Going-Concern Audit Opinion and Firm-Specific Expertise of Outsourced IAF Providers: Empirical Evidence from an Emerging Market

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Abstract

Objective and interest of the work: The effect of firm-specific expertise of outsourced IAF providers on going-concern audit opinions is examined in this study.

Design of the methodology: Based on the agency theoretical background as well as relevant studies from the audit literature, the study’s hypothesis is developed and tested by probit regression to analyse the data of 1,071 firm-year observations listed on the Omani capital market over the period 2006-2019.

Results: The result is consistent with the hypothesis that Omani public listed companies with greater reliance on the outsourced IAF providers who have sufficient firm-specific expertise are less likely to receive a going-concern audit opinion.

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Practical implications: The current study reinforces theoretical and practical implications for regulators, auditors, shareholders and decision makers by providing the first empirical evidence of the relationship between the firm-specific expertise of outsourced IAF providers and going-concern audit opinion, in an Asian emerging market, specifically Omani, context.

Keywords: Going-concern audit opinion; firm-specific expertise; outsourced IAF providers; Oman.

JEL classifications: M42
外包IAF供应商的持续业务审计反馈和公司具体经验：来自一个新兴市场的实践证据

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文章摘要

研究目标：本研究考察了外包IAF供应商的公司特定经验对持续经营审计意见的影响

分析方法：基于该公司的理论背景以及审计文献中的相关研究，本研究的假设被提出，并使用概率回归法对2006-2019年度这一时期在阿曼资本市场上市的1071家公司的观察数据进行了分析检验。

调查结果：此调查结果与假设相一致，即在阿曼上市的公司如果更加依赖具有足够公司特定专业知识的IAF外包商，则不太可能获得持续经营的审计意见。

实际应用：目前的研究通过提供第一个实证证据，说明在亚洲新兴市场，特别是阿曼，外包IAF供应商的公司特定经验与持续经营审计意见之间的关系，加强了对监管者、审计师、股东和决策者的理论和实践意义

关键词：商业审计意见；公司的具体经验；外包IAF供应商；阿曼

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1. Introduction

The issue of going-concern audit opinion is crucial for stakeholders, attracting the attention of both academics and practitioners. Going-concern opinion is of value to the users of financial statements (Sanchez-Ballesta and Garcia-Meca, 2005). During the audit process the external auditor assesses a client’s ability to continue as a going-concern, assisting decision makers to reach appropriate conclusions. The external auditor issues a going-concern opinion to shareholders to let them know if a company is financially viable. This opinion indicates whether a company is in financial difficulties, either because of a lack of liquidity or a growing loss. A going-concern opinion may indicate that a company is on the verge of bankruptcy and that external auditors are concerned about its long-term viability (Hassan and Nasir, 2020; Blay and Geiger, 2013).

The previous empirical studies have identified several company factors as well as corporate governance mechanisms which can affect going-concern opinions. The company factors include company size (Averio, 2021), the financial condition of the company, namely profitability (Numan and Willekens 2012; Averio, 2021), liquidity ratio (Dopuch et al., 1987), leverage (Mutchler, 1985; Aryantika et al., 2015; Averio, 2021; Simamora and Hendarjatno, 2019), loan default (Carcello et al., 2000) and internal control weaknesses (Goh et al., 2013). Corporate governance mechanism variables include audit quality (DeAngelo, 1981; Averio, 2021) and audit lag or audit delay (Kaplan and Williams, 2013; Hassan and Nasir, 2020).

However, despite the number of studies on the impact of the corporate governance mechanisms on going-concern opinion, the influence of internal audit remains largely unknown (Hassan and Nasir, 2020). Little is known regarding the extent to which internal audit contributes to going-concern opinion. Hence, the current study attempts to narrow this gap and extend audit opinion studies by investigating the relationship between the firm-specific expertise of outsourced IAF providers and going-concern opinion.

