Main Determinants of Financial Reporting Quality in the Lebanese Banking Sector

Rasha Mahboub

Abstract:

The study aims to investigate the potential determinants that may influence the quality of financial reporting of 88 annual reports of a sample of 22 Lebanese banks for the period 2012-2015.

Financial reporting quality index with 40 items was used as the dependent variable, while bank specific characteristics of leverage, size, and profitability as well as corporate governance features of board independence, ownership structure, and board size constitute the independent variables.

Using multivariate OLS model, the results indicate that financial leverage, ownership structure and board size has significant and positive relationship with financial reporting quality. On the other hand, bank size, profitability and board independence were found to be not statistically significant in explaining the quality of financial reporting of banking sector in Lebanon.

The results reveal that better financial reporting quality of the annual reports in banking sector can be achieved by having higher proportion of debts, higher ownership by the shareholders, and higher board size. These findings could be of interest to potential investors, management and regulators in the process of financial reporting quality enhancement.

Keywords: Determinants, Financial Reporting Quality, Annual Report, Banking Sector, Lebanon

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1. Introduction

Many accounting scandals and financial crises happened lately in numerous distinguished firms have undermined investors’ trust concerning the financial reports and have introduced several criticisms about financial reporting quality (FRQ) (Akeju and Babatunde, 2017). It has commonly been recognized that the key frustration give rise to these financial crises arisen instantly from the dearth of quality financial disclosure and insufficient governance practices (Fung, 2014).

Thus, the extensive failure in the financial disclosure has generated the demand by investors, regulators, and other stakeholders to enhance the financial information quality and to reinforce the control of managers by putting up adequate governance structures (Klai and Omri, 2011). This will allow boards of directors to assess management’s effectiveness and to take timely correctional actions, when essential, to tackle failure in the financial condition of firms (Fung, 2014).

Hence, firms must prepare financial information with higher quality (Asegdew, 2016). That is, information disclosed must be reliable and relevant to assist users of financial reports in the decision-making (Fathi, 2013). This high-level of disclosure quality is valuable for the firm as it has the perspective to reduce the expense of the debt and raise the stock price (Soheilyfar et al., 2014; Savina, 2016).

Therefore, it is crucial that all public firms present a comprehensible, inclusive and reliable depiction of their financial performance (Schnackenberg, 2009). This particularly, that corporate reporting lately is no longer limited to the financial statements, but incorporates a wide range of additional contents that must also be disclosed to give investors the vital information they require to evaluate their investments (Asegdew, 2016; Liapis et al., 2013; Allegret et al., 2016).

Consequently, the demand and need for sufficient transparency and high quality corporate financial reporting- that is the truthfulness of the information disclosed by the financial reporting process- is indispensable (Fung, 2014; Ivanova et al., 2016).

Hence, quality of financial reporting, especially over the latest decade, has been of considerable concern to accounting researchers; however, one of the key problems is how to measure the so-called FRQ (Scaltrito, 2015). The quality of the information, however, is not always simply and instantly comprehended: diverse methods are applied in the previous studies to measuring it (Lang and Lundholm, 2000).

A thorough overview of previous studies have demonstrated that numerous studies have been carried out on the determinants of FRQ in developed countries such as United States of America, United Kingdom, and Canada (Monday and Nancy, 2016). These empirical studies on FRQ focus on non-financial companies (Abdul Majid and Ismail, 2008; Thalassinos et al., 2015; Vovchenko et al., 2017).
Some of the determinants affecting FRQ relates to specific characteristics of the company include leverage, firm size, profitability, size of audit firm, and the status of listing (Soheilyfar et al., 2014; Al-Asiry, 2017). The other classification of determinants that have impact on FRQ incorporates the features of corporate governance such as board composition, board size, and ownership structure (Fathi, 2013; Chakroun and Hussainey, 2014; Thalassinos and Liapis, 2014).

In spite of its flourishing in the western context, FRQ research is still in its infancy in developing countries (Monday and Nancy, 2016). The dearth of research in this area is even more evident in the banking industry (Haji and Ghazali, 2013). Meanwhile, empirical FRQ studies for banks yet considered little as compared to FRQ study on other sectors (Abdul Majid and Ismail, 2008). Consequently, a research to convey insights regarding this spring of research specifically in the banking industry of developing countries is needed (Denisova et al., 2017).

Therefore, this study aims to investigate the potential main determinants that may influence the quality of financial reporting by Lebanese banks for the period 2012-2015. These determinants precisely pertain to bank specific characteristics and corporate governance variables. The Lebanese banks are an interesting case because despite the latest universal financial crisis, which influenced the banking sector globally, the Lebanese banking industry is still appealing funds from all over the world, which consecutively has generated a prospective for better efficiency in financial reporting; thus, a study of this nature is justified (Menassa, 2010).

