An Empirical Analysis on the Determinants of Audit Report Lag

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Keywords: Audit report lag, Financial leverage, Big 4 audit firms.

Abstract. This study investigates the factors that affect audit report lag from the samples of Shanghai and Shenzhen Stock Exchange. The result shows that the financial leverage is positively associated with audit report lag. The result suggests that audit firms audit higher financial leverage companies more carefully to ensure the accuracy of the audit reports. This study also finds that the big 4 audit firms have a positive relationship with audit report lag. This finding indicates that the big 4 audit firms usually provide services for large companies and will audit financial statements more cautiously.

Introduction

Timeliness is one of the qualities of accounting information to enable users of financial statements to get reliable information and reduces the information asymmetry. There is unavoidable time difference between the end of the financial year and the issue of the audited financial statements. Audit report lag is the number of days from fiscal year end to audit report date. The audit lag is also the most important factor of timeliness in earnings announcement and determines the market reaction to earnings (Givoly & Palmon, 1982; Chambers & Penman, 1984; Kross & Schroeder, 1984) [1] [2] [3]. Understanding causes of the audit report lag would improve audit work and enhance market efficiency (Walker & Johnson, 1996) [4].

This study examines the factors that affect audit report lag from the samples of Shanghai and Shenzhen Stock Exchange. The result shows that the financial leverage is positively associated with audit report lag. The result suggests that audit firms audit higher financial leverage companies more carefully to ensure the accuracy of the audit reports. This study also finds that the big 4 audit firms have a positive relationship with audit report lag. This finding indicates that the big 4 audit firms usually provide services for large companies and will audit financial statements more cautiously.

Literature Review

Ashton, Graul and Newton (1989) [5] studied the determinants of audit delay from 465 Canada listed companies from 1977 to 1982. The four factors such as the size of auditor, industry classification, presence of extraordinary items and company size are examined. The study found that company size and the size of auditor are negatively associated with audit delays.
Jaggi and Tsui (1999) [6] used a sample of 393 Hong Kong companies for the 1991-1993 to examine whether the audit report lag of Hong Kong companies is associated with auditor business risk and audit firm technology. They found that there is a positive relationship between the audit report lag and the financial risk for sample companies. This indicated that companies with a fragile financial situation are associated with longer audit delays. The study also showed that audit firms using the structured audit approach have longer audit delays. Larger companies appear to associate with shorter audit delays.

Leventis, Weetman and Caramanis (2005) [7] examined the factors of audit report timeliness for 171 companies listed on the Athens Stock Exchange (ASE) in 2000. They found that there is a significant association between audit report timeliness and auditor type, audit fees, number of explanations in the audit report, the extraordinary items, and an uncertainty opinion in the audit report. They suggested that the companies hire an international accounting firm improving the timeliness of the audit report. This may be due to the international accounting firm with a high professional reputation and advanced technology.

Alkhatib and Marji (2012) [8] investigated audit reports timeliness from 137 firms listed on the Jordanian Stock Exchange. For the services sector, they found that leverage, profitability ratio, and company sizes have no association with audit timeliness. The audit type has a significant correlation with audit timeliness. For the industrial sector, leverage has a significant association with audit timeliness; the auditor type, company size, and profit ratio has no association with audit timeliness.

The Determinants of Audit Report Lag

Financial Leverage and Audit Report Lag

Financial leverage is the firm's debts used to finance its assets and also used to measure the firms' ability to repay its obligations as they mature. Prior research found that financial leverage is positively associated with audit report lag (Alkhatib & Marji, 2012) [8]. It is more risky to run a business if a company with higher financial ratio. Therefore, the auditors will audit financial statement more carefully to ensure the accuracy of the audit report based on their profession judgments. This expectation leads to the following hypothesis:

H1: There is a positive relationship between financial leverage and audit report lag.

Big 4 Audit Firms and Audit Report Lag

Prior study suggested that large international auditing firms with good reputation provide faster services in order to increase their market shares (Leventis et al., 2005) [7]. Williams and Dirsmith (1988) [9] provided evidences that the multinational audit firms would be more efficient because they have good audit technology.

In China, the big 4 audit firms have more resources and may use higher quality staff. Normally, they provide services for large companies. Also, the big 4 audit firms are more cautious and have a motivation to provide a higher quality audit in order to protect future revenues. This expectation leads to the following hypothesis:

H2: There is a positive relationship between big 4 audit firms and audit report lag.
**Data and Methodology**

The initial sample consists of 2515 A-share listed companies in Shanghai and Shenzhen Stock Exchange in 2013. Annual data was collected from a database, the CSMAR, a leading research database in China. CSMAR provides detailed company profiles and financial data of companies. The final sample consisted of 2410 firms by deleting: (1) 43 financial companies because their operations are different (2) 55 "ST" listed companies because their financial statements are abnormal (3) 7 companies with incomplete data.