The importance of the Internal Audit Function (IAF) as one of the key internal corporate governance monitoring mechanisms has been the focus of much attention (Carcello et al., 2005; Zain and Subramaniam, 2007; Archambeault et al., 2008); it is viewed as an important monitoring mechanism which can contribute to reducing the issues related to the agency problem and its costs (Adams, 1994; Anderson et al., 1993; Rizzotti and Angela, 2013).

As a result of international capital-market authorities' demands (e.g., Oman, China, Malaysia, and the NYSE in the USA) publicly listed companies must adopt an objective and independent IAF. Nevertheless, several companies can face difficulties in securing professional and highly qualified IAF staff as well as adequate investment (Barr-Pulliam, 2016; Al-Akra et al., 2016). These companies therefore depend on outsourcing the function to an external provider, enabling them to acquire high-quality IAF at a lesser cost (Mubako, 2019).

The term “internal audit outsourcing” refers to the use of independent accounting companies to conduct internal audits. Recently, many public accounting companies have moved towards providing high-quality IAF services to their clients, with specialized considerations (Baatwah et al., 2022), which are considered more
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profitable for the audit companies (Parker and Johnson, 2017). The audit firms’
increasing interest in supplying IAF motivates this study to provide empirical evi-
dence of whether audit firms are sufficiently competent to offer high-quality IAF. In
this regard, Mubako (2019) argued for more study on outsourced IAF and in-depth
investigation of the role of types of providers of quality services.

A limited number of studies have examined the impact of the expertise of out-
sourced IAF providers in the context of financial reporting quality and audit efficien-
cy (Baatwah et al., 2022). In the field of going-concern opinions, Hassan and Nasir
(2020) examined the effect of internal audit investment on going-concern opinions.
The focus of the current study is on the association between external providers’
firm-specific expertise in the internal audit function and going-concern audit opin-
on, not considered in prior studies.

Firm-specific expertise has an impact on the level of high-quality audit including
the quality of financial reports (Riccardi, 2019; Contessotto et al., 2019; Sharma
et al., 2017; Ghosh and Moon, 2005; Chi and Huang, 2005; Johnson et al., 2002).
To ensure high-quality audit the external auditor requires widespread knowledge
and familiarity with the client’s accounting practices and its operations, relying on
the work of the internal auditor (among others) for an adequate period of time
(Baatwah et al., 2022; Chi and Huang, 2005; Johnson et al., 2002). In this regard,
the characteristics of the providers of IAF affect the external auditor’s perception and
reliance on the IAF provider’s work (Abbott et al., 2012; Desai et al., 2011; Glover
et al., 2008). Breger et al. (2020) argue that if the internal auditors are highly skilled
and objective, the external auditor will prefer to rely on their work. According to
Baatwah et al. (2022), the confidence of the external auditor on the quality of the
company’s internal control system and financial reporting processes depends on the
expertise of the outsourced IAF provider. This is predicted to reduce the challenges
an external auditor faces in determining future financial performance and the ability
of companies to function (Hassan and Nasir, 2020).

Therefore, the experience of the external IAF provider enhances its role as a
control mechanism, leading to better internal control in the company and better
financial report quality, as well as increasing the effectiveness and efficiency of com-
pany operations (Hassan and Nasir, 2020). As a result, there would be a decrease
in the prospect of receiving going-concern opinion. It is logical to believe that the
firm-specific expertise of outsourced IAF providers have a negative impact on the
going-concern opinion, which means that those companies outsourcing IAF to
external providers with firm-specific expertise are less likely to receive going-concern
audit opinion, as a result of improving their internal monitoring mechanisms.

This study seeks to contribute to the going-concern opinion literature through
considering the effects of the firm-specific expertise of outsourced IAF providers
on the going-concern opinion, a topic not yet considered by researchers. To our
knowledge, prior IAF and going-concern opinion studies do not focus on the effect
of the external IAF providers’ characteristics, such as firm-specific expertise, on-go-
ing-concern opinion (e.g., Hassan and Nasir, 2020). In response to previous authors
(Mubako, 2019), this study extends work on outsourced IAF (Baatwah et al., 2022;
Hassan and Nasir, 2020) by examining an additional aspect of outsourced IAF providers, specifically firm-specific expertise on going-concern opinion.

