Highlighting the Concrete Language in IFRS Based Footnote. Would that Really Help to Increase Willingness to Invest?

UFRS Temelli Bir Dipnotta Somut Dilin Belirginleştirilmesi. Bu Yatırım İsteğinin Artmasında Etkili olabilir mi?

Emre CENGİZ[1]

Abstract: IFRS (International Financial Reporting Standards) suggests that financial footnotes should present the necessary and relevant information for decision makers by using plain and concrete language. Thus, this study presents the empirical evidence that highlighting concrete language in an IFRS based financial footnote increases the investors' willingness to invest in a firm. This study contributes the previous literature on how linguistic preferences in financial instruments affect the judgment of investors by showing empirical evidence that highlighting the concrete language may increase the investors' willingness to invest**.**

Keywords: Financial footnote, Investor Competence, Concrete Language

JEL Classification M41 D81 C91 G02

ÖZ: Uluslararası Finansal Raporlama Standartları (UFRS), finansal dipnotların karar vericiler için gerekli ve ilgili bilgileri sade ve somut bir dille ifade edilmesi gerektiğini belirtmektedir. Böylelikle, bu çalışma UFRS temelli bir dipnottaki somut ifadelerin belirginleştirilmesinin, yatırımcıların o firmaya olan yatırım isteğini arttırdığını gösteren deneysel sonuçlar sunmaktadır. Çalışma, dilsel seçimlerin; yatırımcılar tarafından finansal enstrümanların seçimindeki karar sürecine nasıl etki yaptığını gösteren ve somut dilin belirginleştirilmesinin yatırım isteğini arttırdığını gösteren daha önceki deneysel çalışmalara katkı sağlamaktadır**.**

Anahtar Kelimeler: Finansal dipnot, Yatırımcı Yeterliliği, Somut Dil

1. Introduction

International Accounting Standard I (IAS 1) -Presentation of Financial Statements, suggest that footnotes should present the most relevant for decision makers by using plain English to describe industry and entity-specific policies (Pricewaterhouse Coopers, 2014).

Since 2005, Turkish public companies have been obliged to issue financial statements according to IFRSs (International Financial Reporting Standards) and meanwhile, Turkish Accounting Standards Board has officially translated the IFRSs under the title of Turkish Financial Reporting Standards (TFRSs). In TFRSs based financial statements set, typically the first footnote (or Note 1) titled as "Primary Activity and Organization" gives some relevant information about the reporting entity such as its operations, strategies, partnerships and etc. Thus, an experiment was used to test if highlighting more concrete language in Note 1 increases Turkish investors' willingness to invest in a firm or not.

Heath and Tversky (1991) show that when "the perceived investing competence" of an investor increases, the investors tend to rely on their own judgments about an uncertain outcome. These findings are important for two aspects. First of all, there is a direct positive effect between the competence level of an investor and the type of the language used in information (Elliott et al., 2015). Specifically, when the concrete language is more highlighted, the investor is expected to have an increased perceived competence level for more frequent trading activities. Prior research also shows that clear and concise disclosures in U.S. firms relatively reduce the information disadvantage of investors (Lawrence, 2013).

In this study, the respondents were asked to evaluate the first footnote (Note 1) of a hypothetical firm selling its stock in market. Note 1 provides information about firm's operations, strategy and brief financial performance in both relatively abstract and relatively concrete language but highlights either the abstract or concrete language while keepingn information constant. As previous research shows that emphasizing some specific financial information (e.g., comprehensive income) in a purposive financial data set has some significant effect on analysts' judgments (Hirst & Hopkins, 1998; Maines & McDaniel, 2000; Elliott, 2006). more noticeable information is expected to have a greater influence on investors' judgments.

This study presents the empirical evidence that highlighting concrete language in an IFRS based financial footnote (Note 1) increases the investors' willingness to invest in a firm.

This study has some contributions. First, it contributes previous literature that expresses how linguistic characteristics affect the investor's judgment. For instance, some accounting and finance literature show positive versus negative linguistic tone especially in earning press releases has significant effect on investors' reactions (Henry, 2008; Kothari, Li, & Short, 2009; Feldman, Govindaraj, Livnat, & Segal, 2010; Demers & Vega, 2011; Davis & Sweet, 2012; Davis, Piger, & Sedor, 2012). Nevertheless, some studies report the vivid language (Hales, Kuang, & Venkataraman, 2011), the complexity or readability of reports and the concrete language in disclosure (Elliott et al. 2015) have some influences on the judgment of

investors (Li, 2008; You & Zang, 2009; Miller, 2010; Rennekamp, 2012; Tan, Wang, & Zhou, 2013; Lundholm et al., 2014).