The rest of this study is structured as follows: the second section provides a brief review of the literature on the FRQ determinants; it also sets out the hypotheses to be tested. The third section presents the research methodology of the study. The fourth section discusses the interpretation and analysis of the results. At last, the fifth section provides the conclusion of the study.

2. Literature Review and Hypotheses Development

Previous researches show that there are several determinants related to financial reporting (Takhtaei et al., 2014; Soheilyfar et al., 2014; Monday and Nancy, 2016; Al-Asiry, 2017). These determinants have mostly been examined in developed countries (Pivac et al., 2017). However, these results many not be appropriate in developing countries as these countries, have divergent societies, cultures, economies, and politics (Alfraih and Almutawa, 2014; Kuznetsova et al., 2017).

Moreover, these previous researches have concentrated on determinants that have an impact on the level of financial information disclosed, while little studies have examined determinants of the quality of financial information disclosed (Al-Asiry, 2017). Thus, the central research question addressed by this study can be formulated as follows: “what are the key determinants of FRQ in developing countries like Lebanon?”
There are numerous researches performed aiming to provide confirmation concerning the determinants that may have contributed to FRQ (Abdul Majid and Ismail, 2008; Ahmed Haji and Ghazali, 2013; Chakroun and Hussainey, 2014; Suryanto and Thalassinos, 2017; Liapis and Thalassinos, 2013). According to the prior researches, specific-firm characteristics- firm size, profitability, industry, firm leverage, firm age, liquidity, auditor type and listing status – and certain attributes of corporate governance-board composition, board size, ownership structure, CEO duality, board meeting- have been tested to affirm they impact FRQ.

The empirical evidence about the association between these characteristics and FRQ has sometimes shown a positive relationship and sometimes a negative relationship while other times no relationship. Thus, according to the diverse findings attained by prior researches, it is obvious that the determinants of FRQ are not evidently shown particularly in developing countries.

The prior literature cited numerous determinants that clarify FRQ. These characteristics are mainly the characteristics of the firm and the corporate governance mechanism (Table 1). This study focuses interest on specific characteristics of the bank as Leverage, bank size, and profitability and on certain corporate governance mechanism as board independence, ownership concentration and board size. These determinants have been selected because they have been used broadly in the literature and have been shown to have contradictory effects on FRQ.

**Table 1: Determinants of Financial Reporting Quality Based on Prior Studies**

<table>
<thead>
<tr>
<th>Researchers</th>
<th>Profitability</th>
<th>Leverage</th>
<th>Board Composition</th>
<th>Firm Size</th>
<th>Ownership structure</th>
<th>listing status</th>
<th>Industry</th>
<th>Board Size</th>
<th>CEO duality</th>
<th>BOD Meetings</th>
<th>Audit Committee</th>
<th>External Auditor</th>
<th>Financier</th>
<th>Adequacy</th>
<th>Banker Tenure</th>
<th>Internal Audit</th>
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</table>
Main Determinants of Financial Reporting Quality in the Lebanese Banking Sector

2.1 Specific Firm Characteristics and Financial Reporting Quality

2.1.1 Leverage
Many studies have indicated that there is a positive relation between financial leverage and FRQ (Ferguson et al., 2002; Raffournir, 2006; Dedman et al., 2008; Deumes and Knechel, 2008; Lau et al., 2009; Taylor et al., 2010; Elshandidy et al., 2011; Takhtaei et al., 2014; Uyar et al., 2013). These results demonstrated that companies with huge debts are enforced to disclose more information to satisfy their creditors (Zare et al., 2013). Thus, companies with higher financial leverage are likely subjected to more agency costs; hence, it may presume that there is a direct association between financial leverage and FRQ (Murcia, 2010).

On the other hand, Connors and Gao (2011), Monday and Nancy (2016) found leverage to be significant and negatively related to FRQ. This result did not comfort the agency cost theory and lends support to the dispute that companies with greater debt are more probably tend to disclose fewer public information (Connors and Gao, 2011). However, Bédard et al. (2001), Camfferman and Cooke (2002), Park and Shin (2004), Rajab and Schachler (2009), Fathi (2013), Haji and Ghazali (2013) and AL-Asiry (2017) found leverage to be not statistically significant in explaining the quality of financial reporting. These results provided strong evidence that leverage does not significantly enhance quality disclosure of information (Khlif and Souissi, 2010). Thus, based on these discussions, this study formulates the following hypothesis:

\[ H_1: \text{There is a positive relationship between leverage and FRQ in Lebanese banks.} \]