Oman is chosen as the setting for this study for two reasons. First, most companies in emerging markets such as Oman are unable to recruit skilled and experienced IAF personnel or to provide the appropriate investment in in-house IAF (Al-Akra et al., 2016). Many have come to rely on third-party providers to perform IAF activities now and in the future (Barr-Pulliam, 2016). Second, Oman is unique in terms of the availability of data on internal audit disclosed by publicly listed companies (Baatwah et al., 2022; Baatwah et al., 2019).

The rest of the paper is structured as follows. Section two discusses previous work and the development of the hypothesis. The study design is described in Section three. In Section four the empirical results are illustrated and reported. The last section is the conclusion of the study.

2. Testable Hypothesis

The internal audit function has undergone major transformation and developments, allowing it to play a larger role in improving the quality of financial reporting as one of the effective company’s internal corporate monitoring mechanisms (Prawitt et al., 2012; Gras-Gil et al., 2012). The function of internal audit can be performed in-house by the company’s internal audit department or outsourced to a third-party firm (Desai et al., 2011; Carcello et al., 2005). The decision on sourcing arrangements is significantly influenced by several factors such as business knowledge, expertise, costs and independence (Desai et al., 2011; Carey et al., 2006). Thus, as external providers of IAF who have firm-specific expertise have more capacity to test the company’s internal control system and enhance the financial reporting quality, companies tend to outsource this function (Prawitt et al., 2012; Carey et al., 2006).

This study assumes that the firm-specific expertise of outsourced IAF providers can provide high-quality internal audit activities which contribute to improving the quality of financial reporting and increase audit quality. This is because they have adequate understanding of the company’s accounting procedures, internal control system, governance structure, and company strengths and weaknesses. Hence, they can provide advice based on experience, to improve a company’s financial performance and its ability to operate in the future. This increases the confidence and reliance of external auditors on the work of outsourced IAF providers and is expected to reduce the difficulties an external auditor faces in determining future financial performance and the ability of companies to function (Hassan and Nasir, 2020). Consequently, this would reduce the likelihood of receiving going-concern opinion from external auditors. Hence, the following hypothesis is proposed:

H: There is a negative association between the firm-specific expertise of outsourced IAF providers and the likelihood of receiving going-concern audit opinion, all else remaining constant.
3. Research Methods

3.1 Empirical Model for Testing Hypothesis

To test the hypothesis of a negative association between the firm-specific expertise of outsourced IAF providers and going-concern opinion, the researcher applied the following probit regression. Following prior authors (e.g., Khan et al., 2015), this study regresses the determinants of going-concern using pooled probit regression with robust standards error to control the possible effect of heteroskedasticity and autocorrelation problems. To eliminate the influence of outliers, it also winsorizes the value of continuous variables at 1 and 99 percentiles. The following equation shows the main model of this study.

\[ GC_{it} = \beta_0 + \beta_1 OIAFEX_{it} + \beta_2 AC + \beta_3 ADQ + \beta_4 RISK + \beta_5 SIZE + \beta_6 NEWS + \beta_7 MBV + \varepsilon_{it} \]  

(1)

Table 1 explains the variables. GC as the dependent variable is an indicator of going-concern audit opinion. Going-concern opinion is a professional judgment issued by the external auditor and indicates that there is a risk to the company.

