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會計師任期會影響盈餘品質嗎？

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中文摘要

近幾年連續的企業弊案發生後，會計師的簽證品質以及獨立性成為世界各國證券市場與管制者極為關注之議題。各國無不重新審視如何強化會計師獨立性，其中一個重要的議題是會計師的任期長短與審計品質是否有關？是否應強制規範會計師或會計師事務所輪調？由於各國的會計師輪調規定主要係規範「事務所內」會計師的輪調，過去研究僅能以「會計師事務所的任期」衡量會計師與客戶之關係，尚乏探討「(個別)會計師任期」與審計品質關聯之研究。因國內查核報告必須由會計師簽名，故提供一個探討「會計師及會計師事務所任期」是否影響審計品質之機會。本研究之目的即在以台灣年報之簽證會計師及事務所資料，檢視資本市場關心的議題：(1)審計品質是否隨會計師任期增長而降低(2)控制會計師任期後，會計師事務所輪調是否可提升審計品質？本研究以裁決性應計數為盈餘品質之替代變數，研究結果發現，會計師任期增長時，裁決性應計數(絕對金額及正值時)反而減少。控制會計師任期後，會計師事務所之任期與裁決性應計數(絕對值)呈顯著負關係。研究結果並未支持任期愈長盈餘品質愈差之假說。

關鍵字：會計師任期、會計師事務所任期、裁決性應計數、盈餘品質、會計師輪調

Abstract

Prior studies have investigated the relation between audit firm tenure and earnings quality. However, since audit firm tenure is correlated with partner tenure, the evidence at audit firm level could be attributable to partner tenure, which makes it difficult to draw inferences on whether imposing a limit on audit firm tenure would have any effect on earnings quality. On the other hand, despite the requirement of audit partner rotation in several countries, academic research has not investigated the relation between partner tenure and earnings quality. We investigate this issue using a sample of Taiwanese companies whose audit reports show the audit partners' names. Using discretionary accruals as a proxy for earnings quality, we find that the absolute and positive values of discretionary accruals decrease significantly with audit partner tenure. After

controlling for audit partner tenure, we find that absolute discretionary accruals decrease significantly with audit firm tenure. Our findings are not consistent with the arguments that (i) earnings quality decreases with extended audit partner tenure and (ii) audit firm rotation in addition to partner rotation would improve earnings quality.

Keywords: audit partner tenure; audit firm tenure; auditor rotation; discretionary accruals; earnings quality.

1. Introduction

Recent accounting scandals across the world, from Enron and WorldCom in the U.S. to Parmalat in Europe, have raised public concerns about auditor independence. Regulators are concerned that as auditor tenure (the length of the auditor-client relationship) gets longer, auditors are more likely to compromise on their client's accounting and reporting choices in order to retain the client. Thus, the proponents of mandatory auditor rotation argue that setting a limit on the number of years an auditor may audit the same company will improve auditor independence and audit quality. The opponents, however, argue that as auditors gain more experience from longer tenure, they have better knowledge to determine whether the company's accounting and reporting choices are proper. This argument suggests that audit quality improves as the length of auditor tenure increases.

Auditor rotation can take place at firm level or partner level. Mandatory audit firm rotation is still under debate in most places, but audit partner rotation has been adopted in certain countries. The professional requirements in the U.S. state that the partner in charge of an audit engagement should be replaced at least once every seven years. The Sarbanes-Oxley Act of 2002 further requires audit partner rotation at least once every five years. In the UK, audit partner rotation has been a requirement for many years, and in January 2003 the maximum period for rotation of the lead partner was reduced from seven years to five years. Requirements for audit partner rotation also have been adopted

in the Netherlands and Germany. In Japan, beginning from April 2004, audit partners and reviewing partners are prohibited from being engaged in auditing the same listed company over a period of seven consecutive years.

Several recent studies investigate the relation between audit firm tenure and earnings/audit quality. Their findings are generally inconsistent with the argument that earnings/audit quality deteriorates with extended audit firm tenure (more details below). On the other hand, despite the practice of audit partner rotation for years, academic research has not investigated whether long audit partner tenure is associated with lower earnings/audit quality. We think the most likely reason is that data of audit partner tenure is not publicly available, as audit reports in most countries do not show the audit partner's name. In addition, when audit partner rotation is required, there is no case of long audit partner tenure (e.g., longer than five years), so it is impossible to investigate whether earnings/audit quality deteriorates with extended audit partner tenure.