The rest of this paper proceeds as follows. Section 2 reviews the literature and develops the hypotheses. Section 3 and Section 4 present the research design and result of the experiment, respectively. Section 5 concludes the study.

2. Hypothesis Development

2.1 Willingness to Invest through concrete language
The linguistic category model (LCT) described by Semin and Fiedler (1988) highlights that linguistic bias plays a crucial role in interpersonal domain and also suggests a systematic relation between the respective linguistic category and informativeness about the subject in the sentence. According to LCT; there is a four level classification of a person behavior in terms of abstractness: Descriptive action verbs, interpretive action verbs, state verbs, and adjectives. The "action verbs" are described as most concrete terms (e.g., A helicopter is flying) and highlight local properties and details of an object whereas the "adjectives" are described as ultimate abstract terms (e.g., A helicopter is fast) that emphasize the global properties of an object (Semin, 2008). It is a fact that envisioning the concrete expression that "a helicopter is flying" is much more convenient for the receiver to envision an abstract expression that "a helicopter is fast". Nevertheless, previous research showed that the linguistic bias that describer displays systematically influences the judgments of the receiver (Wigboldus, Semin, & Spears, 2000; Katz, 2001; Morris, Sheldon, Ames, & Young, 2007). Douglas and Sutton (2006) showed describers who use relatively abstract language are perceived to have more subjective attitudes and intentions compared to the ones that use more concrete language.

The literature also presents some evidence about the relationship between the linguistic category used and financial information provided. Hirst, Koonce, and Venkataraman (2007) showed that disaggregated forecasts influence forecast credibility. Hansen and Wänke (2010) reported that statements written in concrete language perceived as more true than they are written in abstract language; probably due to their greater perceived vividness of truth given in concrete language. Sedor (2002) showed when a manager's future plans are presented as scenarios; the analysts are more optimistic that when the same information provided as lists. Kadous, Krische, & Sedor (2006) showed some evidence that this scenario-based optimism may be reduced by counter-explanations that explain why managers' plans could fail. The literature outlines that the concreteness of the language in financial information is mainly associated with the judgment of the analyst because concrete expressions facilitate the analysts' envisioning of proposed events (Sedor, 2002).

International Accounting Standard I (IAS 1) -Presentation of Financial Statements endorsed and amended by the International Accounting Standards Board (IASB) requires an entity clearly identify each financial statement and the notes to the financial statements (IFRS, 2012). These footnotes should present the intended purpose of the reporting entity while giving the necessary information for the decision makers. They should also enhance the information reported on the financial statement and draw attention on matters that are most relevant for decision makers. To this end,

the reporting entity should consider using plain English to describe industry and entity-specific policies with contextualized text for facilitating understanding of the reader (PricewaterhouseCoopers, 2014).

Since 2005, Turkish public companies have been obliged to issue financial statements according to IFRSs (International Financial Reporting Standards) and meanwhile, Turkish Accounting Standards Board has officially translated the IFRSs under the title of Turkish Financial Reporting Standards (TFRSs). In TFRSs based financial statements set, typically the first footnote (or Note 1) titled as "Primary Activity and Organization" gives some relevant information about the reporting entity including its operations, strategy, partnership structure and some brief financial performance. As documented literature shows emphasizing some specific financial information (e.g., comprehensive income) in a purposive financial data set has some significant effect on analysts' judgments (Hirst & Hopkins, 1998; Maines & McDaniel, 2000; Elliott, 2006), Thus, more noticeable information presented in Note 1 is expected to have a greater effect on investors' judgments . Thereby, it is hypothesized that:

H1: When the concrete language is highlighted in Note 1, investors are more willing to invest in that firm rather than when the abstract language is highlighted.

2.2 Perceived Investing Competence
Along with the previous hypothesis, Heath and Tversky (1991) showed that individuals' own judgment play an important role when making a decision about an ambiguous outcome when they feel themselves knowledgeable. Within the financial framework, evidence suggests this "competence effect" makes the investors trade more often (Graham et al. 2009). Thereby, it is hypothesized that:

H2: The investing competence effect mediates the positive relationship between the concreteness in Note 1 and the investors' willingness to invest.