Table 1: Variables described and summarised

| Variable | Definitions |
|----------|-------------|
| GC       | Indicator variable equal 1 if the firms received going-concern audit opinion, 0 otherwise. |
| OIAFEX   | The number of years that an IAF external supplier has provided IAF activities for a specific company in a row. |
| ACIND    | The percentage of independent directors on the AC. |
| ACAEXPRT | The percentage of directors on the AC who have accounting experience. |
| ACSIZE   | The total number of directors on the AC. |
| ACMT     | The number of meetings held by AC over the course of the year. |
| BIG4     | If the external auditor is a big4 audit company, the indicator variable is 1, otherwise it is 0. |
| ADT      | The number of years that the firm has used the same audit firm as its external auditor in a row. |
| ADFEE    | Natural log of audit fees. |
| OWCCO    | Parentage of ordinary shares held by major shareholders (>=10%). |
| PROFT    | Net income divided by total assets. |
| CURATIO  | Current ratio calculated by dividing total current assets on current liabilities. |
| LEV      | Total liabilities divided by total assets. |
| LOSS     | If the current period’s result is a loss, the indicator variable is 1, otherwise it is 0. |
| SIZE     | Natural log of total assets. |
| NEWS     | The change in EPS is computed by subtracting the current year’s EPS from the previous year’s EPS. |
| MBV      | Capital market value of equity divided by book value of equity. |
according to the auditor’s evaluation. The dummy variable is used as a proxy to measure going-concern audit opinion and takes the value 1 if the company has received a going-concern audit opinion, and 0 otherwise (see Keasey et al., 1988; Chan and Walter, 1996; Tsipouridou and Spathis, 2014; Hassan and Nasir, 2020; Averio, 2021). A new variable, OIAFEX, was inserted into the study model to analyse the effect of the outsourced IAF providers' firm-specific expertise on the probability of receiving a going-concern opinion. OIAFEX is represented by the number of consecutive years an IAF external provider has worked for a given company.

The researcher introduced several control variables into the study’s model, to minimize the impact of the expunged variables and enhance the model’s ability to be predictive. Most previous studies indicate that a going-concern opinion is associated with many variables that influence the probability of an external auditor issuing a going-concern opinion, such as audit committee characteristics (AC) measured by independence (ACIND), financial expertise (ACEXP), size (ACSZ) and meetings (ACM). The quality of the external auditor is ADQ, measured by audit firm size (BIG4), external auditor tenure (ADT) and audit fees (ADFEE)). Audit risk is RISK, measured by ownership structure (OWCCO), performance (PROFT), current ratio (CURATIO), leverage (LEV), and loss (LOSS)). The company total assets is SIZE, change (NEWS) and capital market value (MBV) (e.g. Keasey et al., 1988; Chen and Church, 1992; Chan and Walter, 1996; Geiger et al., 1998; Carcello and Neal, 2003; Tsipouridou and Spathis, 2014; Hassan and Nasir 2020; Xu and Kalelkar, 2020; Averio 2021).

3.2 Data and Sample

Data are collected from the website of the Omani capital market. All relevant data are obtained from annual reports of a sample of companies listed from 2006 through 2019.

The process of sample selection from the population is by identifying all companies listed on the market in the period 2006 to 2019, resulting in 1,742 company year-observations, on average 91 companies in each year. The researcher deleted 468 year-observations for financial companies, due to the fact that they have various regulatory frameworks, accounting systems and procedures. The researcher also eliminates 203 observations with missing data, resulting in a final sample of 1,071 company year-observations for the study model, as shown in Table 2.

Table 2: Sample selection

| Total observations for listed firms over the period 2006-2019 | 1742 |
|-------------------------------------------------------------|------|
| Minus observations for:                                     |      |
| Financial firms                                             | (468)|
| Missing data                                                | (203)|
| Final sample                                                | 1071 |
4. Results

4.1 Descriptive Statistics and Univariate Analyses

Table 3 summarizes the statistical descriptive analysis for the main variables. As reported in Table 3, the mean (median) value of the going-concern audit opinion GC is 0.06 (0.00), which means that 6% of the companies received going-concern audit opinion. This result is in line with a previous Omani audit study (Baatwah et al., 2018). For the firm-specific expertise of outsourced IAF providers OIAFEX, the mean (median) value is 2.14 (1.00), with a minimum of 0.00 and maximum of 15.00. This suggests that the average tenure of Omani companies’ association with the outsourced IAF providers' firm-specific expertise is two years, in line with a current local audit study (Baatwah et al., 2022). As illustrated in Table 3, the results of the descriptive analysis for control variables are deemed adequate, although space limitations prevent further discussion.

