Overvaluation of Accruals Persistence by Sophisticated Users of Accounting Information

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Using a simple survey of sell-side analysts, auditors, and loan officers, this paper examines whether sophisticated users of accounting information differ in the extent to which they overestimate the value-relevant information in accruals. We infer the extent to which they overvalue accruals from the difference in the weight they give to net income and operating cash flow in assessing firm performance. We find that loan officers are more likely to be overly optimistic about accruals, compared to analysts and auditors. We offer three explanations for this: first, the possibility that loan officers are less sophisticated; second, the lending practice of Korean banks that require collateral; and third, loan officers' preference for accrual-based financial statements for early-stage firms. The results suggest that the understanding of accrual overvaluation differs between different sophisticated groups of users. These findings are expected to encourage sophisticated market participants to correctly assess the informativeness of accruals and help to reduce the overvaluation of accruals that is widespread in the capital markets.

Ⅰ. Introduction

This paper examines how differently the sophisticated accounting information users perceive the overvaluation of accruals from a brief survey of 149 respondents consisting of sell-side analysts, auditors, and bank loan officers. Accruals are less persistent than cash flow but average investors do not fully understand it [Sloan, 1996; Francis, 1999; Kaserer & Klingler, 2008]. The capital mar-

kets continue to fixate on the number of earnings and overestimate the persistence of accruals, which is called accrual anomaly. The concepts of earnings quality that are widely accepted in practice include earnings persistence, conservatism, cash convertibility, predictability for future earnings and earnings volatility. Among these, we consider in this paper that the overvaluation of accruals implicit in the difference between net income and operating cash flow is at the core of the concept of earnings quality. This suggests

that the role of sophisticated market partic-
ipants in helping naive investors to under-
stand the value implications of accruals is
important [Collins et al, 2003; Barth, 2004;
Ahmed et al, 2006; Lev & Nissim, 2006;
Kao, 2007; Barone & Magilke, 2009; Peng
et al, 2016; Raonic & Sahin, 2020]. Hence,
there are some studies that examine how the
sophisticated participants understand the
accrual overvaluation.

Of these, the most evidence is for sell-side
analysts. This is because sell-side analysts,
as information intermediaries, have a sig-
nificant impact on capital markets. Analysts'
earnings forecast errors are negatively related
to the level of accruals [Bradshaw et al, 2001].
There is a positive relationship between ana-
lyst forecast revisions and current year ac-
cruals [Barth & Hutton, 2004]. The over-
valuation of accruals impounded in the stock
price is mitigated for firms with higher ana-
lyst coverage, but it is not perfect [Elgers et
al, 2003]. These findings suggests that the
analysts, although better than naive invest-
ors, do not fully understand the difference in
value relevance between earnings and cash
flow, and are likely to be overly optimistic
about accruals. It is inconclusive whether the
auditors fully understand the overvaluation
of accruals. Auditors understand the higher
uncertainty of accruals relative to cash flow
and are more likely to be conservative for the
audit report of the high accrual firms [Francis
& Krishnan, 1999]. In contrast, there is no
evidence that high accrual firms have more

modifications of audit opinion and auditor
turnover [Bradshaw et al, 2001]. Auditors'
lack of firm-specific knowledge is associated
with lower earnings quality [Johnson et al,
2002; Gul et al, 2009]. For loan officers, there
is evidence that they have a good understanding
of the implications of accruals for future
earnings. Firms with higher earnings quality
have easier access to bank loans [Garcia-Teruel
et al, 2014]. Firms with high accruals are
likely to choose syndicated bank loans over
public debt to reduce adverse selection costs
[Bharath et al, 2008]. They also report that
banks adjust the terms of the loan contract,
such as the spread, the maturity and the
likelihood of collateral being provided, de-
pending on the earnings quality of the firms.
However, some evidence is inconsistent with
these studies. Loan officers prefer financial
statements based on accrual-based accounting
information over cash-based accounting in-
formation when evaluating a loan application
[Riahi-Belkaoui, 1992]. Small firms using
accrual accounting have lower interest rates
[Cassar et al, 2015].