In this paper, we investigate the relation between audit partner/firm tenure and earnings quality using a sample of Taiwanese companies. The regulation in Taiwan requires the audit report for public companies to be certified by two audit partners from the same audit firm, and the audit report must show the audit partners' names and the audit firm's name. This requirement enables us to determine audit partner tenure. In Taiwan, audit firm rotation is not mandatory and audit partner rotation was not mandatory before 2003. Our sample period ends in 2001, so the sample includes long audit partner tenures and does not include audit partner changes in response to the recent rotation requirement.

Using discretionary accruals as a proxy for earnings quality, we find that the absolute and positive values of discretionary accruals decrease significantly with audit partner tenure. The decrease in positive discretionary accruals occurs only after the audit partner tenure exceeds five years. After controlling

for audit partner tenure, we find that absolute discretionary accruals decrease significantly with audit firm tenure. Those results are robust to alternative measures of discretionary accruals and inclusion of a number of control variables that are associated with accruals. Overall, our results are not consistent with the arguments that (i) earnings quality decreases with extended audit partner tenure and (ii) audit firm rotation in addition to partner rotation would improve earnings quality.

Our study contributes to the literature on auditor tenure and earnings quality in two ways. First, we provide evidence at audit partner level. Second, we provide evidence on the relative importance of audit firm tenure and partner tenure (which are correlated with each other) in explaining earning quality. This is a critical issue in the debate on auditor rotation because audit firm rotation cannot be justified if long audit firm tenure does not have adverse effects on earnings quality beyond the effects of partner tenure. Prior studies have not addressed this issue directly because their evidence is at audit firm level. If indeed the relation between audit firm tenure and earnings quality is attributable to partner tenure, the decision to adopt (or not adopt) audit firm rotation based on the conclusions from audit firm-level evidence could be problematic.

The accounting and auditing standards in Taiwan are similar to those in the U.S., and most public companies are audited by the Big-N audit firms (more than 70 percent since early 1990s and more than 80 percent since 1999). Our findings for the relations between discretionary accruals and company characteristics (age, size, leverage, and growth) in general are similar to those documented in the studies using other countries' data. The above similarities increase the likelihood that our results can generalize to other countries with similar accounting and audit environments. In Taiwan, however, lawsuits can be brought in against individual audit partners but not audit firms. To the extent that audit partners' behaviors are influenced by the legal environments, our

results may not generalize to other settings where audit partners are faced by a different level of litigation risk. Nevertheless, we believe our results provide inputs to the debate on auditor rotation.

II. Hypotheses development

The proponents of mandatory audit firm rotation argue that audit quality is more likely to be compromised as the length of the auditor-client relationship increases. The requirement of audit partner rotation thus reflects the regulators' concern that audit quality would deteriorate when the partner tenure is "too long." In contrast, the opponents of mandatory audit firm rotation emphasize that new auditors' lack of client-specific knowledge and experience due to periodic rotation impairs audit quality. We think which arguments are valid is an empirical question, so we formulate the first hypothesis in null form:

H1: *Earnings quality does not change with audit partner tenure.*

When audit partner rotation is mandatory but audit firm rotation is not, the main question under debate is whether earnings quality would be further improved or impaired if a limit is imposed on audit firm tenure. Therefore, we investigate what is the relation between audit firm tenure and earnings quality that is not explained by audit partner tenure. We formulate the second hypothesis in null form as follows:

H2: *Earnings quality does not change with audit firm tenure after controlling for partner tenure.*

III. Research design and sample selection

Measurement of audit partner tenure, audit firm tenure, and discretionary accruals: One way of measuring audit partner tenure is to calculate the length of tenure for the partner with the longest tenure (denoted by *PT1*), where each partner's tenure equals the number of consecutive years the client has retained the partner. Alternatively, audit partner tenure can be calculated as the number

of consecutive years the client has retained the same two audit partners (denoted by *PT2*). This measure essentially is the tenure of the audit-partner team. We measure audit firm tenure as the number of consecutive years the client has retained the audit firm.

We use discretionary accruals as a proxy for earnings quality and investigate the relation between audit partner/firm tenure and discretionary accruals. Because earnings can be managed either upward or downward depending on the manager's objectives, we assume large absolute discretionary accruals suggest poor earnings quality.