3. Methodology

3.1 The Characteristics of the Respondent and Research Design
The hypotheses in the study have been tested by using a hypothetical firm's first footnote (Note 1) that gives brief information about firm's operations, strategy and financial performance. The sample consisted of 62 investors[1] and they were given Note 1s with abstract or concrete highlighted language while holding the actual information constant. Thus, the manipulation aimed to draw on attention to either relatively concrete or abstract language by making them more noticeable to respondents.

During the time of the experiment, respondents indicated to have experience in stock investment more than averagely ten years and thirty-four percent (21 of 62) of them indicated they invested in common stocks as their primary investment activity and sixty-two percent (47 of 62) invested averagely forty percent of their savings in stocks.

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[1] The sample was provided with the help of four MBA students that work in private banks and the questionnaires were conducted by face to face interviews with the experienced customers that visit the banks to have assistance on their stock investment portfolios and savings.

All of the respondents indicated that they were planning to continue to invest in stocks markets in near future. This information confirmed that the respondents fit as the legitimate and experienced investors.

3.2 The Case Firm

The respondents were asked to evaluate a hypothetical firm called CENAS which was selling household appliances in Turkey. CENAS's shares were being sold in Borsa Istanbul (BIST). The respondents were first asked to read instructions then they were given the Note 1s[2] titled as "Primary Activity and Organization" (first footnote of an IFRS based financial statements set) which presented a brief information about operations, strategy and financial performance.

3.3 Manipulation Process

For the manipulation process of the language, either the abstract language that needs high level construal or the concrete language that needs low level construal in more contextualized form was highlighted. IFRS suggests using plain language that draws on attention to relevant information for the reader. Thus, more quantifiable terms were used while expressing the information in concrete language. Fig. 1 shows a comparison of Note 1 given either in abstract highlighted or concrete highlighted formats.
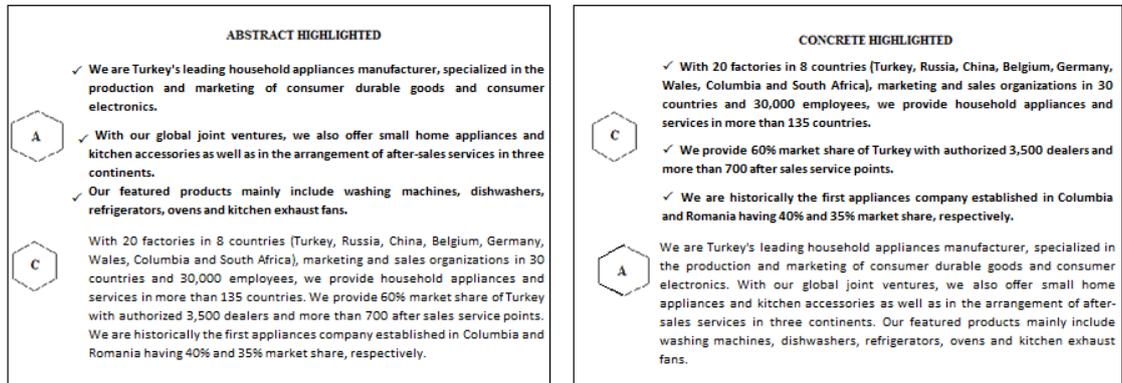

Figure 1. The comparisons of the Note 1 at the end of IFRS based financial statements set in abstract and concrete formats are presented next to each other. Holding actual information constant for two experimental conditions, the only thing that differs is the order of paragraphs of the presented information where abstract (concrete) highlighted Note 1 presents the first three paragraphs in abstract (concrete) terms. The "A" ("C") in hexagon in the figure expresses that the information is given in abstract (concrete) terms in 12 point font, bold typeface and bullet points whereas concrete (abstract) information is given in 10 point font with plain format in order to make the abstract (concrete) information more noticeable to the respondent.

As the previous literature expresses the stages of how cognitive effect influences the information processing of investors' judgments (e.g., Frederickson & Miller, 2004; Elliott, 2006; Elliott et al., 2015), similar methods were used to enhance the language manipulation via highlighting the concrete or abstract language by making them more

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[2] The actual Note 1s of several firms listed in BIST were used to create the structure and content of the hypothetical Note 1.

salient to investors. The abstract highlighted or the concrete highlighted Note 1 formats had the same structure with the title "Primary Activity and Organization" and four following paragraphs. As the information given in each paragraphs were exactly identical, the paragraph order was the main language manipulation. The first three paragraphs of abstract (concrete) highlighted format had expressions in abstract (concrete) terms and were given in 12 point font with bold typeface and bullet points whereas the last paragraph that had concrete (abstract) expressions was in plain text with 10 point font (e.g., Alter & Oppenheimer, 2008; Rennekamp, 2012; Elliott et al., 2015). Thus, the salient information given either in abstract or concrete highlighted format were expected to influence the investors' judgments where concrete highlighted information was enhanced with contextual and quantifiable terms that aimed to enable the envisioning of the information about the firm's facts, and facilitate the comprehension of the reader much more efficiently than abstract highlighted information does.