This mixed evidence on the level of sophis-
tication of different user groups suggests that
it is difficult even for the sophisticated users
to fully understand the gap between accounting
earnings and economic performance. To fully
understand it, a comprehensive knowledge of
the firm-specific earnings reporting system
including the accrual generation process and
incentives for opportunistic earnings man-
agement is required [Bradshaw et al, 2001;

Beneish & Vargus, 2002). This implies that the understanding of accrual over-optimism by sophisticated users is better approached as a matter of degree rather than a binary judgement. In this respect, our study, which compares how different groups of sophisticated users belong in the same market perceive the overvaluation of accruals, provides an extended insight into the recognition of accruals by sophisticated market participants.

We also note that it is difficult to get a clear picture of sophisticated users' understanding of the value implications of accruals based on large-sample archival studies. The studies typically use earnings forecasts and audit opinions, but these are ex-post outcomes affected by practitioners' intent and sophistication together. For this reason, it is difficult to distinguish from data on earnings forecasts or audit opinions whether analysts or auditors lack an understanding of the value implications of accruals, or whether they intentionally fail to fully incorporate the information into their earnings forecasts or audit reports. For example, analysts are likely to overstate accruals to maintain good relations with management, who want to inflate earnings forecasts to boost stock prices (Bradshaw et al, 2001).

We expect survey research to make up for such a weakness in archival research with large samples. Survey research allows to avoid misinterpreting the intentions of practitioners that can be realized in unexpected ways due to unidentified institutional factors. It also helps to avoid errors in statistical inference that may arise due to the research design flaws (Dichev et al, 2013). Of course, survey research has its own weaknesses (Nayak & Narayan, 2019). For example, a limited number of observations, the possibility that respondents may misinterpret questions, lie, respond strategically to the researcher's intentions, or behave differently from their answers. Therefore, survey and large-sample archival research need to lean on each other.

Using a simple survey, we find that there is a difference in the overvaluation of accruals between different user groups. Sell-side analysts and auditors consider cash flow to be more important than net income in evaluating firm performance, whereas loan officers do not recognize the difference in importance between the two. We infer from this result that loan officers more likely to overvalue accruals than sell-side analysts and auditors. There are three possible explanations for why loan officers prefer net income to cash flow and ignore the overvaluation of accruals. First, loan officers may lack the sophistication to distinguish between them. Second, Korean commercial banks have a lending practice that requires collateral. Collateral can compensate for low earnings quality (Bharath et al, 2008). Thus, loan officers do not need to distinguish the value relevance between net income and cash flow. Third, the use of accrual-based reporting by small firms may increase the credibility of the firm's financial documents, leading loan officers to prefer accrual-

based financial information over cash-based information (Riahi-Belkaoui, 1992; Cassar et al, 2015).

The study provides evidence that different groups of sophisticated users may have different perceptions of the overvaluation of accruals. We expect that the evidence induces sophisticated market participants to better assess the informativeness of accruals and help reduce the widespread overvaluation of accruals in the capital markets.

II. Survey Logistics

The survey was conducted to a total of 149 active accounting information users in Korea, 49 of whom are CPAs (Certified Public Accountants) working as auditors at the Big 4 accounting firms, 48 sell-side analysts working at three investment banks, and 52 loan officers in the business lending department of three commercial banks. The Big 4 accounting firms include PwC, KPMG, EY, and Deloitte Korea, the three investment banks are KB, Shinyoung, and MiraeAsset, and the three commercial banks are KB, Hana, and Woori. We emailed the questionnaire to 152 people, and received 149. The survey is anonymous and does not ask respondents to disclose any information about their personal identity or company affiliation, except for the number of years they have worked in their current job. The length of time respondents have worked in

their current job is used to measure their work experience. Work experience is associated with the level of sophistication in incorporating public information and may therefore cause differences in perceptions of accruals between individual respondents (Drake & Myers, 2011). The questionnaire contains the following three questions. The first question is required to be answered on the Likert-scale of 1 to 10 based on the strength of the feeling regarding the question. The other two questions are set to be answered with 'yes' or 'no'.

Question 1: Rate how adequately each of the following financial indicators represents the firm's economic performance. (The financial indicators listed in the survey are 'Net income' and 'Operating cash flow')

Question 2: Have you heard of the concept of earnings quality?

Question 3: Have you been informed about the implications of the adoption of K-IFRS on the accounting information of Korean firms?

