The Effect Of Auditor Change On Initial Audit Fee Discount And Non-Audit Services

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ABSTRACT

The purpose of this research is to verify whether non-audit services are provided without additional fees at the initial audit as a strategy to win an external audit contract, which could give the appearance of initial audit fee discount. From the results, non-audit services are provided at the initial audit, and the initial audit fee is discounted accordingly, only when the independent auditor is changed from a Big 4 accounting firm to a non-Big 4 accounting firm. However, there is no meaningful relevance in any other types of changes. Therefore, if the auditor is changed from a Big 4 accounting firm to a non-Big 4 accounting firm, non-audit services are provided without additional fees in order to win an external audit contract, and the publication of audit fees with a division between the audit service fee and the non-audit service fee may give the appearance of a discounted audit service fee.

Keywords: Initial Audit; Audit Fee Discount; Non-Audit Services; Auditor Change

INTRODUCTION

An independent auditor generally provides audit service and non-audit services simultaneously if the audit is continuously maintained. For an independent auditor, maintaining a close and long-term relationship with an auditee is essential in providing a profitable non-audit service. This tendency is empirically verified by Beck et al. (1988a), who showed that a company purchasing repetitive non-audit services such as taxation, pension or information system from an independent auditor has a longer audit service period by the same auditor.

However, more auditors provide an audit service and non-audit services simultaneously after being appointed as an independent auditor, even though it is initial audit. Although not considered a general matter, certain exceptional factors may apply. In this research, we focus on the provision of non-audit services without additional fees by an accounting firm in order to win an external audit contract. Therefore, a new auditor is more likely to receive a level of total fees similar to those paid to the predecessor, while also providing additional non-audit services which were not provided by the predecessor. Moreover, although additional fees are not charged for these non-audit services provided, the officially reported audit fees are lower than those of the previous auditor because of the published division of audit fees and non-audit fees, which can be misrepresented as an initial audit fee discount.

The purpose of this research is to verify whether accounting firms provide non-audit services without additional fees at the initial audit as a strategy to win an audit contract, which could give the appearance of a discounted initial audit fee. According to previous research, this tendency is expected to occur when the independent auditor is changed to a small auditor. Therefore, whether the relevance between an audit fee discount at the initial audit and the provision of non-audit services is dependent on the type of auditor change is verified through an empirical analysis.

LITERATURE REVIEW AND HYPOTHESES

Literature Review

DeAngelo (1981) suggested the theoretical possibility of an initial audit fee discount based on the start-up cost of the initial audit and the transactional costs of an auditor change. This indicates that the start-up cost of a new auditor and the auditor conversion cost of the auditee, which are generated at auditor change, allow the current auditor to use quasi-rents, and that the auditor trying to acquire a new contract may suggest an initial audit fee discount based on predictable future quasi-rents. Many previous studies suggested such an initial audit fee discount phenomenon (Francis and Simon 1987; Simon and Francis 1988; Walker and Casterella 2000; Ghosh and Lustgarten 2006; Desir et al. 2014).

However, Dye (1991) approached audit fees from the perspective of information, and thus argued that the initial audit fee discount is not a transactional cost suggested by DeAngelo (1981), but it is based on the assumption of the bargaining power of the auditor in the process of deciding the audit fee. In other words, he expected that if the company under audit has all of bargaining power in the process of deciding audit fees, no initial audit fee discount will be offered since there are no future rents for the auditor. Therefore, if audit fees are published, the effect of future quasi-rents is decreased, and no more initial audit fee discount will be offered. Subsequently, Craswell and Francis (1999) presented an empirical result based on data in Australia showing that no initial audit fee discount is offered except in the case of escalation change from non-Big8 to Big8.

Studies on non-audit services have focused on the independence issue of the auditor through simultaneous provision of audit and non-audit services. Since the simultaneous provision of audit service and non-audit services might disrupt the independence of the auditor due to the close relationship between the auditor and the company under audit, the Securities and Exchange Commission (SEC) has required the publication of non-audit services from 2001. In relation to this, Dee et al. (2002) suggested that the accrual is increased as the portion of non-audit fees increases. In particular, Frankel et al. (2002) presented a negative association between the portion of non-audit services fee at the publication of audit fees and the stock returns.

However, even the portion of fees for non-audit services has consistently increased. Antle et al. (2006) proposed a negative association between non-audit services fee and abnormal accrual based on the knowledge transfer phenomenon due to the simultaneous provision of non-audit services. Moreover, DeFond et al. (2002) proposed that there is no meaningful relation between the portion of non-audit services fee and the auditor's opinion on the uncertainty for going-concern business, and argued that this is based on the auditor's reputation.

Hypotheses

In consideration of the knowledge transfer phenomenon due to simultaneous provision of audit and non-audit services mostly presented by the previous research related to non-audit services, the simultaneous and repetitive provision of non-audit services is considered possible in a continuous audit. The non-audit services that are provided based on information of the company under audit collected from an audit increases profits. Therefore, the non-audit services are provided more frequently during the continuous audit period than the initial audit year.