After some information was given in Note 1, respondents were asked to evaluate some other factors given for the purpose of the study.

3.4 The Questionnaire Design
As previous evidence suggests that investors trade more often a when they feel themselves competent (Heath & Tversky, 1991; Graham et al., 2009), "perceived investor competence" was measured by asking respondents, "How competent do you feel about judging CENAS as a prospective investment?" Respondents asked to respond on a 101-point response scales with properly labeled endpoints, ranging from 0 = "Very incompetent" to 100 = "Very competent" (Koonce & Lipe, 2010). The willingness to invest was measured with two separate questions. First it was asked, "How attractive is an investment in CENAS stock?" and then "How likely are you to invest in CENAS stock?" Similarly, respondents asked to respond on a 101-point response scales, ranging from 0 = "Very unlikely" to 100 = "Very likely" (e.g., Elliott et al., 2015).

As the previous literature used additional measures such as risk (Elliott et al, 2015), processing fluency (Lee, Keller, & Sternthal, 2010; Rennekamp, 2012) that might have influence on the judgment of investors, respondents were asked to rate the riskiness of an investment in CENAS while considering an identical firm in the same industry. The scale ranged from 0 = "Very low risk"; 100 = "Very high risk" (e.g., Elliott et al., 2015), and in order to measure the processing fluency of the information in Note 1; they were asked how easy or difficult it felt to read the information in Note 1 (e.g., Lee at al., 2010; Rennekamp, 2012). Nevertheless, additional evidence shows that gender (e.g., McCrea, Wieber, & Myers, 2012) might create some self-construal differences regarding the type of language highlighted. Therefore, respondents also were asked to indicate their genders. Each of these measures were used as "control variables" in Section 4.3. Lastly, respondents were asked to answer some demographic questions.

4. Results

4.1 Manipulation Checks

The questionnaire firstly aimed to measure the primary dependent measures .Note that all the information either in abstract language or concrete language highlighted Note 1 had the exact identical information and they just varied only across the language that was highlighted. Other than that the responders were asked the question, "How concrete were the details in CENAS footnote (Note 1)?" on a 101-point response scales where 0 corresponds "Not at all concrete" and 100 corresponds "Very concrete" (e.g., Elliott et al, 2015). The respondents that were given concrete language highlighted Note 1s rated the details as more concrete (p=0.045, one tailed). This confirmed a successful linguistic manipulation by highlighting the concrete language.

Then, respondents were asked to provide some written description about the firm in order to determine their preferred languages (*abstract vs. concrete*) while describing the firm. Two independent raters were assigned to perform a blind review process. They were not being informed about the purpose of the study and they coded each description that the respondents provided. Many of the written descriptions have had relatively abstract or relatively concrete terms. Therefore, each description was coded as "entirely or mainly abstract" with a given value of 0; (e.g., CENAS is a household appliances manufacturer in Turkey), "entirely concrete" with a given value of 1; (e.g., CENAS is Turkey's leading household appliances manufacturer with the largest market share and also offering small home appliances through international partnerships which operate and sell worldwide) or a combination of abstract or concrete terms with a given value of 0.5. This coding process was also similar to previous psychology and finance methodology (e.g., Alter & Oppenheimer, 2008; Elliott et al., 2015). To guide their evaluations, the blind coders were told that:

In accordance with SEC (1998) expressions, "one share of IBM stock" is more concrete than an asset, investment or security even though all terms define the same economic value. However, the concrete language facilitates the comprehension of the financial reader and visualizes the object with more contextualized and specific descriptions.

The two raters rated 78% of the statements consistently and another blind coder resolved the inconsistent descriptions. As the codes were not normally distributed, a nonparametric Mann-Whitney U test was conducted on the codes and the results indicated that respondents that evaluated the Note 1s with concrete language highlighted used more concrete descriptions about the firm than those that evaluated the firm with abstract highlighted language (p=0.038,one-tailed)<0.05).

Consequently, the results of manipulation tests revealed that highlighting concrete language facilitated the comprehension and visualization of the firm and made the respondents describe the firm in more concrete terms.