The first question, which is our main question, aims to find out how much the respondent perceives the overvaluation of accruals. In addition to 'net income' and 'operating cash flow', the survey also asks respondents to rate 'sales' and 'operating income', to disguise the intention to examine the difference in perception between net income and operating cash flow. However, the results are not presented here as we do not consider them to be

relevant to the topic of this paper, i.e., the overvaluation of accruals. We do not use the term 'accruals' because respondents may not be technically aware of it, and we do not want to reveal our intention to examine the perceptions of accruals. We suspect that the disclosure of our intention to investigate the overvaluation of accruals is likely to bias respondents' answers. The difference in scores between net income and operating cash flow measures the extent to which respondents perceive net income to be a better indicator of a firm's performance than cash flow. That is, it indicates the respondent's unconscious assessment of how well accruals represent the firm's performance. We thus use it as a proxy for the likelihood that the respondent overvalues accruals when assessing the firm's performance.

The other two questions are intended to examine respondents' individual knowledge on the general concept of earnings quality. Being familiar with the concept can be associated with the sophistication in understanding the implications of accruals for firm performance. Knowledge of earnings quality may vary across individuals, either through personal experience, interest in general accounting issues, ability to acquire information from media report, and training opportunities provided in their work [Clement, 1999; Drake & Myers, 2011]. Therefore, it is important to control for individual background on earnings quality in order to separately identify the differences in the understanding of accruals across

professions. In this context, the second question asks directly whether respondents are familiar with the concept of earnings quality. And the third question asks whether they recognize the earnings quality issue related to a specific accounting event, the adoption of K-IFRS by Korean firms. The adoption of K-IFRS has been widely discussed in Korea in terms of the quality of accounting information of Korean firms. All Korean firms listed on the KOSPI (Korea Composite Stock Price Index) and KOSDAQ (Korea Securities Dealers Automated Quotation) markets have been required to follow K-IFRS since 2012. For specific issues related to the adoption, see, for example, Lee et al.(2015) and Shin et al. (2018). So, if the respondents are aware of this, we expect that they are likely to have some background to better understand the gap between earnings and economic performance.

To quantify the overvaluation of accruals by sophisticated users of accounting information, we estimate the following regression equation.

$$Accruals_{it} = \beta_0 + \beta_1*Loan\_officers_{it}$$
$$+ \beta_2*Auditors_{it} + \beta_3*Work\_experience_{it}$$
$$+ \beta_4*Earnings\_quality_{it} + \beta_5*K\text{-}IFRS_{it} + \varepsilon_{it}$$

Where $Accruals_{it}$ is a measure of the overvaluation of accruals. $Accruals_{it}$ is defined as the difference between the scores of net income and operating cash flow. $Loan\_officers_{it}$ is a dummy that takes the value of 1 if the respondent is a loan officer and 0 otherwise. $Auditors_{it}$ is also a dummy that takes the

value of 1 if the respondent is an auditor and 0 otherwise. Control variables are Work_experience$_{it}$, Earnings_quality$_{it}$, and K-IFRS$_{it}$. Specifically, Work_experience$_{it}$ is the natural logarithm of the number of years the respondent has worked in the current job. Earnings_quality$_{it}$ is set to 1 if the answer to the second question is 'yes' and 0 if it is 'no'. K-IFRS$_{it}$ is set to 1 if the answer to the third question is 'yes' and 0 if it is 'no'. A positive and significant β_1 and β_2 indicates that they are more likely to ignore earnings reversals associated with accruals and to be over-optimistic about accruals.

III. Results

In this section, we present the empirical results. ⟨Table 1⟩ reports the descriptive statistics and correlation coefficients. In Panel A, the average of Loan_officers, Auditors, and Analysts are 0.349, 0.329, and 0.322, indicating that the sample ratios of creditors, auditors, and analysts are 34.9%, 32.9%, and 32.2%, respectively. For Accruals, the average score is −0.001, and the standard deviation 2.779 is high. The mean and median of Work_experience is 6.769 and 5 years,

⟨Table 1⟩ Descriptive statistics and correlation

Panel A: Descriptive statistics					
Variable	Mean	S.D.	Min	Median	Max
Loan_officers	0.349	0.478	0.000	0.000	1.000
Auditors	0.329	0.471	0.000	0.000	1.000
Analysts	0.322	0.469	0.000	0.000	1.000
Accruals	−0.001	2.779	−6.188	−0.188	9.812
Work experience	6.769	5.403	0.500	5.000	21.000
Earnings_quality	0.450	0.499	0.000	0.000	1.000
K-IFRS	0.490	0.502	0.000	0.000	1.000