However, in consideration of the fact that the initial audit fee discount arises due to the competition between auditors to win an audit contract, a different supposition can be postulated. In the case of a large auditor (BIG), which has a relative cost advantage due to its size (or technical efficiency based on industrial expertise), the initial audit fee discount may be large due to the quasi-rents during the future audit period, whereas the inferior small auditor (non-BIG) presents a limited initial audit fee discount (Ettredge and Greenberg 1990). At this time, the small auditor (non-BIG), which has a limited initial audit fee discount, will establish a strategy to win a new audit contract through other measures rather than the initial audit fee discount. In other words, it will provide the initial audit and additional non-audit services simultaneously, which may induce the possibility to follow a non-pricing strategy rather than a pricing strategy using the initial audit fee discount, which is limited compared to that of the large auditor (BIG). Therefore, the following hypothesis is postulated.

Hypothesis 1: (In a situation where the non-audit services are relatively unusual at the initial audit year) The initial audit where a large auditor (BIG) is changed to a small auditor (non-BIG), non-audit services will probably be offered.

The unreasonable audit fees could be a sign as the possibility of disrupting the auditor' independence to the information user. If the audit fees are below a certain level, the economic relationship based on quasi-rents for the future audit period can be assumed, and if the audit fees exceed a certain level, then an audit opinion may be purchased. At this time, in consideration of the high quality of audit from a large auditor (BIG), there is no benefit in changing to a small auditor (non-BIG) from a large auditor (BIG) at higher audit fees, so it is likely for a small auditor (non-BIG) to offer lower audit fees (DeAngelo 1981; Becker et al. 1998).

However, the non-pricing strategy to provide non-audit services simultaneously may be a practical alternative since the issue of the auditor's independence may be raised due to the significantly lower audit fees and discounts are limited due to the poor cost advantage compared to a large auditor (BIG). This strategy may avoid the independence issue by maintaining similar audit fees compared to the large auditor (BIG), while obtaining a discount effect of audit fees by providing non-audit services simultaneously. Therefore, a small auditor provides additional non-audit services similar to the total fees provided by a large auditor (BIG) to compete against the large auditor (BIG) by discounting the fees per service. Therefore, the following hypothesis is postulated.

Hypothesis 2: The initial audit fee discount in terms of non-audit services is probably offered in the case of changing to a small auditor (non-BIG) from a large auditor (BIG).

SELECTION OF SAMPLE AND RESEARCH DESIGN

Selection of Sample

We analyze the listed companies on the KOSPI and KOSDAQ from 2003 to 2014. We collect financial data and corporate governance data from the KISVALUE database and audit fees and non-audit service fees from TS-2000. We select firms with a December 31 fiscal year-end. Lastly, we exclude firms that belong to the financial industry. All variables are winsorized at the 1st and 99th percentiles. The final sample size is 11,578 observations.

Research Model

We estimate the relation between non-audit services and auditor change using Equation (1). In order to calculate the probability of a client receiving a non-audit service, we use the results of the following logit model:

$$p\left(NASR_{D_{it}}\right) = \alpha_0 + \alpha_1 BIG_{NONBIG_{it}} + \alpha_2 NONBIG\_BIG_{it} + \alpha_3 BIG\_BIG_{it} + \alpha_4 NONBIG\_NONBIG_{it} + \alpha_5 LAST_{it} + \alpha_6 SIZE_{it} + \alpha_7 LEV_{it} + \alpha_8 GRW_{it} + \alpha_9 MB_{it} + \alpha_{10} ROA_{it} + \alpha_{11} CFO_{it} + \alpha_{12} OWNER_{it} + \alpha_{13} FORGI_{it} + \alpha_{14} BIG4_{it} + \alpha_{15} KOSPI_{it} + IND + YD + e \tag{1}$$

NASF_D:	1 if the client receives non-audit services for auditor and 0 otherwise;
BIG_NONBIG:	1 if changes a large auditor to a small auditor and 0 otherwise;
NONBIG_BIG:	1 if changes a small auditor to a large auditor and 0 otherwise;
BIG_BIG:	1 if changes a large auditor to a large auditor and 0 otherwise;
NONBIG_NONBIG:	1 if changes a small auditor to a small auditor and 0 otherwise;
LAST:	1 if last audit and 0 otherwise;
SIZE:	The natural logarithm of total assets;
LEV:	Total liabilities divided by total assets;
GRW:	Sales divided by beginning sales;
MB:	Market value divided by book value;
ROA:	Net income divided by lagged total assets;
CFO:	Operating cash flow divided by total assets;
OWNER:	Ownership of largest shareholder and related parties;
FORGI:	Foreign ownership;
BIG4:	1 if auditor is a large auditor called Big 4 and 0 otherwise;
KOSPI:	1 if firms are listed in KOSPI and 0 otherwise;

IND:	industry dummy
YD:	year dummy

Our variables of interest are BIG_NONBIG, NONBIG_BIG, BIG_BIG and NONBIG_NONBIG. We expect that the probability of a client receiving a non-audit services are more pronounced for firms changing a large auditor to a small auditor. Therefore, we predict α1 to be positive or not significant but α2, α3, α4 to be negative in support of H1. We include control variables (LAST, SIZE, LEV, GRW, MB, ROA, CFO, OWNER, FORGI, BIG4, KOSPI) as in Kim et al. (2016).