Several tests determine the possible existence of multicollinearity, including the correlation matrix, variance inflation factor (VIF) and tolerance (1/VIF).

The researcher constructed a Pearson correlation matrix for the study model, which confirmed that no multicollinearity exists among the independent variables.

| Table 3: Summary statistics | Min | P25 | Mean | Std. Dev | Median | P75 | Max |
|-----------------------------|-----|-----|------|----------|--------|-----|-----|
| GC                          | 0.00| 0.00| 0.06 | 0.23     | 0.00   | 0.00| 1.00|
| OIAFEX                      | 0.00| 0.00| 2.14 | 2.90     | 1.00   | 3.00| 15.00|
| ACIND                       | 0.00| 0.67| 0.86 | 0.24     | 1.00   | 1.00| 1.00|
| ACAEXPRT                    | 0.00| 0.00| 0.23 | 0.23     | 0.25   | 0.33| 1.00|
| ACSIZE                      | 2.00| 3.00| 3.34 | 0.62     | 3.00   | 4.00| 5.00|
| ACMT                        | 0.00| 4.00| 4.74 | 1.42     | 4.00   | 5.00| 9.00|
| BIG4                        | 0.00| 0.00| 0.62 | 0.49     | 1.00   | 1.00| 1.00|
| ADT                         | 1.00| 1.00| 2.32 | 1.11     | 2.00   | 3.00| 4.00|
| ADFEE                       | 7.60| 8.35| 8.87 | 0.77     | 8.78   | 9.18| 12.20|
| OWCCO                       | 0.00| 42.26| 58.76| 22.85   | 60.10  | 76.50| 99.13|
| SIZE                        | 1.39| 2.56| 2.92 | 0.50     | 2.94   | 3.33| 3.74|
| PROFIT                      | -0.36| 0.00| 0.04 | 0.10     | 0.04   | 0.09| 0.25|
| CURATIO                     | 0.03| 0.95| 2.12 | 2.20     | 1.36   | 2.39| 12.48|
| LEV                         | 0.06| 0.25| 0.52 | 0.34     | 0.47   | 0.71| 2.04|
| LOSS                        | 0.00| 0.00| 0.22 | 0.42     | 0.00   | 0.00| 1.00|
| NEWS                        | -1.35| -0.03| -0.01| 0.22     | 0.00   | 0.02| 0.83|
| MBV                         | -4.79| 0.60| 1.66 | 2.68     | 1.16   | 2.01| 20.69|

See Table 1 for deflations.
as none of the correlates equal or exceed 0.80 (Greene, 1999; Cooper and Schindler, 2003; Hair et al., 2006). The highest correlation between independent variables is for LOSS and PROFIT (-0.71), followed by LEV and CURATIO (-0.49) and ADFEE and BIG4 (0.44). That is, multicollinearity is not a problem in the study model (Gujarati and Porter, 2009), as shown in Table 4.

Based on the VIF and 1/VIF results, absence of a multicollinearity is confirmed; they do not exceed 10 and 0.10, respectively, which confirms that multicollinearity does not threaten the reliability of the researcher’s estimates (Hair et al., 2006; Gujarati and Porter, 2009). For brevity, these findings are not tabulated here.

4.2 Regression Results

Table 5 shows the results of regression to test the study’s hypothesis. The study model is significant (X² = 125.935, p < 0.000), while the pseudo X² = (0.597) indicating that the dependent and independent variables have a relatively strong relationship. That is, the model’s independent variables explain 59.7% of the change in the dependent variable, showing that the model is reasonably explanatory. The results indicate a significant negative association between the firm-specific expertise of supporting the hypothesis.

This result indicates that the firm-specific expertise of outsourced IAF providers enhances its monitoring activities in carrying out their responsibilities to provide high-quality IAF. Thence it can be argued that the long tenure of the outsourced IAF provider improves its firm-specific expertise IAF and contributes to providing IAF of a high quality. In turn, it reduces the probability of Omani public listed companies obtaining a going-concern audit opinion. This result is consistent with the findings of local Omani audit studies (Baatwah et al., 2021; Baatwah et al., 2022).