Panel B: Correlation analysis						
Variable	Loan_ officers	Auditors	Analysts	Accruals	Work_ experience	Earnings_ quality
Accruals	0.210**	−0.109	−0.104			
Work_experience	0.284***	−0.441***	0.153*	0.051		
Earnings_quality	−0.096	−0.087	0.185**	0.051	0.246***	
K-IFRS	0.071	−0.143*	0.071	−0.067	0.149*	0.059

The score of accruals is defined as the difference between the scores of net income and operating cash flow. Loan_officers is a dummy that takes the value of 1 if the respondent is a loan officer and 0 otherwise. Auditors (Analysts) is also a dummy that takes the value of 1 if the respondent is an auditor (analyst) and 0 otherwise. Work_experience is the natural logarithm of the number of years the respondent has worked in the current job. Earnings_quality (K-IFRS) is set to 1 if the answer to the second (third) question is 'yes' and 0 if it is 'no'. In panel B, ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

respectively. The average of Earnings_quality and K-IFRS are 0.450 and 0.490, respectively. In Panel B, Accruals is significantly positively correlated with Loan_officers. We also find that all control variables are not significantly correlated with Accruals. The results reported in the paper are obtained using the raw scores. All results are qualitatively the same when we use standardized values of the scores.

〈Table 2〉 shows the summary statistics for the scores for net income, operating cash flow and accruals, with the results of the ANOVA and post-hoc analyses. The score for accruals is calculated as the difference between the

scores for net income and operating cash flow. As noted above, we use the score on accruals as a proxy for the extent to which respondents overestimate the value of accruals when assessing firm performance.

For net income, the average score given by loan officers is 7.346, which is higher than that given by analysts 5.896 and auditors 5.571. Analysis of variance shows that the difference in average scores between each group of users is statistically significant (F= 10.35). The result of the post-hoc analysis is also consistent with the average score of loan officers being higher than that of analysts and auditors. In contrast, for operating cash

〈Table 2〉 One-way ANOVA and post-hoc analyses

Variable		Net income	Operating cash flow	Accruals(= NI - OCF)
Loan_officers	Mean	7.346	7.365	-0.020(0.05)
	S.D.	2.104	1.847	2.570
Analysts	Mean	5.896	7.125	-1.230(3.30***)
	S.D.	2.126	1.580	2.991
Auditors	Mean	5.571	6.816	-1.240 (2.85***)
	S.D.	2.051	1.900	2.642
All	Mean	6.295	7.107	-0.812(3.57***)
	S.D.	2.222	1.786	2.779
F		10.35***	1.20	3.36**
Post-hoc		Analysts, Auditors 〈Loan officers	N.a.	Analysts, Auditors 〈Loan officers

This table shows the summary statistics for the scores on net income, operating cash flow, and accruals, with the results of the ANOVA and post-hoc analyses. The score for accruals is defined as the difference between the scores for net income and operating cash flow. The last column shows the t-value for the difference test of the scores between net income and operating cash flow in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

flow, the difference in the average scores between each group of users is not distinct. The score for auditors is 6.816, which is slightly lower than that for loan officers 7.365 and analysts 7.125. However, the analysis of variance does not indicate that the difference is statistically significant (F＝1.20). It results that the loan officers' score for accruals −0.02 is higher than the other user groups (−1.23 for analysts and −1.24 for auditors). We interpret the higher score for accruals to mean that loan officers are more likely to believe that accruals are a good indicator of firm performance than analysts and auditors, leading them to be overly optimistic about accruals. The results are consistent with our expectation that each group of sophisticated users has a different level of understanding of the value implication of accruals for firm performance.