We estimate the relation the initial audit fee discount in terms of non-audit services and types of auditor change using Equation (2):

$$lnAF_{it} = \beta_0 + \beta_1 lnNASFEE_{it} + \beta_2 AUD_{CHI}-4_{it} + \beta_3 lnNASFEE_{it} * AUD_{CHI_{it}} + \beta_4 LAST_{it} +$$
$$\beta_5 ROA_{it-1} + \beta_6 LOSS_{it-1} + \beta_7 LEV_{it-1} + \beta_8 SIZE_{it-1} + \beta_9 GRW_{it-1} + \beta_{10} EXPRATIO_{it-1} +$$
$$\beta_{11} LIQ_{it-1} + \beta_{12} INVAR_{it-1} + \beta_{13} MB_{it-1} + \beta_{14} OWNER_{it} + \beta_{15} FORGI_{it} \tag{2}$$

lnAF:	The natural logarithm of audit fee;
lnNASFEE:	The natural logarithm of non-audit fee;
AUD_CH1-4;	
(1) BIG_NONBIG:	1 if changes a large auditor to a small auditor and 0 otherwise;
(2) NONBIG_BIG:	1 if changes a small auditor to a large auditor and 0 otherwise;
(3) BIG_BIG:	1 if changes a large auditor to a large auditor and 0 otherwise;
(4) NONBIG_NONBIG:	1 if changes a small auditor to a small auditor and 0 otherwise;
LOSS:	1 if a firm reports loss and 0 otherwise;
EXPRATIO:	international sales divided by sales;
LIQ:	current asset divided current liability
INVAR:	Receivables and inventory divided by total assets;
OPINO:	1 if audit opinion is clean and 0 otherwise;

Our variable of interest is lnNASFEEit*AUD_CH. Then we perform a regression analysis using Equation (2) across subsamples of firms with audit change type (AUD_CH1-4). The variables AUD_CH1-4 are BIG_NONBIG, NONBIG_BIG, BIG_BIG and NONBIG_NONBIG. We only expect a negative coefficient of lnNASFEE*AUD_CH1 (BIG_NONBIG) in line with Hypothesis 2. The control variable LART, ROA, LOSS, LEV is a proxy for audit risk and SIZE, GRW, EXPRATO are a proxy for client size (Simunic 1980; Francis 1984). We also include liquidity control variables (LIQ and INVAR) and corporate governance control variables (OWNER, FORGI). Simunic (1980) and Francis (1984) demonstrated that audit fees are positively associated with auditor's disqualified opinion, so we include audit opinion. We control for Book value to Market value (MB), because Book value to Market value captures various factors to audit fees in growing firms. Lastly, for all specifications of the research model, we include industry and year dummy to control for industry and year effects.

EMPIRICAL RESULTS

Descriptive Statistics and Correlation Analysis

Table 1 provides descriptive statistics for the variables included in Equations (1) and (2) for the full sample. The mean NASF_D is 28.95% and the mean of lnNASFEE is 4.8669. The mean (median) of lnAF is 18.0058 (17.9099). FIRST is 15.40 %. The mean of the interesting variables BIG_NONBIG is 3.21%.

Table 2, Panel A shows the Pearson correlation among the variables used in Equation (1) and Panel B shows the Pearson correlation among the variables used in Equation (2). The variable NASF_D shows a significant negative correlation at 1% significance level with the variable BIG_NONBIG. This result reveals a negative relation between non-audit services and changing from a large auditor to a small auditor. The lnAF and NONBIG_BIG variables show a significant negative correlation, which means that audit fees are negatively associated with firm changes from a large auditor to a small auditor.

Table 1. Descriptive Statistics

Variables	Mean	Std.	Min	1st	Median	3rd	Max
NASF_D	0.2895	0.4536	0.0000	0.0000	0.0000	1.0000	1.0000
lnNASFEE	4.8669	7.6628	0.0000	0.0000	0.0000	15.4249	19.9054
lnAF	18.0058	0.6417	16.8112	17.5958	17.9099	18.2582	20.2124
FIRST	0.1540	0.3610	0.0000	0.0000	0.0000	0.0000	1.0000
LAST	0.1536	0.3605	0.0000	0.0000	0.0000	0.0000	1.0000
BIG_NONBIG	0.0321	0.1764	0.0000	0.0000	0.0000	0.0000	1.0000
NONBIG_BIG	0.0279	0.1647	0.0000	0.0000	0.0000	0.0000	1.0000
BIG_BIG	0.0478	0.2135	0.0000	0.0000	0.0000	0.0000	1.0000
NONBIG_NONBIG	0.0461	0.2098	0.0000	0.0000	0.0000	0.0000	1.0000
SIZE	25.6612	1.3582	23.2805	24.7398	25.3954	26.3203	30.2485
LEV	0.4086	0.1963	0.0404	0.2518	0.4081	0.5553	0.8779
GRW	1.1049	0.3572	0.3342	0.9380	1.0590	1.1968	2.9226
MB	1.3333	1.2299	0.1848	0.5976	0.9500	1.5937	7.7098
ROA	0.0122	0.1140	-0.5681	-0.0007	0.0308	0.0678	0.2128
CFO	0.0496	0.1008	-0.2641	-0.0043	0.0472	0.1034	0.3469
OWNER	0.2693	0.1382	0.0474	0.1655	0.2422	0.3482	0.6999
FOR	0.0633	0.1123	0.0000	0.0014	0.0114	0.0692	0.5613
BIG4	0.5449	0.4980	0.0000	0.0000	1.0000	1.0000	1.0000
KOSPI	0.4222	0.4939	0.0000	0.0000	0.0000	1.0000	1.0000
LAG_ROA	0.0177	0.1133	-0.5504	0.0030	0.0342	0.0739	0.2235
LAG_LOSS	0.2345	0.4237	0.0000	0.0000	0.0000	0.0000	1.0000
LAG_SIZE	25.5854	1.3616	23.2381	24.6572	25.3218	26.2473	30.1817
LAG_LEV	0.4071	0.1952	0.0433	0.2517	0.4057	0.5520	0.8751
LAG_GRW	1.1296	0.4001	0.3405	0.9483	1.0704	1.2147	3.3131
LAG_EXPRATIO	0.2699	0.3054	0.0000	0.0001	0.1285	0.5005	0.9865
LAG_LIQ	2.5703	2.9318	0.2541	1.0514	1.5931	2.7697	19.2912
LAG_INVAR	0.2782	0.1541	0.0000	0.1633	0.2670	0.3811	0.6785
LAG_MB	1.3051	1.1964	0.1757	0.5806	0.9343	1.5808	7.4121
LAG_OPINO	0.9977	0.0482	0.0000	1.0000	1.0000	1.0000	1.0000