2.1.2 Size
Many researchers studied the relation between firm size and FRQ and the results were mixed. Naser and Al-Khatib (2000), Street and Bryant (2000), Alsaeed (2006), Mangena and Tauringana (2007), Haji and Ghazali (2013), Agyei-Mensah (2013), Ebrahimabadi and Asadi (2016) and Monday and Nancy (2016) found a significant
positive relation between firm size and FRQ. This result demonstrated that big companies have more propensities to disclose more high quality information because they are more under scrutiny (Uyar et al., 2013). Conversely, Abdul Majid and Ismail (2008) as well as Takhtaei and Mousavi (2012) found a negative relation between firm size and FRQ. This finding indicated that small-sized companies have revealed their readiness to disclose more might point that they incline to put themselves for competitive advantages and public visibility (Abdul Majid and Ismail, 2008). However, Hosseinzadeh et al. (2014) and Al-Asiry (2017) found an insignificant relation between size and FRQ. Hence, size has no significant influence on the quality of financial reporting. Thus, based on these arguments, this study develops the following hypothesis:

\[ H_2: \text{There is a positive relationship between size and FRQ in Lebanese banks.} \]

2.1.3 Profitability

Company’s profitability showed mixed evidence on its association with FRQ. For instance, Raffournir (2006), Dedman et al. (2008), Fathi (2013), Uyar et al. (2013), Takhtaei et al. (2014) and Al-Asiry (2017) found a significant positive relation between profitability and FRQ. The quality of information is more for a firm with a higher performance. This result indicated that profitable companies have growth opportunities they may disclose better information to show the reliability of their earnings and the projects that they presume to attain; this will spread their reputations and keep away from under-estimation of their actions (Fathi, 2013).

Moreover, this relationship can also be justified by the way of behaving of managers, as they present better information to demonstrate their capability to maximize value for shareholders and enlarge their compensation (Fathi, 2013). Conversely, Camfferman and Cooke (2002), Vandemele et al. (2009), Monday and Nancy (2016) and Ebrahimabadi and Asadi (2016) concluded that there is a negative relation between profitability and quality of the information disclosure.

This finding can be explained by the fact that competitive costs of disclosure increase when the firm is highly profitable; thus, companies do not want to utilize their advantage to competitors and therefore the quality of information disclosed could decrease (Prencipe 2004). On the other hand, some studies have shown an insignificant relation between profitability and FRQ (Abdul Majid and Ismail, 2008; Agyei-Mensah, 2013; Haji and Ghazali, 2013; Hosseinzadeh et al., 2014). Therefore, profitability may not influence the quality of information disclosure, or at least not be an important factor. Thus, based on these points of view, this study postulates the following hypothesis:

\[ H_3: \text{There is a positive relationship between profitability and FRQ in Lebanese banks.} \]

2.2 Corporate Governance Mechanism and Financial Reporting Quality
2.2.1 Board Independence
Many researchers studied the relation between board independence and FRQ and the results were mixed. For instance, Cheng and Jaggi (2000), Ho and Wong (2001), Haniffa and Cooke (2002), Gul and Leung (2004), Nasir and Abdullah (2004), Arcay and Vazquez (2005), Byard et al. (2006), Cheng and Courtenay (2006), Katmun (2012), Ben-Ali (2008), Hassan and Bello (2013), Htay et al. (2013), Soheilyfar et al. (2014) and Monday and Nancy (2016) found a significant positive relation between board independence and FRQ. This finding suggested that keeping track of corporate boards by independent directors will assist them to become more reactive to investors, and will enhance the company’s adherence with the disclosure requirements, which consecutively will improve the extent and quality of information disclosures (Cheng and Jaggi 2000). Conversely, Chakroun and Hussainey (2014) show that board independence affects negatively FRQ. This relationship might be clarified by the fact that firms would not enhance both FRQ and board independence simultaneously; however, they would select strategically to enhance one with the sacrifice of the other (Chakroun and Hussainey, 2014).