We compute discretionary accruals (*DA*) as follows:

$$DA = TA - (\phi_0 + \phi_1(\Delta SALES - \Delta AR) + \phi_2 PPE), \quad (1)$$

where *TA* is total accruals (earnings before extraordinary items minus net cash flow from operations), $\Delta SALES$ is change in net sales, ΔAR is change in net accounts receivable, and *PPE* is net property, plant, and equipment. All the variables and the constant term are scaled by beginning book value of total assets. The coefficients ϕ_0 , ϕ_1 , and ϕ_2 are the parameters from estimating the cross-sectional modified Jones (1991) model:

Methods of empirical tests:

Specifically, we estimate the following equation to test H1:

$$DiscAccr = \beta_0 + \beta_1 PT + \beta_2 BIG5 + \beta_3 AGE + \beta_4 SIZE + \beta_5 GROW + \beta_6 CFO + \delta \cdot Year + \gamma \cdot Industry + \varepsilon,$$

where *DiscAccr* is discretionary accruals (absolute value, raw value, or signed value of *DA*); *PT* is audit partner tenure; *BIG5* is a dummy variable equal to one if the company is audited by a Big-5 audit firm and equal to zero otherwise; *AGE* is the number of years since the company was established; *SIZE* equals natural logarithm of book value of total assets at year-end; *GROW* equals growth rate of net sales over the previous year; *CFO* equals net cash flow from operations scaled by beginning book value of total assets.

Because typically audit firm tenure is greater than partner tenure, we use the following model to test H2:

$$DiscAccr = \beta_0 + \beta_1 PT + \beta_2(FT-PT) + \beta_3 BIG5 + \beta_4 AGE + \beta_5 SIZE + \beta_6 GROW + \beta_7 CFO + \delta \cdot Year + \gamma \cdot Industry + \varepsilon.$$

In this regression, the coefficient of $(FT-PT)$ captures the association between audit firm tenure and discretionary accruals after controlling for partner tenure.

Sample selection: Our sample selection begins with all of the non-financial companies included in the *Taiwan Economic Journal (TEJ)* database for years 1990–2001. We then delete the observations with one of the following characteristics: (1) in the year of initial public offering or the year after, (2) in start-up period (firm age less than 5 years), (3) in the small industries (less than eight companies in the year), (4) with extreme value of discretionary accruals or net cash flow from operations (top or bottom one percent of the variable). The final sample consists of 5,260 observations from 888 companies.

IV. Empirical Results

The mean (median) of $PT1$ is 5.95 (5) years and the mean (median) of $PT2$ is 3.52 (3) years. Audit firm tenure has a mean (median) of 6.84 (6) years. The mean (median) of DA equals 0.52 (–0.01) percent of beginning total assets. The mean (median) of $|DA|$ equals 7.45 (5.10) percent of beginning total assets. About 75 percent of the sample observations are audited by the Big-5 audit firms.

The OLS regression results showed a significantly negative coefficient on $PT1$. The coefficients on company age and net cash flow from operations are significantly negative, and the coefficient on growth is significantly positive. These results are consistent with the findings in prior studies (e.g., JKR; MMO; Menon and Williams 2004). The coefficients on auditor type and company size are not significantly different from zero. When the dependent variable is DA , we find that the coefficient on $PT1$ is not significantly different from zero. When dependent variable is positive DA (DA^+) and negative DA (DA^-), respectively, we use truncated regression to

avoid biased coefficient estimates (Greene 2000). For the regression of DA^+ , the coefficient on $PT1$ equals –0.0023 (Z-statistic = –2.16, p -value = .031). For the regression of DA^- , the coefficient on $PT1$ equals 0.0040 (Z-statistic = 2.00, p -value = .045). Those results suggest that companies are less likely to record extreme values of positive and negative discretionary accruals as the length of audit partner tenure increases.