⟨Table 3⟩ shows the scores for net income, operating cash flow, and accruals by the respondents' work experience and background knowledge of earnings quality and the implications of K-IFRS. The respondent is classified in the 'high group' if the value of work experience is above the median, and in the 'low group' if it is below the median. For earnings quality, if the answer to the second

⟨Table 3⟩ The relationship between the control variables and the scores of the financial indicators

Variable		Low group	High group	t-value
Work_experience	# of obs.	79	70	
	Net income	6.43	6.14	0.787
	Operating cash flow	7.25	6.94	1.059
	Accruals	−0.82	−0.80	−0.050
Earnings_quality	# of obs.	82	67	
	Net income	6.232	6.373	−0.385
	Operating cash flow	7.171	7.030	0.478
	Accruals	−0.939	−0.657	−0.616
K-IFRS	# of obs.	76	73	
	Net income	6.316	6.274	0.114
	Operating cash flow	6.947	7.274	−1.117
	Accruals	−0.632	−1.000	0.808

This table shows the scores for net income, operating cash flow, and accruals by the respondents' work experience and background knowledge of earnings quality and the implications of K-IFRS. Work experience is defined as the number of years the respondent has been in their current job. The respondent is classified in the 'high group' if the value of Work_experience is above the median, and in the 'low group' if it is below the median. For Earnings_quality (K-IFRS), if the answer to the second (third) question is 'yes', the respondent is classified in the 'high group' and if the answer is 'no', the respondent is classified in the 'low group'. The last column shows the t-value for the difference test of the mean scores between the low group and the high group. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels.

question is 'yes', the respondent is classified in the 'high group' and if the answer is 'no', the respondent is classified in the 'low group'. Similarly, for K-IFRS, if the answer to the third question is 'yes', the respondent is classified in the 'high group' and if the answer is 'no', he/she is classified in the 'low group'. The last column of 〈Table 3〉 shows the t-value for the difference test of the mean scores between the high and low groups.

The results show that work experience is not associated with the scores for all financial indicators. The difference in scores between the high and low groups for net income, operating cash flow, and accruals is not significant. For the earnings quality, the number of respondents in the high group is 82, which is higher compared to 67 in the low group. However, for all three indicators, the difference in scores between the two groups is not significant. In particular, the high group's score for accruals is slightly higher than the low group's, but the difference is not statistically significant. This suggests that the familiarity with the concept of earnings quality is not associated with an overvaluation of accruals. For K-IFRS, 76 respondents said they were aware of the implications of its adoption, while 73 said they were not. As with the results for earnings quality, there is no significant difference in the scores for all three indicators between the high and the low groups. The score for accruals is slightly higher for the low group than for the high group. This is consistent with our expectation

that attention to the adoption of K-IFRS is associated with respondents' better understanding of the informativeness of accruals. However, the t-value for the difference is 0.81 and is not statistically significant. These results show that work experience and background knowledge of the concept of earnings quality do not influence individual perception of accruals as an indicator of firm performance. This reflects that the differences in scores between the groups of users reported in 〈Table 1〉 are more likely to be due to differences in the profession itself, rather than a bias towards the more sophisticated respondents belonging to a particular professional group.

We next run OLS regressions to statistically test whether the score of accruals differs for each group of users, controlling for the potential effects of work experience, knowledge of earnings quality and K-IFRS on respondent sophistication. The dependent variable is the score for accruals. As independent variables, we set three dummy variables for each group of sophisticated users. A dummy for sell-side analysts, Analysts, takes the value of 1 if the respondent is an analyst and 0 otherwise. The dummies for the loan officers (Loan_ officers) and the auditors (Auditors) are defined in the same way. Work_experience is the natural logarithm of the number of years the respondent has worked in the job. Earnings_ quality is a dummy variable that takes the value of 1 if the respondent is aware of the concept of earnings quality, i.e., if the respondent is in the high group in 〈Table 3〉,

and 0 if the respondent is not, i.e., if he/she is in the low group in 〈Table 3〉. K-IFRS is a dummy variable set in the same way. It takes the value of 1 if the respondent answers that he/she knows the implications of K-IFRS adoption, i.e., in the high group in 〈Table 2〉 and 0 if the respondent answers that he/she does not know, i.e., in the low group in 〈Table 3〉.

Panel A of 〈Table 4〉 shows the results. In model (1), the coefficient of Loan_officers is positive 1.218 and statistically significant at the 5% level. Compared to analyst and auditors, loan officers consider that net income is a better indicator of firm performance than operating cash flow. It suggests that they are more likely to ignore earnings reversals associated with accruals and to be over-optimistic about accruals. Model (2) shows that the coefficient on Auditors is -0.016 and is not statistically significant, whereas the coefficient of Loan_officers is still positive and statistically significant. It suggests that the difference in scores between loan officers and analysts is significant, but that the difference in scores between analysts and auditors is not.

