

Study of the Accounting Firm Characteristics' Impact on Audit Quality

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Abstract. This paper learns from the experience of product market structure, combines the current situation of auditing market structure, analyzes real data from market, study the influence to audit quality from accounting firm's characteristics, that is, what are the best time to develop specialization so that accounting firm can improve its audit quality effectively.

Keywords: Audit market structure; audit quality; accounting firm industry expertise.

1. Research Overview

1.1 Research Background

In the product market, the market is divided into four structures, there are free competition market, monopoly market, monopolistic competition market and oligopolistic market. In the product market structure, the similarities and differences in the quantity, scale, and share of companies will determine the market structure's competition form. The quantity of products, the size of the company, and the market share are the basis for studying the structure of the product market and also the index

To adjust market structure, they reflect the degree of competition and monopoly. As a service product, audit is part of the product market structure, and its development is a lot of commonness with the product market structure. The audit market can be studied by studying the structure of the product market. The similarities and differences between the accounting firms (hereinafter to be referred as firm) in the number, size, and share can reflect to market concentration, firm size, and specialization. The size of the firm, the degree of market concentration, and whether there is any difference in audit services provided their own characteristics, these characteristics determines the potential in future development of the firm in a large extent.

1.2 Research Summary at Home and Abroad

There are different degrees of research about the quality of the audit both at home and abroad. The major foreign studies are, Simony and Stein (1987) believe that if the firm will have industry expertise. They will more inclined to focus on invest in technical, physical assets, personnel training and organizational control. Then the quality of audit reports issued by certified public accountants will more reliable. [1] This reliable function is particularly apparently in the international "big four" accounting firms. Domestic research mainly includes, Yu Yuima (2001) believes China's auditing market is characterized by low concentration and strong regionalism, it leads to the firms fail to form economies of scale, and insufficient pressure and motivation to cultivate audit quality, poor risks and brand awareness, besides, it affects the audit's independence seriously [2]. In addition, the influence of firm size on audit quality has also attracted people's attention.

2. The Empirical Hypothesis Proposed

The audit market structure is the performance of the accounting firm as the seller's entity in the auditing market. Its basic factors include economies of scale, degree of concentration, barriers to advance and retreat, and product differences. The four factors constitute the characteristics of the market structure, and they are also interrelated. In addition to barriers, firm characteristics are based on the main influencing factors of the audit structure and consider the development of the firm itself, it contains three representative characteristics of the firm. We put the three conditions that conform to the monopoly competition market (i.e. the number of manufacturers of similar products, the degree of concentration is high, and there are differences between products) apply to the audit market, then

there is a large number of accounting firms that are highly concentrated and have their own industry expertise will enable the audit market to achieve monopolistic competition. In theory, the market structure of monopolistic competition can maximize the profits of the firm and contribute to the improve product quality (audit quality) at the same time. Therefore, we build a hypothesis.

Hypothesis: An accounting firms developing industry expertise will enhance its audit quality when it has highly concentrated and large-scale.

3. The Construction of The Model

3.1 Selection of Dependent Variables

Based on the past research, this paper uses the research on the level of earnings management of public companies' financial reports to measure the audit quality of public companies in China. The level of earnings management is measured by the discretionary accruals (DA).

3.2 Selection of Independent Variables

3.2.1 Firm Industry Expertise (Expert)

Based on the results of a large number of studies on the methods used to measure firm industry expertise, this paper adopt auditor share in an industry (IMS) and portfolio share (PS, an industry's share in the auditor's portfolio of client industries).

Then, $Expert = IMS * PS$

IMS = The sum of the total square root of all customer assets that I firm in the k industry / The sum of the total square root of the customer assets of all firms in the k industry

PS = The sum of the total square root of all customer assets that I firm in the k industry / The sum of the square root of the total assets of all clients in the I firm

This paper use the sum of square roots of all client assets of a firm in a certain year to calculate the firm's industry share and portfolio share.

3.2.2 Market Concentration (CR)

This paper use the total square root of assets of an individual firm in 2008 division the total square root of the customer assets of all firms in 2008 to measure an individual firm's market share.