With respect to the results for the second measure of audit partner tenure ($PT2$), it is found that when the dependent variable is $|DA|$, the coefficient on $PT2$ equals –0.0009 (t -value = –2.81). When the dependent variable is DA , the coefficient on $PT2$ equals 0.0009 (t -value = 1.89). For the regression of DA^+ , the coefficient on $PT2$ equals –0.0015 (Z-statistic = –1.29). For the regression of DA^- , the coefficient on $PT2$ equals 0.0035 (Z-statistic = 1.30). Taken together, the results show that absolute discretionary accruals decrease significantly with audit partner tenure. Taken together, the results are not consistent with the first hypothesis that earnings quality does not change with audit partner tenure. Indeed, we find evidence that earnings quality improves with extended audit partner tenure.

As to the relation between audit partner tenure and discretionary accruals before vs after the tenure exceeding five years, the empirical results find that during the first five years, negative discretionary accruals become less negative as the length of the tenure increases. However, after the partner tenure exceeds five years, positive discretionary accruals become less positive as the length of the tenure increases. Thus, if the main argument for audit partner rotation is that income-increasing earnings management becomes more prevalent after partner tenure exceeds five years, then our results do not support the argument.

This study also replicated the prior analysis by examining the association between audit firm tenure and discretionary accruals. In general, the results are similar to those documented in prior studies using the

U.S. data. We further tested the relation between audit firm tenure and discretionary accruals after controlling for partner tenure. The results show that the coefficients on audit partner tenure are significantly negative (positive) in the regressions of $|DA|$ and DA^+ (DA^-). These results are generally consistent with those found above. The coefficient on $FT-PT1$ is significantly negative in the regression of $|DA|$. The coefficient on $FT-PT2$ is significantly negative (positive) in the regressions of $|DA|$ and DA^+ (DA^-). The results provide consistent evidence that longer audit firm tenure in excess of partner tenure is associated with lower absolute discretionary accruals. The results for positive and negative discretionary accruals are mixed: $FT-PT1$ is not significantly associated with either DA^+ or DA^- , but longer $FT-PT2$ is associated with smaller magnitude of DA^+ and DA^- . Overall, this study finds evidence that earnings quality improves with extended audit firm tenure after controlling for partner tenure.

In the multivariate analysis, we also document that non-Big-5 partners are more likely to constrain their client's income-decreasing discretionary accruals as their relationship with the client gets longer. But this is not true for the Big-5 partners. Those results suggest that Big-5 partners remain more conservative compared with the non-Big-5 partners regardless of the length of partner tenure.

To check the robustness of the above empirical results, the following additional analyses were conducted: (1) Using performance-adjusted discretionary accruals; (2) Measuring earnings quality by quality of accruals; (3) Analyzing patterns in discretionary accruals around audit partner changes. In general, the results from diagnostic tests do not change the main finding described earlier.

V. Conclusions

In this paper, we investigate a sample of Taiwanese companies whose audit report shows the audit partners' names. The disclosure requirement enables us to

investigate two questions: (i) whether earnings quality changes with audit partner tenure and (ii) whether earnings quality changes with audit firm tenure after controlling for partner tenure. Using discretionary accruals as a proxy for earnings quality, we find that the absolute and positive values of discretionary accruals decrease significantly with audit partner tenure. The decrease in positive discretionary accruals occurs only after audit partner tenure exceeds five years. These findings are not consistent with the argument that earnings quality decreases with audit partner tenure, especially when income-increasing earnings management attempts are the primary concern. After controlling for audit partner tenure, we find that absolute discretionary accruals decrease significantly with audit firm tenure. Although some of our results show that negative discretionary accruals become less extreme as audit partner tenure gets longer, those results are not robust to alternative measures of discretionary accruals and more restricted samples. None of our results are consistent with the argument that audit partner rotation or audit firm rotation in addition to partner rotation would improve earnings quality. Instead, our results are generally consistent with the argument that audit partner/firm rotation could have adverse effects on earnings quality.

Our study contributes to the literature on auditor tenure and earnings quality by showing evidence at audit partner level. Moreover, we show evidence on the relative importance of audit firm tenure and partner tenure in explaining earning quality. This is a critical issue because audit firm rotation (which is more costly than partner rotation) cannot be justified if long audit firm tenure does not have adverse effects on earnings quality beyond the effects of partner tenure.