However, Haji and Ghazali (2013), Fathi (2013), Asegdew (2016) and Al-Asiry (2017) found an insignificant relation between board independence and FRQ. This indicates that that board independence does not lead to high quality financial reporting. Hence, based on these debates, this study proposes the following hypothesis:

\[ H_4: \text{There is a positive relationship between board independence and FRQ in Lebanese banks.} \]

2.2.2 Ownership Structure
Ownership structure was not investigated extensively in prior research. Only few researches considered the association between ownership structure and FRQ. For instance, Gelb (2000), Fan and Wong (2002), Ben-Ali et al. (2007), Ben-Ali (2008) and Htay et al. (2013) found a negative relation between ownership concentration and FRQ. This reveals that FRQ is weak in companies with both high ownership and control concentration (Ben-Ali, 2014). Thus, it can be concluded that under high ownership concentration, controlling shareholders are less dependent on minority shareholders and may take benefits from them; therefore, they have less motive to provide high quality financial reporting (Ben-Ali, 2007). Contrary to this finding, Haniffa and Cooke (2002) and Soheilyfar et al. (2014) found a positive relationship between these two variables. This positive association may reflect the companies’ selection to disclose high quality information as a governance practice to monitor managerial activities (Ho and Tower, 2011). Whereas, Bédard et al. (2004), Park and Shin (2004), Haji and Ghazali (2013) and Fathi (2013) found an insignificant relation between ownership concentration and FRQ. The results show that the ownership structure does not affect the quality of financial reporting. Indeed, based on these disputes, this study suggests the following hypothesis:
There is a positive relationship between ownership structure and FRQ in Lebanese banks.

2.2.3 Board Size
Several studies have investigated the relation between board size and FRQ, but the results varied widely. For instance, Bradbury et al. (2006), Fathi (2013), Htay et al. (2013), Haji and Ghazali (2013), Chakroun, and Hussainey (2014), Asegdew (2016), Uwuigbe et al. (2017) and Akeju and Babatunde (2017) found a positive relation between board size and FRQ. These results implied that better disclosure quality of the annual reports could be achieved by having greater board size (Htay et al., 2013). Larger board size could provide more competence and knowledge to the firm and may have the capability to monitor excellently, which could consequently lead to higher quality of financial reporting (Haji and Ghazali, 2013).

Conversely, Yoshikawa and Phan (2003), Byard et al. (2006) and Ostadhashemi et al. (2017) found a negative relation between board size and FRQ. This finding demonstrated that the lesser the board size, the better communication and coordination is which in turn will result in better disclosure quality of accounting information (Yoshikawa and Phan, 2003).

However, Firth et al. (2007), Ben-Ali (2008), Liu and Sun (2010), Chalaki et al. (2012), Soheilyfar et al. (2014) and Navarroand Urquiza (2015) demonstrated that FRQ is not significantly associated with board size. This result could be justified by the fact that board size may not convey board quality if it does not work proficiently (Uyar et al., 2013). While the board’s monitoring ability rises as more directors are joined to the board, the benefit may be exceeded by the cost of inferior communication and decision-making allied with larger groups; thus, the efficiency and effectiveness of board’s working is significant rather than its size (Uyar et al., 2013). Accordingly, based on these opinions, this study tests the following hypothesis:

\[ H_6: \text{There is a positive relationship between board size and FRQ in Lebanese banks.} \]

3. Research Methodology

3.1 Sample Selection and Data Collection
This study examines the potential determinants that may influence the quality of financial reporting in the annual reports for a sample of 22 Lebanese banks for the period 2012-2015 and accordingly 88 annual reports are used. The banks included in the sample had to meet two key criteria: first, they have electronic websites; and second, they had published annual reports in their websites for a period of four successive years from 2012 to 2015 (Table (2)).
To the best of the researchers’ knowledge, the banking sector in Lebanon have not been investigated extensively, despite its banking sector is one of the most vibrant sectors in the Lebanese economy (Hobeika, 2009). To assess FRQ a manual content analysis of bank’s annual report was undertaken. The annual reports of the sampled banks are directly downloadable from their official website for the period 2012-2015. Further, the data about specific characteristics of the banks and the corporate governance mechanisms are collected from the narrative section and financial statement section of each annual report of the sampled banks.

### 3.2 Measurement of Variables

#### 3.2.1 Dependent Variable

Prior researches on corporate disclosure practice apply a diversity of measurement methods for measuring FRQ (Pivac et al., 2017). For instance, accrual models (Van Tendeloo and Vanstraelen, 2005), value relevance models (Barth et al., 2001; Nicholas and Wahlen, 2004) research focusing on specific elements in the annual report (Hirst et al., 2004; Mbobo and Ekpo, 2016) and methods operationalizing the qualitative characteristics (Van der Meulen et al., 2007; Barth et al., 2008; Van Beest et al., 2009). Although numerous measurement methods have been employed in previous literature to assess the quality of financial reporting, this study was based on “method operationalizing the qualitative characteristics”. This method was chosen among other methods because these methods have several weaknesses as they only concentrate on financial information disclosed in statements of financial position and they are not capable to assess FRQ comprehensively (Van Beest et al., 2009).