Table 2. Correlation Matrix

Panel A. Correlation Matrix for Model 1

	V1	V2	V3	V4	V5	V6	V7	V8
NASF_D(V1)	**1.000**							
BIG_NONBIG (V2)	**-0.032**	1.000						
NONBIG_BIG (V3)	-0.003	-0.031	1.000					
BIG_BIG (V4)	**0.023**	-0.041	-0.038	1.000				
NONBIG_NONBIG (V5)	**-0.060**	-0.040	-0.037	-0.049	1.000			
LAST(V6)	**-0.038**	-0.078	-0.072	-0.095	-0.094	1.000		
SIZE(V7)	**0.192**	-0.068	-0.010	0.142	-0.111	-0.038	**1.000**	
LEV(V8)	-0.007	-0.020	0.006	0.024	-0.002	0.040	**0.201**	**1.000**
GRW(V9)	0.005	0.003	0.025	0.003	0.022	-0.009	**-0.023**	0.045
MB(V10)	**0.044**	-0.008	0.000	0.006	0.003	0.030	**-0.096**	0.066
ROA(V11)	**0.059**	-0.003	0.015	0.032	-0.059	-0.082	**0.196**	-0.282
CFO(V12)	**0.068**	-0.017	0.008	0.021	-0.050	-0.035	**0.074**	-0.184
OWNER(V13)	**0.023**	-0.015	0.014	0.025	-0.025	-0.020	**0.045**	-0.021
FOR(V14)	**0.168**	-0.053	-0.016	0.083	-0.077	-0.028	**0.463**	-0.103
BIG4(V15)	**0.171**	-0.199	0.155	0.205	-0.241	-0.024	**0.364**	0.031
KOSPI(V16)	**0.121**	-0.056	0.000	0.101	-0.058	0.000	**0.552**	0.103

(Table 1, Panel A continued on next page)

Panel A. continued

	V9	V10	V11	V12	V13	V14	V15	V16
GRW(V9)	**1.000**							
MB(V10)	**0.102**	**1.000**						
ROA(V11)	**0.188**	**-0.096**	**1.000**					
CFO(V12)	**0.089**	0.028	**0.449**	**1.000**				
OWNER(V13)	-0.010	**-0.062**	**0.131**	**0.071**	**1.000**			
FOR(V14)	-0.008	**0.110**	**0.181**	**0.155**	0.022	**1.000**		
BIG4(V15)	**-0.021**	-0.009	**0.092**	**0.082**	**0.092**	**0.243**	**1.000**	
KOSPI(V16)	**-0.066**	**-0.166**	**0.075**	-0.025	**0.040**	**0.263**	**0.237**	**1.000**

Panel B. Correlation Matrix for Model 2

	V1	V2	V3	V4	V5	V6	V7	V8	V9
lnAF (V1)	**1.000**								
lnNASFEE (V2)	**0.259**	**1.000**							
BIG_NONBIG (V3)	**-0.098**	**-0.036**	**1.000**						
NONBIG_BIG (V4)	**-0.028**	-0.002	**-0.031**	**1.000**					
BIG_BIG (V5)	**0.116**	**0.025**	**-0.041**	**-0.038**	**1.000**				
NONBIG_NONBIG (V6)	**-0.100**	**-0.063**	**-0.040**	**-0.037**	**-0.049**	**1.000**			
LAG_ROA (V7)	**0.055**	**0.055**	**-0.038**	-0.005	**0.024**	**-0.069**	**1.000**		
LAG_LOSS (V8)	**-0.055**	**-0.045**	**0.033**	-0.002	**-0.019**	**0.048**	**-0.706**	**1.000**	
LAG_SIZE (V9)	**0.815**	**0.222**	**-0.072**	-0.013	**0.136**	**-0.113**	**0.173**	**-0.155**	**1.000**
LAG_LEV (V10)	**0.239**	0.004	-0.014	0.009	**0.021**	0.001	**-0.288**	**0.221**	**0.221**
LAG_GRW (V11)	**-0.021**	0.008	-0.005	0.000	-0.012	0.003	**0.191**	**-0.156**	-0.018
LAG_EXPRATIO (V12)	**0.070**	**0.027**	-0.003	-0.006	-0.002	**-0.020**	**0.028**	0.017	**0.075**
LAG_LIQ (V13)	**-0.209**	0.007	**0.024**	-0.011	**-0.022**	0.017	**0.119**	**-0.072**	**-0.215**
LAG_INVAR (V4)	**-0.168**	**-0.079**	0.013	**0.021**	**-0.043**	0.007	**0.091**	**-0.092**	**-0.168**
LAG_MB (V15)	**0.071**	**0.049**	0.004	0.011	**0.018**	**0.022**	**-0.069**	**0.072**	**-0.088**
OWNER (V16)	-0.004	**0.022**	-0.015	0.014	**0.025**	**-0.025**	**0.124**	**-0.086**	**0.043**
FOR (V17)	**0.436**	**0.189**	**-0.053**	-0.016	**0.083**	**-0.077**	**0.184**	**-0.149**	**0.456**
LAG_OPINO (V18)	0.000	0.011	0.009	0.008	0.002	0.002	**0.027**	**-0.028**	0.013