As expected, those control variables with a significant association with going-concern opinion are audit committee independence (ACIND), audit committee financial expertise (ACEXP), audit firm size (BIG4), current ratio (CURATIO) and leverage (LEV). Nevertheless, this study finds insignificant association between the remaining control variables in the study model. Hence this study’s findings are consistent with those of prior studies (Baatwah et al., 2021; Baatwah et al., 2022).

5. Conclusion

This study examines whether the firm-specific expertise of outsourced IAF providers is associated with going-concern opinion in an emerging Asian market, specifically Oman. The results of analyzing 1,071 company year-observations listed on the Omani capital market from 2006 until 2019 suggest that the firm-specific expertise of outsourced IAF providers is negatively and significantly associated with
Table 4: Correlation results

| Variable | (1)  | (2)  | (3)  | (4)  | (5)  | (6)  | (7)  | (8)  | (9)  | (10) | (11) | (12) |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|
| GC       | 1.00 |      |      |      |      |      |      |      |      |      |      |      |
| OIAFEX   | -0.03| 1.00 |      |      |      |      |      |      |      |      |      |      |
| ACIND    | -0.33***| 0.05* | 1.00 |      |      |      |      |      |      |      |      |      |
| ACAEXPRT | -0.12***| 0.00 | 0.12***| 1.00 |      |      |      |      |      |      |      |      |
| ACSIZE   | -0.13***| 0.12***| 0.17***| 0.14***| 1.00 |      |      |      |      |      |      |      |
| ACMT     | -0.20***| 0.02 | 0.24***| 0.03 | 0.15***| 1.00 |      |      |      |      |      |      |
| BIG4     | -0.22***| -0.06** | 0.17***| -0.03 | 0.11***| 0.12***| 1.00 |      |      |      |      |      |
| ADT      | -0.03 | 0.10***| 0.02 | -0.01 | 0.01 | 0.05 | 0.05 | 1.00 |      |      |      |      |
| ADFEE    | -0.15***| -0.20***| 0.04 | -0.04 | 0.06** | 0.19***| 0.44***| 0.04 | 1.00 |      |      |      |
| OWCCO    | 0.10***| 0.10***| -0.10***| 0.08***| -0.04 | -0.12***| -0.13***| -0.02 | 0.23***| 1.00 |      |      |
| SIZE     | -0.04 | 0.13***| -0.04 | 0.12***| 0.13***| 0.19***| -0.10***| 0.00 | 0.04 | 0.13***| 1.00 |      |
| PROFIT   | -0.32***| 0.00 | 0.09***| 0.02 | 0.08***| 0.17***| 0.16***| 0.11***| 0.18***| 0.10***| -0.04 | 1.00 |
| CURATIO  | -0.19***| 0.02 | 0.12***| 0.00 | 0.04 | 0.05 | -0.08***| 0.01 | 0.16***| 0.09***| 0.11***| 0.17***|
| LEV      | 0.35***| -0.04 | -0.10***| 0.02 | -0.16***| -0.07***| -0.08***| -0.07***| 0.03 | 0.04 | -0.23***| -0.43***|
### Table 4: Correlation Results

| Variable | (13) | (14) | (15) | (16) | (17) |
|----------|------|------|------|------|------|
| CURATIO  | 1.00 |      |      |      |      |
| LEV      | -0.49*** | 1.00 |      |      |      |
| LOSS     | -0.13*** | -0.10*** | 1.00 |      |      |
| NEWS     | -0.03 | 0.01 | -0.10*** | 1.00 |      |
| MBV      | 0.09*** | -0.08*** | -0.13*** | -0.01 | 1.00 |

