Are Female Auditors More Likely to Be Independent? Evidence from Modified Audit Opinions

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Purpose

• Research question
  – Are female auditors more likely to report independently than male auditors?
  – Addressed by examining the association between auditor gender and the likelihood of issuing a modified audit opinion (MAO).
Purpose

• Motivation
  – Two working paper studies focusing on listed firms provide mixed evidence of the effect of auditor gender on the likelihood of issuing a MAO or a going concern audit opinion (GCO).
  – One working paper study based on Belgian data shows that female auditors are more likely to issue MAOs for private clients with the highest audit fees.
  – So far, it remains an open question whether the gender effect is driven by difference in competence and/or independence.
Purpose

• Motivation
  – Previous studies suggest that women are (1) more risk averse and (2) behave more ethically than men.
    ➢ We predict that male (female) auditors are more (less) likely to report opportunistically when the expected costs of opportunistic reporting are relatively low.
Purpose

• Research setting
  – The audit market of privately-held Finnish companies
  – Opportunistic auditor reporting is likely to be more common in a code-law private-firm setting than in a common-law listed-firm setting because of lower litigation and reputation risks.
    ➢ A potential gender difference in auditor independence is likely to present itself as a differential likelihood of issuing MAOs.
  – In Finland, the audit engagement partners are required to personally sign the audit report.
    ➢ The Finnish setting allows us to examine the effects of individual auditor characteristics such as gender on audit quality.
Contribution

• Improves understanding on whether female (male) auditors are more (less) likely to report independently when economic incentives favor opportunistic auditor reporting.
Results

• Model

\[ MAO = \beta_0 + \beta_1 GENDER + \beta_2 KHT + \beta_3 INDEXPP + \beta_4 LNAGEP + \beta_5 LNCLIENTS + \]
\[ \beta_6 LNPSIZE + \beta_7 CLIENTIMP + \beta_8 INDEXPF + \beta_9 BIG4 + \beta_{10} LEVERAGE + \]
\[ \beta_{11} LNASSETS + \beta_{12} INVREC + \beta_{13} CFO + \beta_{14} LOSS + \beta_{15} TURNOVER + \]
\[ \beta_{16} CURRENT + \beta_{17} ROA + \beta_{18} LNAGEC + \]
\[ \delta \cdot YEAR + \phi \cdot INDUSTRY + \varepsilon \]  

(1)
Results

• Data
  – Limited to privately-held Finnish firms, audits by certified auditors, and audits involving just one engagement partner.
  – Based on years 2009 and 2010, and consists of 33,909 observations.
  – Represents 25,878 private Finnish firms, 1,161 individual audit partners, and 232 audit firms.
  – In total of 1,793 observations of MAOs, and 6,377 observations of female auditors.
  – Combined from the AMADEUS and VOITTO database, and the auditor register of the Finnish Central Chamber of Commerce.
Table 5: Logistic regressions for the overall sample

<table>
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<tr>
<th></th>
<th>Column 1</th>
<th>Column 2</th>
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<td>Coeff. p-value</td>
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<td>GENDER</td>
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<td>GENDER x BIG4</td>
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<td>–</td>
<td>–</td>
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<tr>
<td>GENDER x DSIZE</td>
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<td>–</td>
<td>–</td>
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<td>KHT</td>
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<td>LNCLIENTS</td>
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<td>LNPSIZE</td>
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<td>INDEXPF</td>
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<td>BIG4</td>
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<td>0.030 0.775</td>
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<td>1.080 0.000</td>
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<td>0.074 0.579</td>
<td>0.075 0.573</td>
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<td>-0.009 0.600</td>
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<td>CURRENT</td>
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<td>-0.012 0.256</td>
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<td>ROA</td>
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<td>0.761 0.000</td>
<td>0.753 0.000</td>
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<tr>
<td>LNAGEC</td>
<td>-0.126 0.000</td>
<td>-0.127 0.000</td>
<td>-0.125 0.000</td>
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Year controls: Yes  Yes  Yes
Industry controls: Yes  Yes  Yes

N: 33,909 33,909 33,909
Pseudo R$^2$: 0.188 0.188 0.188
Correctly class. (%): 94.58 94.58 94.59
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<td>0.172</td>
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<td><em>KHT</em></td>
<td>–0.319</td>
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<td>0.179</td>
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<td><em>INDEXPP</em></td>
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<td>0.225</td>
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<td><em>LNCLIENTS</em></td>
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<td>0.393</td>
<td>0.373</td>
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<td><em>CLIENTIMP</em></td>
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<td><em>INDEXPF</em></td>
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<td><em>BIG4</em></td>
<td>0.147</td>
<td>0.219</td>
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<td>0.178</td>
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<td><em>LEVERAGE</em></td>
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<td>1.724</td>
<td>1.015</td>
<td>1.166</td>
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<td><em>LNASSETS</em></td>
<td>0.060</td>
<td>–0.101</td>
<td>0.004</td>
<td>–0.012</td>
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<tr>
<td><em>INVREC</em></td>
<td>0.353</td>
<td>–0.376</td>
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<td>0.236</td>
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<td><em>CFO</em></td>
<td>–0.372</td>
<td>–0.792</td>
<td>–0.451</td>
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<td><em>LOSS</em></td>
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<td>1.221</td>
<td>1.245</td>
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<td><em>TURNOVER</em></td>
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<td><em>CURRENT</em></td>
<td>–0.013</td>
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<td><em>ROA</em></td>
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<td>0.751</td>
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<td><em>LNAGEC</em></td>
<td>–0.135</td>
<td>–0.079</td>
<td>–0.194</td>
<td>–0.053</td>
</tr>
</tbody>
</table>

Year controls: Yes
Industry controls: Yes

| N | 16,925 | 16,982 | 16,828 | 16,971 |
| Pseudo $R^2$ | 0.200 | 0.187 | 0.183 | 0.202 |
| Correctly class. (%) | 93.82 | 95.41 | 94.72 | 94.47 |
Results

• Addressing potential self-selection bias
  – The results remain qualitatively unchanged when the regressions are rerun using a propensity score matched sample.
Conclusion

- Female (male) auditors are more (less) likely to issue MAOs when incentives for opportunistic auditor reporting for maintaining a client are stronger.
- The differential probability of issuing a MAO appears to be driven by difference in independence rather than in competence between female and male auditors.