4.2 Data Screening

As Structural Equation Modeling (SEM) was used to test the mediation hypothesis, prior to statistical analysis, preliminary analysis was checked for missing data, outliers and normality on a univariate level (Perry, Nicholls, Clough, & Crust, 2015).

Inspection of missing data resulted in 6 missing values within the sample. However, no variables across the data set had been found to have missing values greater than 5%. The missing data was assumed to be completely random and missing values were replaced with the mean value for continuous scales and the median value for the ordinal scales (Hair, Black, Babin, & Anderson, 2010).

To check if there were outliers on continuous variables within the sample, a box plot for outliers was made and two outliers in continuous variables had been replaced with the mean value.

Next, normality analysis was examined based on skewness and kurtosis. A skewness and kurtosis examination were made by investigating skewness and kurtosis values greater than or less than +/- 1.00 (Bulmer, 1979). Even though some items did not meet this criterion, their absolute skewness and kurtosis values were still between 1 and 2. Thus, they were considered within a fairly acceptable range (Sposito, Hand, & Skarpness, 1983).

4.3 Tests of H1 and H2

H1 predicts that investors are more willing to invest in a firm when the concrete language is highlighted in Note 1 rather than when the abstract language is highlighted. On the other side, H2 is based on a mediation test based on positive relationship between the concreteness in Note 1 and the investors' willingness to invest in a firm.

In order to test H1 hypothesis, two questions were used to measure the attractiveness of CENAS as an investment and the likelihood that respondents would invest in CENAS. The reliability analysis confirmed that these two measures could be used as one combined measure of willingness to invest with Cronbach's alpha of 0.68 which was fairly near the recommended threshold of 0.70 (Nunnally, 1978). So, by averaging the responses for these two questions, a single underlying combined measure was created. Table 1, Panel A, exhibits some descriptive values (cell sizes, mean, and standard deviations) for these two questions and combined measure of willingness to invest.

Table 1 Descriptive statistics and tests of H1a and H2

Distance	Highlighted Language					
	Investment Attractiveness		Investment likelihood		Willingness to Invest (combined measure)	
	Abstract	Concrete	Abstract	Concrete	Abstract	Concrete
Panel A: Descriptive Statistics-means (standard deviations) for investment attractiveness, investment likelihood and willingness to invest (combined measure)						
	60.58	73.39	51.39	64.23	55.34	67.27
	(21.88)	(20.10)	(22.46)	(21.62)	(20.96)	(18.43)
	n=31	n=31	n=31	n=31	n=31	n=31

	Investment Attractiveness	Investment likelihood	Willingness to Invest (combined measure)
Panel B: ANOVA results			
Highlighted Language (Abstract vs. Concrete)	*F=5.760, p=0.020* (two-tailed)**	*F=5,258 p=0.025* (two-tailed)*	*F=5,671, p=0.020* (two-tailed)*

Respondents rated (1) the attractiveness of an investment in the firm's stock and (2) the likelihood that they would invest in the firm's stock. The willingness to invest is a combined measure of these two items by taking the averages of these two items after conducting a reliability analysis (Cronbach's alpha=0,68).

Panel B represents the results of analysis of variance (ANOVA) tests to test the effect of highlighted language on willingness to invest. The results indicate a significant main effect of highlighting concrete language on willingness to invest which supports of H1 (p=0.020, two-tailed).

Then, in order to test H2 that predicts the investing competence effect mediates the positive relationship between the concreteness of the highlighted language and the investors' willingness to invest in a firm, structural equation modeling (SEM) was used. Recent literature (e.g., Iacobucci, Saldanha, & Deng, 2007) claim that SEM performs better than the three series of regression models (partial, full, and indirect) suggested by Baron and Kenny (1986). Nevertheless, some additional literature suggests that the mediation is simply present when there is an indirect effect (MacKinnon, Fairchild, & Fritz, 2007, Hayes, 2009; Hayes, 2013).