Model (3) and (4) show the regression results for the equations with control variables. In model (3), the coefficient on Loan_officers is still positive and statistically significant. Model (4) consistently shows that there is no significant difference in the scores for accruals between auditors and analysts. The coefficient on Work_experience is negative, but not statistically significant in either model. This result does not support our expectation that

work experience would be associated with a better understanding of accrual overvaluation. For Earnings_quality, the coefficients are also statistically insignificant in both models. The coefficient on K-IFRS is negative, which is consistent with our prediction that those interested in the implications of adopting K-IFRS are more likely to perceive an overvaluation of accruals. However, it is not statistically significant. These results show that none of the control variables are significant in explaining the score of accruals, consistent with the findings in 〈Table 3〉. The smaller F-values for the model (3) and (4) also indicate that the inclusion of the control variables does not provide a better fit.

In addition, we run regressions using the mean deviated score for net income as the dependent variable, based on the finding of 〈Table 2〉 that the differences in the scores for accruals between the groups mostly arise from the difference in the scores for net income. Panel B of 〈Table 4〉 shows the results. The coefficients on Loan_officers are positive 1.61 and statistically significant at the 1% level, suggesting that loan officers are more likely, than analyst and auditors, to believe that net income is a good indicator of firm performance. Model (2) shows that there is no difference between the analysts' and the auditors' net income scores. The coefficients on Work_experience, Earnings_quality and K-IFRS are not statistically significant. The results, which are identical to those reported in panel A, suggest that the difference in the perception

〈Table 4〉 Regression results

Panel A: The dependent variable is the mean deviated score of accruals

Variable	(1)	(2)	(3)	(4)
Loan_officers	1.218** (2.60)	1.210** (2.21)	1.335** (2.68)	1.311** (2.34)
Auditors		-0.016 (-0.03)		-0.056 (-0.09)
Analysts				
Work_experience			-0.068 (-0.24)	-0.076 (-0.26)
Earnings_quality			0.462 (0.98)	0.459 (0.97)
K-IFRS			-0.468 (-1.03)	-0.471 (-1.03)
Constant	-1.237*** (-4.47)	-1.229*** (-3.11)	-1.150** (-2.31)	-1.107 (-1.62)
Adj. R^2	0.037	0.031	0.031	0.024
F	6.756**	3.355**	2.171*	1.726

Panel B: The dependent variable is the mean deviated score of net income

Variable	(1)	(2)	(3)	(4)
Loan_officers	1.614*** (4.49)	1.450*** (3.46)	1.747*** (4.56)	1.555*** (3.62)
Auditors		-0.324 (-0.76)		-0.455 (-0.99)
Analysts				
Work_experience			-0.160 (-0.75)	-0.232 (-1.03)
Earnings_quality			0.380 (1.05)	0.358 (0.98)
K-IFRS			-0.140 (-0.40)	-0.168 (-0.48)
Constant	-0.563*** (-2.65)	-0.399 (-1.32)	-0.461 (-1.20)	-0.109 (-0.21)
Adj. R^2	0.115	0.112	0.106	0.106
F	20.172***	10.348***	5.372***	4.493***

This table shows the results of the regressions. The dependent variable of panel A is the score of accruals and that of panel B is the mean deviated score of net income. The score of accruals is defined as the difference between the scores of net income and operating cash flow. Loan_officers is a dummy that takes the value of 1 if the respondent is a loan officer and 0 otherwise. Auditors (Analysts) is also a dummy that takes the value of 1 if the respondent is an auditor (analyst) and 0 otherwise. Work_experience is the natural logarithm of the number of years the respondent has worked in the current job. Earnings_quality (K-IFRS) is set to 1 if the answer to the second (third) question is 'yes' and 0 if it is 'no'. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

of accruals between each group of users is mainly due to the difference in the perception of net income, rather than cash flow.