Panel B. continued

	V10	V11	V12	V13	V14	V15	V16	V17	V18
LAG_LEV (V10)	**1.000**								
LAG_GRW (V11)	**0.041**	**1.000**							
LAG_EXPRATIO (V12)	**0.049**	0.008	**1.000**						
LAG_LIQ (V13)	**-0.619**	**-0.035**	-0.014	**1.000**					
LAG_INVAR (V4)	**0.188**	**0.079**	**0.029**	**-0.144**	**1.000**				
LAG_MB (V15)	**0.062**	**0.111**	0.011	**0.042**	**-0.077**	**1.000**			
OWNER (V16)	**-0.020**	-0.013	**-0.056**	**0.035**	0.016	**-0.059**	**1.000**		
FOR (V17)	**-0.088**	0.009	0.015	**0.029**	**-0.128**	**0.109**	**0.022**	**1.000**	
LAG_OPINO (V18)	**-0.022**	0.004	-0.006	0.009	-0.005	-0.006	-0.010	-0.006	**1.000**

1) The lower triangle presents the Pearson correlation coefficients. Boldfaced figures are statistically significant at the 0.05 level.

Table 2. Correlation Matrix

Panel A. Correlation Matrix for Model 1

	V1	V2	V3	V4	V5	V6	V7	V8
NASF_D(V1)	1.000							
BIG_NONBIG (V2)	-0.032	1.000						
NONBIG_BIG (V3)	-0.003	-0.031	1.000					
BIG_BIG (V4)	0.023	-0.041	-0.038	1.000				
NONBIG_NONBIG (V5)	-0.060	-0.040	-0.037	-0.049	1.000			
LAST(V6)	-0.038	-0.078	-0.072	-0.095	-0.094	1.000		
SIZE(V7)	0.192	-0.068	-0.010	0.142	-0.111	-0.038	1.000	
LEV(V8)	-0.007	-0.020	0.006	0.024	-0.002	0.040	0.201	1.000
GRW(V9)	0.005	0.003	0.025	0.003	0.022	-0.009	-0.023	0.045
MB(V10)	0.044	-0.008	0.000	0.006	0.003	0.030	-0.096	0.066
ROA(V11)	0.059	-0.003	0.015	0.032	-0.059	-0.082	0.196	-0.282
CFO(V12)	0.068	-0.017	0.008	0.021	-0.050	-0.035	0.074	-0.184
OWNER(V13)	0.023	-0.015	0.014	0.025	-0.025	-0.020	0.045	-0.021
FOR(V14)	0.168	-0.053	-0.016	0.083	-0.077	-0.028	0.463	-0.103
BIG4(V15)	0.171	-0.199	0.155	0.205	-0.241	-0.024	0.364	0.031
KOSPI(V16)	0.121	-0.056	0.000	0.101	-0.058	0.000	0.552	0.103

Panel A. continued

	V9	V10	V11	V12	V13	V14	V15	V16
GRW(V9)	1.000							
MB(V10)	0.102	1.000						
ROA(V11)	0.188	-0.096	1.000					
CFO(V12)	0.089	0.028	0.449	1.000				
OWNER(V13)	-0.010	-0.062	0.131	0.071	1.000			
FOR(V14)	-0.008	0.110	0.181	0.155	0.022	1.000		
BIG4(V15)	-0.021	-0.009	0.092	0.082	0.092	0.243	1.000	
KOSPI(V16)	-0.066	-0.166	0.075	-0.025	0.040	0.263	0.237	1.000

Panel B. Correlation Matrix for Model 2

	V1	V2	V3	V4	V5	V6	V7	V8	V9
lnAF (V1)	1.000								
lnNASFEE (V2)	0.259	1.000							
BIG_NONBIG (V3)	-0.098	-0.036	1.000						
NONBIG_BIG (V4)	-0.028	-0.002	-0.031	1.000					
BIG_BIG (V5)	0.116	0.025	-0.041	-0.038	1.000				
NONBIG_NONBIG (V6)	-0.100	-0.063	-0.040	-0.037	-0.049	1.000			
LAG_ROA (V7)	0.055	0.055	-0.038	-0.005	0.024	-0.069	1.000		
LAG_LOSS (V8)	-0.055	-0.045	0.033	-0.002	-0.019	0.048	-0.706	1.000	
LAG_SIZE (V9)	0.815	0.222	-0.072	-0.013	0.136	-0.113	0.173	-0.155	1.000
LAG_LEV (V10)	0.239	0.004	-0.014	0.009	0.021	0.001	-0.288	0.221	0.221
LAG_GRW (V11)	-0.021	0.008	-0.005	0.000	-0.012	0.003	0.191	-0.156	-0.018
LAG_EXPRATIO (V12)	0.070	0.027	-0.003	-0.006	-0.002	-0.020	0.028	0.017	0.075
LAG_LIQ (V13)	-0.209	0.007	0.024	-0.011	-0.022	0.017	0.119	-0.072	-0.215
LAG_INVAR (V4)	-0.168	-0.079	0.013	0.021	-0.043	0.007	0.091	-0.092	-0.168
LAG_MB (V15)	0.071	0.049	0.004	0.011	0.018	0.022	-0.069	0.072	-0.088
OWNER (V16)	-0.004	0.022	-0.015	0.014	0.025	-0.025	0.124	-0.086	0.043
FOR (V17)	0.436	0.189	-0.053	-0.016	0.083	-0.077	0.184	-0.149	0.456
LAG_OPINO (V18)	0.000	0.011	0.009	0.008	0.002	0.002	0.027	-0.028	0.013