Most of prior corporate disclosure researches have utilized diverse disclosure indices to measure FRQ (Hassan and Marston, 2010). This study uses a FRQ index for annual reports that was adopted from Van Beest et al. (2009) and Braam and Van Beest (2013) with some modification to measure FRQ. These indices were chosen among other indices because they were capable to entirely assess the quality of financial and non-financial reporting information in the annual report taking into

#### Table 2. Sample of the Study

<table>
<thead>
<tr>
<th>Fransabank</th>
<th>B.L.C. Bank</th>
<th>Bankmed</th>
<th>BBAC</th>
<th>Byblos Bank</th>
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<td>BanqueLibano-Francaise</td>
<td>Blom Bank</td>
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<td>Al Baraka Bank</td>
<td>Arab Bank</td>
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consideration all dimensions of decision usefulness as interpreted in the exposure

Therefore, FRQ is operationalized by 40 measurement items for the qualitative
classifications: relevance (Rel) (16 items), faithful representation (FRep) (8 items),
understandability (Und) (8 items), comparability (Com) (7 items), and timeliness (Tim) (1 item). All items used 5-point Likert-type scales.

Thus, the researcher constructs the FRQ index for annual reports in three stages.
First, the researcher was used a manual content analysis on the annual reports to
score all items of the fundamental and enhancing qualitative characteristics. To
correct for biased in the interpretation of the annual reports, the researcher and other
accounting professor assessed the quantitative and qualitative information in the
annual reports of the Lebanese banks, to determine the items’ measurement scores.
To guarantee the reliability of the scores between raters, inter-rater reliability
coefficient Krippendorff’s alpha was used. The value for Krippendorff’s alpha was
0.88, which is above the required 0.70. This reveals that the FRQ scores were
reliable, and coders approved on the quality assessments made (Braam and Van
Beest, 2013). Second, calculating a sub score for each qualitative characteristics
of each individual annual report (Sub score= total score on the related items for each
qualitative characteristic divided by total number of items for each qualitative
characteristic). Third, calculating an aggregated score for FRQ of each individual
annual report (Aggregated score= sum score of all related items of the qualitative
classifications divide by 40).

3.2.2 Independent Variables
The measurement of the independent variables is selected based on prior studies.
Leverage (Lev) is measured by using the debt ratio (total liabilities/total assets*100)
(Fathi, 2013; Soheilyfar et al., 2014; Monday and Nancy, 2016). Bank Size (Siz) is
measured by the Logarithms of total assets (Ben Ali, 2008; Chakroun and
Hussaine, 2014; Monday and Nancy, 2016). Profitability (Prof) is measured by
return on asset (net income/total assets*100) (Asegdew, 2016). Board Independence
(BInd) is measured by the number of independent directors to total number of
directors on the board (Htay et al., 2013; Chakroun and Hussaine, 2014; Soheilyfar
et al., 2014; Navarro and Urquiza, 2015). Ownership Structure (OStr) is measured
by the percentage of shares not held by known or concentrated shareholders (Fathi,
2013; Soheilyfar et al., 2014). Board Size (BSiz) is measured by the total number of
directors on the board (Fathi, 2013; Haji and Ghazali, 2013; Soheilyfar et al., 2014;
Navarro and Urquiza, 2015).

4. Empirical Results and Analysis

4.1 Descriptive Statistics
This section essentially present descriptive statistics of dependent and explanatory variables included in this study. The dependent variable of this study is FRQ and explanatory variables are Lev, Siz, Prof, BInd, OStr, and BSiz. The total observation for each dependent and independent variable was 88 (data for 22 banks operating in Lebanon for the period from the year 2012 to 2015). The descriptive statistics include mean, median, standard deviation, minimum and maximum of all study variable (Table 3).

**Table 3. Descriptive Statistics of Variables**

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<td>.69530344</td>
<td>.00183</td>
<td>6.53241</td>
</tr>
<tr>
<td>BInd</td>
<td>88</td>
<td>.4974159</td>
<td>.5000000</td>
<td>.20276918</td>
<td>.08333</td>
<td>.77778</td>
</tr>
<tr>
<td>OStr</td>
<td>88</td>
<td>.1559545</td>
<td>.0924000</td>
<td>.19433698</td>
<td>.00010</td>
<td>.64175</td>
</tr>
<tr>
<td>BSiz</td>
<td>88</td>
<td>10.181182</td>
<td>10.0000000</td>
<td>1.50512881</td>
<td>7.00000</td>
<td>13.00000</td>
</tr>
</tbody>
</table>