3.2.3 Firm Size (GM)

This paper measures the firm's size according to the 2008 total income data published by the Chinese Institute of Certified Public Accountants on the website's 2009 top 100. Firm size is converted into dummy variables using quantitative variables, and the quantified data is directly based on the firm's total revenue in 2008. Dummy variables are divided into 1 and 0, representing the "top ten" firms and the other in 2008.

3.3 Selection of Control Variables

1. Corporate Asset Scale (Ln A).
2. Asset Liabilities (Lev).
3. Operating cash flow (Of).
4. The company's profitability (ROA).
5. The absolute value of total accrued profits divided by the total assets of the previous year (Abs TA).

3.4 Model Establishment and Analysis

3.4.1 Establishment of Regression Model

Put the firm's own characteristics as a whole to study its impact on the quality of the audit, that is, what kind of opportunity to develop industry expertise can improve the audit quality of the firm effectively? Create a model using dummy variables with interactive items;

$$|DA| = \beta_0 + \beta_1 Expert + \beta_2 GM + \beta_3 CR + \beta_4 Abs TA + \beta_5 Lev + \beta_6 Ocf + \beta_7 ROA + \beta_8 Ln A + \beta_9 Expert \times GM + \beta_{10} Expert \times CR + \beta_{11} Expert \times GM \times CR + \varepsilon_1$$

3.4.2 Sources of Data and Selection of Samples

The data in this paper comes from the ranking of the top 100 firms in 2009 by the China Institute of Certified Public Accountants (It is based on the operating income of the firm in 2008) and the CSMAR database. The sample with the largest amount of data was selected as the primary sample. the Shanghai and Shenzhen stocks of the public companies of manufacturing industry were selected, according to the classification of the CSRC for manufacturing, and to let statistical research more realistic and objectives, we excluding the industries that the number of public companies less than 80, a total of 547 samples from four industries were obtained.54 accounting firms were selected because they have participated in auditing during the year. Multiple regression equations were tested by statistical software Views 5.0, SPSS12 software was used for correlation analysis of mixed samples. The empirical test results are shown in table 1.

4. Analysis Conclusion

According to the sample regression test results of the above four industries, we can see he firm size (GM) is negatively correlated with control accrual profit (Abdi), that is, it is positively related to audit quality; besides, the (Expert *GM*CR) item has a negative correlation with control accruals, this confirms the hypothesis is true, but the effect is not very significant. It means that an accounting firm can develop industry expertise to improve its audit quality in some extent when its scale is large and in a high concentration.

Table. 1 Sample test results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	0.023785	0.028916	0.822551	0.4111
Expert	0.000178	0.005700	0.031292	0.9750
GM	-0.003963	0.005062	-0.782848	0.4341
CR	0.003375	0.004899	0.688888	0.4912
AbsTA	0.874513***	0.016750	52.20887	0.0000
Lev	-0.002781	0.009567	-0.290728	0.7714
Ocf	-0.061426***	0.014936	-4.112701	0.0000
ROA	0.075774***	0.019946	3.798860	0.0002
Size	-0.000897	0.001444	-0.621308	0.5347
Expert*GM	0.003991	0.013699	0.291344	0.7709
Expert*CR	0.016711	0.012247	1.364507	0.1730
Expert*GM*CR	-0.016209	0.016563	-0.978596	0.3282
R-squared	0.850450	Mean dependent var		0.072001
Adjusted R-squared	0.847375	S.D. dependent var		0.083184
S.E. of regression	0.032498	Akaike info criterion		-3.993600
Sum squared resid	0.565014	Schwarz criterion		-3.899170
Log likelihood	1104.250	F-statistic		276.5822
Durbin-Watson stat	1.976115	Prob(F-statistic)		0.000000

***, **, * indicate that the test is significant at the 1%, 5%, and 10% levels respectively

References

- [1]. Simony, D. A., and Stein, M. Product Differentiation in Auditing: Auditor Choice in the Market for Unseasoned New Issuers [A]. Canadian Certified General Accountants, Research Foundation, 1987.
- [2]. Ziff S A, R L Possum. An Analysis of Large Audit Clients. The Accounting Review, 1967, 42(2):298-320.
- [3]. Deangelo, L. E. Auditor Size and Audit Quality [J] .Journal of Accounting and Economics, 1981.