(Table 2, Panel B continued on next page)

Panel B. Continued

	V10	V11	V12	V13	V14	V15	V16	V17	V18
LAG_LEV (V10)	**1.000**								
LAG_GRW (V11)	**0.041**	**1.000**							
LAG_EXPRATIO (V12)	**0.049**	0.008	**1.000**						
LAG_LIQ (V13)	**-0.619**	**-0.035**	-0.014	**1.000**					
LAG_INVAR (V4)	**0.188**	**0.079**	0.029	**-0.144**	**1.000**				
LAG_MB (V15)	**0.062**	**0.111**	0.011	**0.042**	**-0.077**	**1.000**			
OWNER (V16)	**-0.020**	-0.013	**-0.056**	**0.035**	0.016	**-0.059**	**1.000**		
FOR (V17)	**-0.088**	0.009	0.015	**0.029**	**-0.128**	**0.109**	0.022	**1.000**	
LAG_OPINO (V18)	**-0.022**	0.004	-0.006	0.009	-0.005	-0.006	-0.010	-0.006	**1.000**

Results for the Study Hypotheses

Table 3 provides the results of Equation (1) to test hypothesis 1. The non-audit services and initial audit have a significant negative association. However, the results reveal no significant relationship between non-audit services and the change from a large auditor to a small auditor. The result suggests that in the case of an initial audit where a large auditor is changed to a small auditor, non-audit services will likely be provided.

Table 3. Results of Hypothesis 1

	Coefficient	p-value	Coefficient	p-value
Intercept	-6.6320***	(<.0001)	-6.6560***	(<.0001)
FIRST	-0.2592***	(<.0001)		
BIG_NONBIG			-0.0834	(0.5398)
NONBIG_BIG			-0.3043**	(0.0221)
BIG_BIG			-0.3184***	(0.0015)
NONBIG_NONBIG			-0.2624**	(0.0362)
LAST	-0.2889***	(<.0001)	-0.2895***	(<.0001)
SIZE	0.2120***	(<.0001)	0.2122***	(<.0001)
LEV	-0.4402***	(0.0005)	-0.4380***	(0.0006)
GRW	-0.0006	(0.9926)	0.0001	(0.9993)
MV	0.1030***	(<.0001)	0.1034***	(<.0001)
ROA	-0.2735	(0.2523)	-0.2770	(0.2465)
CFO	0.7791***	(0.0015)	0.7818***	(0.0014)
OWNER	0.2303	(0.1390)	0.2304	(0.1389)
FORGI	0.7320***	(0.0007)	0.7322***	(0.0007)
BIG4	0.4997***	(<.0001)	0.5184***	(<.0001)
KOSPI	0.1834***	(0.0009)	0.1843***	(0.0009)
IND	Included		Included	
YD	Included		Included	
Max-rescaled R2	0.1170		0.1173	
Likelihood Ration	989.2028***		991.32777***	
# of NASF=1	3,352		3,352	
# of NASF=0	8,226		8,226	
Obs.	11,578		11,578	

1) Variable definition FIRST: 1 if audit is initial audit and otherwise 0. Notes: *, **, *** represent significance at the 10, 5, and 1 percent levels, respectively.

Table 4 reports the results of Equation (2) to test hypothesis 2. Consistent with hypothesis 2, we find that the coefficients on AUD_CH*lnNASFEE are significantly negative for the third column, which shows Equation (2) by using AUD_CH as a proxy for BIG_NONBIG (-0.1571, t=-3.56). However, we find no significant relationship between lnAF and AUD_CH2*lnNASFEE, AUD_CH3*lnNASFEE and AUD_CH4*lnNASFEE. The result suggest that the initial audit fee discount in terms of non-audit services is probably offered in the case of changing to a small auditor from a large auditor. We continue to find evidence generally supporting our hypothesis 2.