*Source: Author’s calculations, SPSS 20.*

Table (3) shows that the means of the sub scores of FRQ beeing Rel, FRep, Und, Com and Tim are close with a slight dominance to Und. The mean observed for the Rel sub score is relatively low and is of the order of 2.758. This demonstrates that, Lebanese banks tend to be weakly attentive to the qualitative characteristic of relevance. The highest mean is detected for the sub score of Und. Then it seems that understandability is the highest qualitative characteristic for the Lebanese banks. This indicates that Lebanese banks tend to be strongly concerned by the qualitative characteristic of understandability. The mean and median of the aggregate FRQ score rise to 3.115 and 3.112 respectively. In addition, its minimum is 2.426 and its maximum is 3.507. This result indicates that the quality of financial reporting of the sample Lebanese banks tend to have a medium level since the values of the mean and the median are very close to the neutral value “3”. Furthermore, the mean of leverage is 86.74%, which indicates that the sample banks are highly leveraged banks, and suffer debt problems. Moreover, the mean of the variable bank size measured by the natural logarithm of total assets is of 12.91, which approximates to $1,000,000 in total assets. In addition, profitability has a mean value of 8.4 percent.
This implies that the management of Lebanese banks have generated on average 8.4% return for each asset employed. Besides, the composition of board of directors has average value of 49.74 percent that obviously shows half of the members of the board of Lebanese banks is independent directors. Likewise, the average shareholding of the unknown shareholders is 15.59 percent, reflecting high ownership concentration by the largest owners. Finally, on average, boards of Lebanese banks are large, the average size is 10, it is a value larger than the optimal size that is nine members (Alzoubi and Selamat, 2012).

4.2 Correlation Analysis

To determine the level of the relationship among the variables, “Pearson Correlation Coefficient” has been utilized. Table (4) shows a significant positive correlation between FRQ score and leverage as well as between FRQ score and ownership structure. More specifically Pearson's correlation coefficients between FRQ and leverage as well between FRQ and ownership structure stand respectively at 38.9% and 30.7% and they are significant at 1%. In addition, this Table shows some significant correlations between some independent variables such as the correlations between size of the bank, on one hand and leverage (-22.2%), profitability (-45.9%), board independence (-21.0%), ownership structure (32.0%) and board size (26.3%) on the other hand.

In addition, there is significant correlations between board size on one hand and leverage (41.2%), board independence (-30.4%) and ownership structure (21.7%) on the other hand. Finally, there is a significant negative correlation between ownership structure and board independence (-25.0%). These results demonstrate the presence of a low correlation between explanatory variables. The correlation does not exceeds 45%. Thus, to assess multi-collinearity, variance inflation factor (VIF) has been utilized. Table (4) shows that the VIF was lower than the threshold value "3" for each of the independent variables, which reveals the absence of the problem of multi-collinearity (Chakroun and Hussainey, 2014).

Table 4. Correlation Matrix of Variables and VIF Test

<table>
<thead>
<tr>
<th></th>
<th>FRQ</th>
<th>Lev</th>
<th>Siz</th>
<th>Prof</th>
<th>Blnd</th>
<th>OStr</th>
<th>BSiz</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRQ</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lev</td>
<td>.389**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.292</td>
</tr>
<tr>
<td>Siz</td>
<td>.096</td>
<td>.222*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.616</td>
</tr>
<tr>
<td>Prof</td>
<td>-.096</td>
<td>0.039</td>
<td>-.459*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1.393</td>
</tr>
<tr>
<td>Blnd</td>
<td>-.089</td>
<td>0.196</td>
<td>-.210*</td>
<td>-.001</td>
<td>1</td>
<td></td>
<td></td>
<td>1.170</td>
</tr>
<tr>
<td>OStr</td>
<td>.307**</td>
<td>0.049</td>
<td>.320**</td>
<td>-.074</td>
<td>-.250*</td>
<td>1</td>
<td></td>
<td>1.229</td>
</tr>
<tr>
<td>BSiz</td>
<td>.085</td>
<td>-.412**</td>
<td>.263*</td>
<td>0.132</td>
<td>-.304**</td>
<td>.217*</td>
<td>1</td>
<td>1.461</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, SPSS 20
4.3 Regression Analysis

In order to measure the influence of specific firm characteristics and corporate governance mechanism on FRQ in annual reports of the Lebanese banks, OLS regression has been conducted. The model is as follows:

\[ \text{FRQ} = \beta_0 + \beta_1 \text{Lev} + \beta_2 \text{Siz} + \beta_3 \text{Prof} + \beta_4 \text{BInd} + \beta_5 \text{OStr} + \beta_6 \text{BSiz} + \varepsilon \]

Where: FRQ: Financial Reporting Quality; Lev: Leverage; Siz: Bank Size; Prof: Profitability; BInd: Board Independence; OStr: Ownership Structure; BSiz: Board Size

Hence, Table (5) summarizes the multiple regression analyses in the quality of financial reporting of Lebanese banks. As shown in Table (4), the multiple regression model is statistically significant at 0.000 with an adjusted Rsquared of 29.5 percent. The results also show that three variables, namely, leverage, ownership structure and board size are significant. However, the other variables namely, bank size, profitability, and board independence are insignificant in explaining the quality of financial reporting of the Lebanese banking sector.