The results in 〈Table 4〉 suggest that over-optimism about accruals is higher for loan officers than for analysts and auditors, confirming the results in 〈Table 2〉. Bank loan officers verify a firm's ability to repay to decide whether to grant or deny a loan. Thus, it is essential for them to predict future cash flows based on current financial statements. We therefore expect loan officers to have a better understanding of the implications of high accruals for future earnings. However, our finding is not consistent with this expectation. We provide three explanations to address it. The first explanation, which is the simplest, is that loan officers are not smart enough to understand the difference in value-relevant information between net income and cash flow. Another possible reason is that Korean commercial banks have a lending practice of requiring collateral from firms. Collateral is one of the most powerful devices for securing loan repayment. In South Korea, on average, 60.9% of business loans are collateralized from 2015 to 2019 and the proportion continued to increase from 55.4% in 2015 to 65.0% in 2019. Then, the bank's practice of requiring collateral can lead loan officers to ignore the different value relevance of net income and cash flow. Third, the use of accruals-based reporting by early-stage firms increases the confidence in financial documents, and therefore auditors value net income more than

other user groups〔Riahi-Belkaoui, 1992; Cassar et al, 2015〕.

Ⅳ. Conclusions

Green et al. (2011) and Kothari et al. (2023) report that the accruals anomaly has vanished in more recent years, both using US evidence from NYSE and NASDAQ firms. The accruals anomaly has vanished in settings where (1) public knowledge of the accruals anomaly has increased, and (2) firms have received more investor attention〔Oler et al, 2004〕. However, Wakil, Lento, and Sayed (2023) argue that the accruals anomaly still exists based on evidence from the Canadian Toronto Stock Exchange. This conflicting evidence from previous studies motivates us to examine the accruals anomaly between different sophisticated groups of users.

Using a simple survey of sell-side analysts, auditors, and loan officers, this paper examines whether sophisticated users of accounting information differ in the extent to which they overestimate the value-relevant information in accruals. The degree of overestimation of accruals is proxied by the difference in the importance that respondents give to net income and cash flows. The results show that loan officers tend to overstate accruals more than analysts and auditors. The result provides evidence that there is a meaningful difference in the extent to which different groups

of sophisticated users perceive the value-implication of accruals. These findings are expected to encourage sophisticated market participants to correctly assess the informativeness of accruals and help to reduce the overvaluation of accruals that is widespread in the capital markets.

Based on the results of this study, the following specific future research directions can be suggested. First, it is necessary to examine the specific areas and reasons why loan officers are less sophisticated compared to analysts and auditors. Second, related research is needed to empirically analyze how the collateral-based lending practice of Korean banks specifically affect loan officers' accruals overvaluation. Third, future research is needed to analyze what specific factors, in addition to small firms and early-stage firms, lead loan officers to prefer accrual-based financial information over cash-based information. This study has limitations in that it presents analysis results using a survey methodology. Therefore, it is necessary to confirm and expand the results of this study using empirical research in the future.

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전문적인 회계정보이용자의 발생액 지속성 과대평가

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요 약

본 연구는 애널리스트, 감사인, 신용분석가에 대한 설문조사를 통해 회계정보이용자가 발생액의 가치관련성을 과대평가하는 정도에 차이가 있는지를 분석하였는데, 기업성과를 평가할 때 순이익과 영업활동현금흐름에 부여하는 가중치 차이에서 발생액을 과대평가하는 정도를 추론하였다. 본 연구는 신용분석가가 애널리스트와 감사인과 비교하여 발생액에 대해 지나치게 낙관적으로 평가할 가능성이 더 높다는 것을 발견하였으며, 이에 대해 다음과 같은 세 가지 설명을 제시하고 있다. 첫째, 신용분석가가 애널리스트와 감사인에 비해 회계정보에 대한 전문성이 상대적으로 낮을 가능성이 존재한다. 둘째, 담보를 요구하는 국내 은행의 대출 관행에 기인할 수 있다. 셋째, 신용분석가가 초기 단계의 기업에 대해 발생액 기반 재무제표를 상대적으로 선호하기 때문일 가능성이 존재한다. 본 연구의 결과는 발생액 과대평가에 대한 평가가 전문적인 회계정보이용자에 따라 차이가 존재할 수 있으므로 이를 반영한 경제적 의사결정의 필요성을 제시해 주고 있다. 이러한 분석연구는 전문적인 회계정보이용자들이 발생액의 정보를 정확하게 평가하는데 도움을 주고, 자본시장에 존재하는 발생액의 과대평가 현상을 줄이는 데 기여할 것으로 기대된다.

주제어: 회계정보이용자, 발생액, 지속성, 과대평가

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