Table 4. Results of Hypothesis 2

	Proxy for AUD_CH				
	FIRST	BIG_NONBIG	NONBIG_BIG	BIG_BIG	NONBIG_NONBIG
	Coefficient (t-stat.)	**Coefficient (t-stat.)**	**Coefficient (t-stat.)**	**Coefficient (t-stat.)**	**Coefficient (t-stat.)**
Intercept	8.6303*** (82.68)	8.6618*** (83.06)	8.6282*** (82.52)	8.6318*** (82.31)	8.6459*** (82.53)
lnNASFEE	0.0061*** (12.98)	0.0059*** (13.55)	0.0059*** (13.31)	0.0059*** (13.15)	0.0059*** (13.26)
AUD_CH	-0.0467*** (-4.38)	-0.1159*** (-5.67)	-0.0412* (-1.78)	0.0109 (0.58)	-0.0213 (-1.26)
AUD_CH lnNASFEE*	-0.0026** (-2.14)	-0.1571*** (-3.56)	-0.0501 (-1.16)	-0.0276 (-0.87)	-0.0551 (-1.36)
LAST	0.0070 (0.75)	-0.2929*** (-6.97)	-0.2893*** (-6.86)	-0.2882*** (-6.83)	-0.2898*** (-6.87)
LAG_ROA	-0.2945*** (-6.99)	0.0204* (1.90)	0.0201* (1.87)	0.0201* (1.87)	0.0200* (1.86)
LAG_LOSS	0.0200* (1.86)	0.3665*** (116.17)	0.3676*** (116.26)	0.3675*** (115.56)	0.3670*** (115.73)
LAG_LEV	0.14805*** (6.24)	-0.0175** (-2.09)	-0.0170** (-2.04)	-0.01684** (-2.01)	-0.0168** (-2.01)
LAG_SIZE	0.3677*** (116.47)	0.1471*** (6.21)	0.1468*** (6.18)	0.1481*** (6.23)	0.1487*** (6.26)
LAG_GRW	-0.01782** (-2.13)	0.0081 (0.68)	0.00849 (0.71)	0.00847 (0.71)	0.0080 (0.68)
LAG_EXPRATIO	0.00742 (0.62)	-0.0054*** (-3.84)	-0.0055*** (-3.95)	-0.00553*** (-3.91)	-0.0054*** (-3.87)
LAG_LIQ	-0.00546*** (-3.86)	0.0077 (0.33)	0.0065 (0.28)	0.00559 (0.23)	0.0049 (0.21)
LAG_INVAR	0.00519 (0.22)	0.0549*** (18.66)	0.0552*** (18.69)	0.05502*** (18.62)	0.0549*** (18.59)
LAG_MB	0.05537*** (18.77)	-0.1041*** (-4.44)	-0.0999*** (-4.25)	-0.10108*** (-4.3)	-0.1022*** (-4.35)
OWNER	-0.0993*** (-4.23)	0.3961*** (11.61)	0.3995*** (11.67)	0.40225*** (11.75)	0.4009*** (11.72)
FORGI	0.39731*** (11.63)	-0.08344 (-1.26)	-0.08724 (-1.32)	-0.08792 (-1.33)	-0.08762 (-1.32)
LAG_OPINO	-0.08546 (-1.29)	-0.0933*** (-5.74)	-0.0862*** (-5.29)	-0.08714*** (-5.35)	-0.0879*** (-5.4)
IND	Included	Included	Included	Included	Included
YD	Included	Included	Included	Included	Included
Adj. R²	0.7156	0.7164	0.7146	0.7144	0.7146
Obs.	11578	11578	11578	11578	11578

1) Notes: *, **, *** represent significance at the 10, 5, and 1 percent levels, respectively.

Additional Tests

In this section, we conduct sensitivity tests to verify whether the above results are robust using the extended model. We present a regression analysis that incorporates the four audit change variables, BIG_NONBIG, NONBIG_BIG, BIG_BIG, and NONBIG_NONBIG, and the four interaction variables, *lnNASFEE* BIG_NONBIG, *lnNASFEE* NONBIG_BIG, *lnNASFEE* BIG_BIG,* and *lnNASFEE* NONBIG_NONBIG.*

The results are consistent with our hypotheses, and we find that the coefficients on lnNASFEE* BIG_NONBIG are significantly negative for the extended model. The results reveal no significant relationship between audit fees (lnAF) and *lnNASFEE* NONBIG_BIG*, *lnNASFEE* BIG_BIG,* and *lnNASFEE* NONBIG_NONBIG.* However, audit fees have the significantly negative association with non-audit fees when changing from a large auditor to a small auditor.

Table 5. Results of Hypothesis 2 by Using the Extended Model

	Coefficient	(t-stat.)
Intercept	8.6748***	(82.87)
lnNASFEE	0.0062***	(13.35)
BIG_NONBIG	-0.1206***	(-5.88)
NONBIG_BIG	-0.0497**	(-2.15)
BIG_BIG	0.0032	(0.17)
NONBIG_NONBIG	-0.0312*	(-1.84)
lnNASFEE BIG_NONBIG*	-0.1608***	(-3.64)
lnNASFEE NONBIG_BIG*	-0.0542	(-1.26)
lnNASFEE BIG_BIG*	-0.0326	(-1.03)
lnNASFEE NONBIG_NONBIG*	-0.0592	(-1.47)
LAG_ROA	-0.2977***	(-7.08)
LAG_LOSS	0.0201*	(1.87)
LAG_LEV	0.1474***	(6.22)
LAG_LEV	0.3660***	(115.18)
LAG_GRW	-0.0180**	(-2.16)
LAG_EXPRATIO	0.0073	(0.61)
LAG_LIQ	-0.0054***	(-3.82)
LAG_INVAR	0.0075	(0.32)
LAG_MB	0.0552***	(18.73)
OWNER	-0.1027***	(-4.38)
FORGI	0.3902***	(11.44)
LAG_OPINO	-0.0814	(-1.23)
IND	Included	
YD	Included	
Adj. R^2	0.7168	
Obs.	11578	

1) Notes: *, **, *** represent significance at the 10, 5, and 1 percent levels, respectively.
2) See TABLE 1 for definition for other variables.