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>t-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.936</td>
<td>3.083</td>
</tr>
<tr>
<td>Lev</td>
<td>0.830</td>
<td>4.691</td>
</tr>
<tr>
<td>Siz</td>
<td>0.002</td>
<td>0.039</td>
</tr>
<tr>
<td>Prof</td>
<td>-0.050</td>
<td>-1.181</td>
</tr>
<tr>
<td>BInd</td>
<td>-0.079</td>
<td>-0.602</td>
</tr>
<tr>
<td>OStr</td>
<td>0.277</td>
<td>1.962</td>
</tr>
<tr>
<td>BSiz</td>
<td>0.043</td>
<td>2.164</td>
</tr>
<tr>
<td>Fisher Test</td>
<td>5.646</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

**R-squared** 29.5%

*Source: Author’s calculations, SPSS 20.*

The coefficient of Lev variable is positive, with a high value and significant (83%). This indicates that leverage tends to increase FRQ. Therefore, hypothesis 1 is accepted. This result corroborates the results of the works of Ferguson *et al.* (2002); Raffournir (2006); Dedman *et al.* (2008); Deumes and Knechel (2008); Lau *et al.* (2009); Taylor *et al.* (2010); ElShandidy *et al.* 2011; Takhtaei *et al.* (2014) and Uyar *et al.* (2014) that conducted in various countries, but oppose Bédard *et al.* (2001), Camfferman and Cooke (2002), Park and Shin (2004), Rajab and Schachler (2009),...
Fathi (2013), Haji and Ghazali (2013) and Al-Asiry (2017) who found insignificant association. Indeed, the existence of positive and significant association of leverage and FRQ in the banking sector of Lebanon indicates that banks with higher financial leverage ratio provide higher quality of financial reporting to be accountable to the various stakeholders.

Besides, the coefficient of the Siz variable has the positive expected sign but it is insignificant (0.2%). This demonstrates that bank size does not affect the quality of financial reporting. Therefore, hypothesis 2 is rejected. This result is in line with the findings of Hosseinzadeh et al. (2014) and Al-Asiry (2017) who found no significant association, but contradict with Naser and Al-Khatib (2000), Street and Bryant (2000), Alsaeed (2006), Mangena and Tauringana (2007), Haji and Ghazali (2013), Agyei-Mensah (2013), Ebrahimabadi and Asadi (2016) and Monday and Nancy (2016) who found positive significant association. Indeed, the absence of a significant relationship between bank size and quality of financial reporting suggests that banks of varying sizes in Lebanon tend to have no significant differences in their financial reporting quality.

Likewise, the coefficient of the Prof variable has the negative unexpected sign but it is insignificant (5%). This implies that profitability does not explain the variation of FRQ among Lebanese banks. Hence, Hypothesis 3 is rejected. This finding is inconsistent with Raffournir (2006), Dedman et al. (2008), Fathi (2013), Takhtaei et al. (2014), Uyar et al. (2014) and Al-Asiry (2017) who found positive significant association, but confirms Abdul Majid and Ismail (2008), Agyei-Mensah (2013), Haji and Ghazali (2013), Hosseinzadeh et al., (2014) who found no significant association. The refusal of this hypothesis might be clarified by the “proprietary cost hypothesis” which is consistent with banks’ decisions to disclose quality financial reporting influenced by the concern that such disclosures can destruct their competitive position in product markets (Healy and Palepu, 2001).