*** p<0.01, ** p<0.05, * p<0.1

See Table 1 for definitions.
Table 5: Results for probit regression for the main analysis

| Variable     | Coef. | St.Err. | t-value | p-value | [95% Conf Interval] | Sig |
|--------------|-------|---------|---------|---------|---------------------|-----|
| OIAFEX       | -0.06 | 0.03    | -2.12   | 0.03    | -0.12 -0.00         | **  |
| ACIND        | -1.49 | 0.33    | -4.52   | 0.00    | -2.13 -0.84         | *** |
| ACAEXPRT     | -0.95 | 0.46    | -2.07   | 0.04    | -1.85 -0.05         | **  |
| ACSIZE       | 0.18  | 0.18    | 1.00    | 0.32    | -0.17 0.52          |     |
| ACMT         | 0.02  | 0.07    | 0.32    | 0.75    | -0.12 0.17          |     |
| BIG4         | -0.69 | 0.26    | -2.70   | 0.01    | -1.20 -0.19         | *** |
| ADT          | 0.05  | 0.10    | 0.55    | 0.58    | -0.14 0.25          |     |
| ADFEE        | 0.15  | 0.14    | 1.02    | 0.31    | -0.14 0.43          |     |
| OWCCO        | 0.01  | 0.01    | 1.47    | 0.14    | -0.00 0.02          |     |
| SIZE         | -0.18 | 0.20    | -0.89   | 0.37    | -0.57 0.21          |     |
| PROFT        | -2.31 | 1.61    | -1.44   | 0.15    | -5.47 0.84          |     |
| CURATIO      | -1.49 | 0.28    | -5.39   | 0.00    | -2.03 -0.95         | *** |
| LEV          | 0.60  | 0.31    | 1.93    | 0.05    | -0.01 1.21          | *   |
| LOSS         | 0.46  | 0.29    | 1.57    | 0.12    | -0.11 1.03          |     |
| NEWS         | 0.27  | 0.41    | 0.66    | 0.51    | -0.53 1.07          |     |
| MBV          | 0.02  | 0.02    | 1.08    | 0.28    | -0.02 0.07          |     |
| Constant     | -1.37 | 1.74    | -0.79   | 0.43    | -4.77 2.03          |     |

| Mean dependent var | 0.056 | SD dependent var | 0.230 |
| Pseudo R²           | 0.597 | Number of obs    | 1071  |
| Chi-square          | 125.935 | Prob > chi2   | 0.000 |
| Akaike crit. (AIC)  | 220.218 | Bayesian crit. (BIC) | 304.816 |

*** p<.01, ** p<.05, * p<.1

See Table 1 for definations.

Going-concern opinion issued by external auditors. In other words, the result of this study provides empirical evidence that the likelihood of Omani public listed companies receiving a going-concern opinion is reduced as the tenure of the outsourced IAF provider increases. This is because this expertise strengthens the monitoring activities of outsourced IAF providers in carrying out their responsibilities to provide high-quality IAF. In turn this helps to improve the company control and operations, reducing the possibility of external auditors issuing a going-concern opinion.

This study offers evidence reinforcing theoretical and practical implications for regulators, auditors, shareholders and decision makers. The results indicate that...
companies benefit more from long-term relationships when outsourced IAF providers work with a company over several years, because providers gain more firm-specific expertise and experience. Moreover, the results support the efforts of internal audit regulators worldwide, such as the IIA and PCAOB, in developing specialized regulatory frameworks specific to IAF outsourcing that reflect the unique nature of IAF outsourcing. The current study also contributes to the audit literature by providing the first empirical evidence of the relationship between the firm-specific expertise of outsourced IAF providers and going-concern audit opinion. As for shareholders and decision makers, the results provide logical evidence that can be relied upon when making a choice of IAF provider, because choosing one with firm-specific expertise will avoid receiving a going-concern opinion. Finally, the results may motivate audit firms to improve their expertise regarding the provision of internal audit services.

As in other studies, this study is subject to several limitations. In particular, different ownership structures and regulations of the companies limit the ability to generalize the results to other countries. Additionally, there might be other variables that influence the likelihood of receiving a going-concern audit opinion which are not included in this study, such as the industry expertise of the outsourced IAF providers. Future studies may address these issues.

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