SUMMARY AND CONCLUSION

The purpose of this research is to verify whether non-audit services are provided without additional fees at the initial audit as a strategy to win an external audit contract, which could give the appearance of initial audit fee discount. The results are as follows.

Similar to Beck et al. (1988a), it is reconfirmed that non-audit services are generally not provided simultaneously in the case of an initial audit. However, if the type of auditor change is classified, and if it is changed from a Big 4 accounting firm to a non-Big 4 accounting firm, it tends to provide non-audit services at initial audit unlike other change types. This result suggests that a non-Big 4 accounting firm may use non-audit services in order to win external audit contracts. In order to verify this, entire samples are divided into four groups according to the types of auditor change and verified. As a result, non-audit services are provided at the initial audit, and the initial audit fee is appeared to be discounted accordingly, only when the independent auditor is changed from a Big 4 accounting firm to a non-Big 4 accounting firm. However, there is no meaningful relevance in any other types of changes. Therefore, if the auditor is changed from a Big 4 accounting firm to a non-Big 4 accounting firm, non-audit services are provided without additional fees in order to win an external audit contract, and the publication of audit fees with a division between the audit service fee and the non-audit service fee may give the appearance of a discounted audit service fee.

This research has scientific value in being the first investigation of the relevance between the initial audit fee discount and non-audit services according to the auditor change. Moreover, this research raises the issue regarding the actual nature of the non-audit services provided at initial audit. Since it should provide an audit service and non-audit service within the total fees similar to the audit service fee of the predecessor, the audit hours will be definitely decreased and, therefore, the quality of the audit will likely be degraded. Therefore, the accounting regulation agency needs to pay more attention to the type of auditor change and non-audit services which would be provided at the initial audit. And

the description and nature of the non-audit services provided at the initial audit should be published to protect investors, and the adequacy of the total fees and audit and non-audit service fees needs to be reviewed more carefully.

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REFERENCES

Antle, R., E. Gordon, G. Narayanamoorthy, and L. Zhou. 2006. The joint determination of audit fees, non-audit fees, and abnormal accruals, *Review of Quantitative Finance and Accounting* 27(3): 235-266.

Beck, P. J., T. J. Frecka, and I. Solomon. 1988a. A model of the market for MAS and audit services: Knowledge spillovers and auditor-auditee bounding, *Journal of Accounting Literature* 7(1): 50-64.

Beck, P. J., T. J. Frecka, and I. Solomon. 1988b. An empirical analysis of the relationship between MAS involvement and auditor tenure: Implications for auditor independence, *Journal of Accounting Literature* 7(1): 65-84.

Becker, C. L., M. L. DeFond, J. Jiambalvo, and K. R. Subramanyam. 1998. The effect of audit quality on earnings management, *Contemporary Accounting Research* 15(1): 1-24.

Craswell, A. T., and J. R. Francis. 1999. "Pricing initial audit engagements: A test of competing theories, *The Accounting Review* 74(2): 201-216.

DeAngelo, L. E. 1981. Auditor size and audit quality, *Journal of Accounting and Economics* 3: 183-199.

Dee, C. C., A. A. Luiseged, and T. S. Nowlin. 2002. Earnings quality and auditor independence: An Examination using non-audit fee data, Working paper.

DeFond, M. L., K. Raghunandan, and K. R. Subramanyam. 2002. Do non-audit service fee impair auditor independence? Evidence from going concern audit opinions, *Journal of Accounting Research* 40(4): 1247-1274.

Desir, R., J. R. Casterella, and J. Kokina. 2014. "A reexamination of audit fees for initial audit engagements in the post-SOX period, Auditing: A Journal of Practice & Theory 33(2): 59-78.

Dye, R. A. 1991. Informationally motivated auditor replacement, *Journal of Accounting and Economics* 14(4): 347-374.

Ettredge, M., and R. Greenberg. 1990. Determinants of fee cutting on initial audit engagements, *Journal of Accounting Research* 28(1): 198-210.

Francis, J. R., and D. T. Simon. 1987. A test of audit pricing in the small-client segment of the US audit market, *The Accounting Review* 62(1): 145-157.

Frankel, R. M., M. F. Johnson, and K. K. Nelson. 2002. The relation between auditors' fee for nonaudit services and earnings management, *The Accounting Review* 77(s-1): 71-105.

Ghosh, A., and S. Lustgarten. 2006. Pricing of initial audit engagements by large and small audit firms, *Contemporary Accounting Research* 23(2): 333-368.

Kim, B., J. Jang, and J. Cheung. The Effects of Non-audit Services on Audit Quality, Audit fee and Audit hour with Controlling for Endogeneity, *Korean Management Review* 45(2): 365-401.

Simon, D. T., and J. R. Francis. 1988. The effects of auditor change on audit fees: Tests of price cutting and price recovery, *The Accounting Review* 63(2): 255-269.

Simunic, D. A. 1984. Auditing, consulting, and auditor independence, *Journal of Accounting Research* 22(2): 679-702.

Walker, P. L., J. R. Casterella. 2000. The role of auditee profitability in pricing new audit engagements, Auditing: *A Journal of Practice & Theory* 19(1): 157-167.

NOTES