Moreover, the coefficient of the BInd variable has the negative unexpected sign but it is insignificant (7.9%). This result suggests that the presence of independent directors on the board does not raise any effect on the quality of financial reporting in the Lebanese banking sector. Thus, Hypothesis 4 is rejected. This finding is in line with the results of the studies conducted by Haji and Ghazali (2013), Fathi (2013), Asegdew (2016) and Alasiry (2017) who found non-significant relationship, but inconsistent with the studies of Cheng and Jaggi (2000), Ho and Shun Wong (2001), Haniffa and Cooke (2002), Gul and Leung (2004), Norita and Nahar (2004), Arcay and Vazquez (2005), Byard et al. (2006), Cheng and Courtenay (2006), Katmum (2012), Ali (2008), Hassan and Bello (2013), Htay et al. (2013), Soheilyfar et al. (2014) and Monday and Nancy (2016) who found a positive association. Thus, a possible justification of this finding is that there are questions about the independence of so-called ‘independent’ nonexecutive directors in Lebanon and their effectiveness as a monitoring tool as a lot of them are selected by the chief executive officer or the chairman of the board (Ho and Wong, 2001).
Furthermore, the coefficient of the OStr variable is positive and significant (27.7%). This indicates that ownership structure tends to increase FRQ. Hence, Hypothesis 5 is accepted. This result contradict the findings of previous studies of Gelb (2000), Bédard et al. (2001), Fan et al. (2002), Park and Shin (2004), Labelle and Schatt (2005), Ali et al. (2007), Ali (2008) and (2009), Htay and Salman (2013), Haji and Ghazali (2013) and Fathi (2013) which have been examined in various countries, but confirms the findings of Bédard et al. (2001), Park and Shin (2004), Haji and Ghazali (2013) and Fathi (2013) who found insignificant relation. Certainly, the existence of positive and significant association of ownership structure and FRQ in the banking sector of Lebanon indicates that banks with high proportion of outside share ownership improve the quality of financial reporting in order to weaken agency problems.

Additionally, the coefficient of the BSiz variable is positive and significant (4.3%). This suggests that the size of the board tends to increase FRQ. Thus, Hypothesis 6 is accepted. This results confirms with the findings of Bradbury et al. (2004), Fathi (2013), Htay et al. (2013), Haji and Ghazali (2013), Chakroun and Hussainey (2014), Olayinka et al. (2016), Asegdew (2016) and Akeju and Babatunde (2017), but contradict with the findings of Firth et al. (2007), Ali (2008), Chalaki et al. (2012), Soheilyfar (2014) and Navarroand Urquiza (2015) who found no association. This result can be explained by the fact that larger board size could provide more proficiency and knowledge to the bank and may have the capability to monitor effectively, which could consecutively lead to higher quality of financial reporting (Haji and Ghazali, 2013).

5. Conclusion, Limitations, and Recommendations

This study aims to investigate the potential determinants that may influence the quality of financial reporting in the annual reports of 22 Lebanese banks for the period 2012-2015. These determinants precisely pertain to bank specific characteristics of leverage, size, and profitability as well corporate governance variables of board independence, ownership structure, and board size. Comprehensive assessment of the quality of financial reports is vital as it may enhance users’ quality of economic decision making and improve overall market efficiency, thereby decreasing the cost of capital. To achieve the intended objective, the study was based on a 40-item financial reporting quality index that was adopted from Van Beest et al. (2009) as well Braam and Van Beest (2013) with some modification. By employing multivariate OLS model, the finding of the study suggests financial leverage, ownership structure, and board size influence banks FRQ. However, there were no support of bank size, profitability, and board independence to be associated with FRQ of banking sector in Lebanon. Thus, financial leverage, ownership structure, and board size can be considered as the most important determinants that influence FRQ. Thus, these determinants should be given more attention by the Lebanese banks. Therefore, the study recommends that banking sector should assess their monitoring rules to guarantee definite rules for the
avoidance of “window dressing behavior” of management in financial reporting. This will further enhance investors' confidence the banking sector of Lebanon. Hence, it is believed that these findings contribute to the academicians to further spread out the research in this area, the investors to make the investment decisions, as well as the regulators and policy makers to promote better rules and regulations.

The study is not without limitations. First, the investigation of the annual reports encompasses a degree of subjectivity that could decrease the reliability of the findings. Future researchers may consequently hope to tackle a mixed-method research approach, where the researchers might be capable to supplement the quantitative approach with interviews to clarify the quantitative results. Second, this study is based on a relatively small sample, future research, using larger samples, may provide additional insights into the external validity of the findings. Third, this study focused the disclosures provided in the annual reports only, other information channels such web sites and brochures were not investigated, hence, future research might try to embrace these other channels in examining the FRQ of banking sector. Fourth, this study examined only specific determinants of FRQ of a sample of banking sector in Lebanon, future research may be conducted on non-financial institutions in other countries. Finally, this study was based on six determinants of FRQ, there are still many determinants influencing the FRQ; future research may analyze more determinants beside the determinants tested in this study.

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Main Determinants of Financial Reporting Quality in the Lebanese Banking Sector


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