The association between the audit report lag and the explanatory variables.

\[ ARL = \beta_0 + \beta_1 \text{Lev} + \beta_2 \text{Prof} + \beta_3 \text{Size} + \beta_4 \text{Audit} + \beta_5 \text{Own} + \epsilon \]

Where

- \( ARL = \) number of days from fiscal year end to the date of audit report.
- \( \text{Lev} = \) Total liabilities to total assets
- \( \text{Prof} = \) Net income to total sales
- \( \text{Size} = \) Total assets
- \( \text{Audit} = 1, \) if the auditor is PricewaterhouseCoopers, Ernst and Young, KPMG or Deloitte, 0 otherwise.
- \( \text{Own} = \) Percentage of company ownership held by top 10 shareholders.

**Empirical Results**

The table one reports the means, standard deviation among the variables used in the analysis. The average (Std. Deviation) of Audit report lag (ARL) is 90.93 (21.29). The mean percentage of the big 4 audit firm (Audit) is 0.05 and Std. Deviation is 0.22. The mean (Std. Deviation) of total debt to total assets (Lev) is approximately 0.44 (0.22).

<table>
<thead>
<tr>
<th></th>
<th>Number of companies</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARL</td>
<td>2410</td>
<td>20</td>
<td>363</td>
<td>90.92988</td>
<td>21.28688</td>
</tr>
<tr>
<td>Lev</td>
<td>2410</td>
<td>0.007969</td>
<td>1.094212</td>
<td>0.436415</td>
<td>0.221664</td>
</tr>
<tr>
<td>Prof</td>
<td>2410</td>
<td>-11.4432</td>
<td>3.951147</td>
<td>0.077122</td>
<td>0.339265</td>
</tr>
<tr>
<td>Size</td>
<td>2410</td>
<td>54989627</td>
<td>2.34E+12</td>
<td>1.24E+10</td>
<td>6.77E+10</td>
</tr>
<tr>
<td>Audit</td>
<td>2410</td>
<td>0</td>
<td>1</td>
<td>0.051867</td>
<td>0.221805</td>
</tr>
<tr>
<td>Own</td>
<td>2410</td>
<td>1</td>
<td>99.1873</td>
<td>58.25413</td>
<td>16.14565</td>
</tr>
</tbody>
</table>

The Table 2 reports regression results for the factors on audit report lag for listed companies in Shanghai and Shenzhen Stock Exchange in 2013.

<table>
<thead>
<tr>
<th></th>
<th>( \beta )</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.881</td>
<td>44.336</td>
<td>0</td>
</tr>
<tr>
<td>Lev</td>
<td>4.609</td>
<td>2.271</td>
<td>0.023 **</td>
</tr>
<tr>
<td>Prof</td>
<td>-3.222</td>
<td>-2.480</td>
<td>0.013 **</td>
</tr>
<tr>
<td>Size</td>
<td>-0.000</td>
<td>-0.381</td>
<td>0.703</td>
</tr>
<tr>
<td>Audit</td>
<td>-5.333</td>
<td>-2.552</td>
<td>0.011 **</td>
</tr>
<tr>
<td>Own</td>
<td>0.023</td>
<td>0.816</td>
<td>0.415</td>
</tr>
</tbody>
</table>

**0.05 level of significance**

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Conclusions

This paper studies the determinants that affect audit report lag from the samples of Shanghai and Shenzhen Stock Exchange in 2013. The result shows that there is a positive relationship between the financial leverage and audit report lag. This is similar to Alkhatib & Marji (2012) [8], who find a significant relationship between financial leverage and audit report lag. The result suggests that the auditors will audit higher financial leverage companies more carefully to ensure the accuracy of the audit reports. This study also finds that the big 4 audit firms have a positive relationship with audit report lag. This finding indicates that the big 4 audit firms usually provide services for large companies and will audit financial statements more cautiously.

The limitation of this paper is data only collected from the year 2013. Extending to longer periods of time would provide a clearer understanding of the relationship between those elements. In addition, other factors may affect the timeliness of audit reports are not included. Possible factors would include governance mechanics. Future research may include other governance mechanics.

References