VI. Self-assessment

The results from this project has been presented in the American Accounting Association Annual Meeting in 2004 and currently is under review by Contemporary

Referecne

1. Belsley, D., E. Kuh, and R. Welsch. 1980. *Regression and Diagnostics*. John Wiley & Sons, Inc.
2. Butler, M., A. J. Leone, and M. Willenborg. 2004. An empirical analysis of auditor reporting and its association with abnormal accruals. *Journal of Accounting and Economics* 37: 139-165.
3. Carcello, J. V., and A. L. Nagy. 2004. Audit firm tenure and fraudulent financial reporting. *Auditing: A Journal of Practice and Theory* 23 (September): 55-69.
4. Chi, W., and H. Huang. 2004. Discretionary accruals, audit-firm tenure and audit-partner: Empirical evidence from Taiwan. Working paper, National Chengchi University.
5. Chi, W. 2004. An explanatory study on the comparison among the effect of various definitions for audit-client relationship and client importance traced at an audit-partner level on discretionary accruals. Working paper, National Chengchi University.
6. Chi, W., H. Huang, Y. Liao, and H. Xie. 2005. Mandatory audit partner rotation, audit quality and market perception: Evidence from Taiwan. Working paper, National Chengchi University.
7. Dechow, P. M., and I. D. Dichev. 2002. The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review* 77 (Supplement): 35-59
8. DeFond, M. L., and J. Jiambalvo. 1994. Debt covenant effects and the manipulation of accruals. *Journal of Accounting and Economics* 17 (January): 145-176.
9. DeFond, M. L., and K. R. Subramanyam. 1998. Auditor changes and discretionary accruals. *Journal of Accounting and Economics* 25: 35-67.
10. Francis, J. R., and J. Krishnan. 1999. Accounting accruals and auditor reporting conservatism. *Contemporary Accounting Research* 16 (Spring): 135-165.
11. Geiger, M., and K. Raghunandan. 2002. Auditor tenure and audit quality. *Auditing: A Journal of Practice and Theory* 21 (March): 187-196
12. General Accounting Office Report November 2003 (USA). Public accounting firms: Required study on the potential effects of mandatory audit firm rotation (GAO-04-216).
13. Ghosh, A., and D. Moon. 2005. Auditor tenure and perceptions of audit quality. *The Accounting Review*, forthcoming
14. Greene, W. H. 2000. *Econometric Analysis*. Englewood Cliffs, New Jersey: Prentice Hall.
15. Hamilton, J., C. Ruddock, D. Stokes, and S. Taylor. 2005. Audit partner rotation, earnings quality and earnings conservatism. Working paper, University of Technology, Sydney.
16. Heninger, W. G. 2001. The association between auditor litigation and abnormal accruals. *The Accounting Review* 76 (January): 111-126.
17. Johnson, V. E., I. K. Khurana, and J. K. Reynolds. 2002. Audit-firm tenure and the quality of financial reporting. *Contemporary Accounting Research* 19 (Winter): 637-660.
18. Jones, J. J. 1991. Earnings management during import relief investigations. *Journal of Accounting Research* 29 (Autumn): 193-228.
19. Klein, A. 2002. Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics* 33 (August): 375-400.
20. Kothari, S. P., A. J. Leone, and C. E. Wasley. 2005. Performance matched discretionary accrual measures. *Journal of Accounting and Economics* 39, 163-197.
21. Mansi, S. A., W. F. Maxwell, and D. P. Miller. 2004. Does auditor quality and tenure matter to investors? Evidence from the bond market. *Journal of Accounting Research* 42 (September): 755-793.
22. Menon, K., and D. D. Williams. 2004. Former audit partners and abnormal

- accruals. *The Accounting Review* 79 (October): 1095-1118.
23. Myers, J. N., L. A. Myers, and T. C. Omer. 2003. Exploring the term of the auditor-client relationship and the quality of earnings: A case for mandatory auditor rotation? *The Accounting Review* 78 (July): 779-799.
24. Myers, J. N., L. A. Myers, Z.-V. Palmrose, and S. W. Scholz. 2004. Mandatory auditor rotation: Evidence from restatements. Working paper, University of Illinois.
25. Nelson, M. W., J. A. Elliott, and R. L. Tarpley. 2002. Evidence from auditors about managers' and auditors' earnings management decisions. *The Accounting Review* 77 (Supplement): 175-202
26. Ng, C. 2003. Rotation of auditors: History and recent developments. Working paper, Griffith University.
27. Warfield, T., J. Wild, and K. Wild. 1995. Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting and Economics* 20 (July): 61-91.