Figure 2 shows the model of the study which includes a simple mediation. In this model, a is the coefficient for the independent variable (in this case, highlighted language; coded 0 for abstract highlighted language and coded 1 for concrete highlighted language) in a model predicting the mediator (in this case, perceived investing competence) from the independent variable and b and ć are the coefficients from both the mediator and the independent variable, respectively. Regarding the path analysis, ć quantifies the direct effect of the independent variable whereas a and b quantify the indirect effect of the independent variable on the dependent variable (in this case, willingness to invest) through the mediator. If all three variables are observed in the model, then:

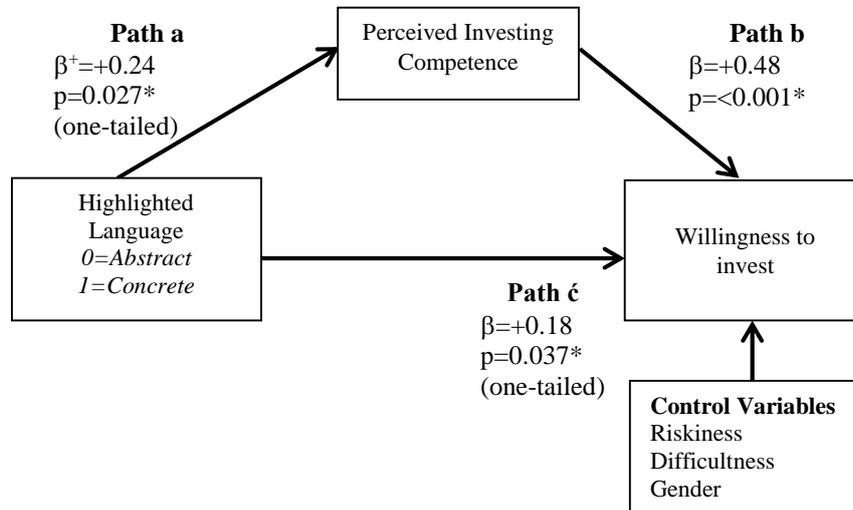Total effect=ć (direct effect) +a x b (indirect effect) (Hayes, 2009).

Figure 2 The goodness of fit statistics indicate that the model has a good fit for the data: χ2/*df*=2.464 (p=0.60); CFI=0.890; GFI: 0.963; SRMR=0.0866; RMSEA=0.085 (Guzman, Lagdaan,& Lagoy, 2015; Hu& Bentler, 1999; Iacobucci, 2009; 2010; Jarvis, Mackenzie, Podsakoff, Mick,. & Bearden, 2003; Kline, 2011; Maslowsky, Jager, & Hemken, 2015; Perry et al., 2015) + **Standardized regression weights were used.**

To test the mediation, first of all; the goodness of fit indices for the model[3] was recalled (Fig.2). Fit statistics indicated that (even after controlling all control variables[4] simultaneously) the model had a good fit for the data. An indirect effect test performed with 2000 bias corrected bootstrapping resamples (e.g., Baron & Kenny, 1986) indicated that there was a significant indirect effect of perceived investing competence on the positive relationship between concrete highlighted language and willingness to invest (a x b; p= 0.047, two-tailed). Thus, H2 is supported. In other words, the *"perceived investing competence"* (an intermediate variable) explains the effect of the *"highlighted language"* (the independent variable) on the *"willingness to invest"* (dependent variable).

5. Conclusion
As IFRS suggests financial footnotes of a financial statements set should present the most relevant for decision makers by using plain English to describe industry and

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3To test the multivariate assumptions of the model, firstly, outliers and influentials were investigated. Cook's distance test and the graphical display exhibited no abnormal cases where Cook's distance exceeded 1 (Heiberger & Holland, 2004, p. 367). Secondly, on a multivariate level, multicollinearity was investigated. Variable Inflation Factor (VIF) values for all of the exogenous variables were investigated simultaneously to test the multicollienarity. The VIFs were all found to be less than 2.0 which confirmed that the exogenous variables were all distinct and independent variables explained unique variance in the dependent variable (O'Brien, 2007).
[4] SEM analysis indicated that the only variable that had significance effect on willing to invest is the riskiness of the firm perceived by the respondents (β=-0.310, p=0.004). Gender (β=+0.001, p=0.995) and difficultness (β=-0.091, p=0.398) were not found to have any significant effect on willingness to invest (All p values are two-tailed).

entity-specific policies, this study presents the empirical evidence that highlighting concrete language in an IFRS based financial footnote (Note 1) increases the investors' willingness to invest in a firm.

The study contributes previous literature that expresses how linguistic characteristics such as linguistic tone (Henry, 2008; Kothari et al. 2009; Feldman et al. 2010; Demers & Vega, 2011; Davis & Sweet, 2012; Davis et al., 2012), vividness, (Hales et al., 2011), the readability and the concreteness of disclosures (Elliott et al., 2015) have influences on the judgment of investors (Li, 2008; You & Zang, 2009; Miller, 2010; Rennekamp, 2012; Tan et al., 2013; Lundholm et al., 2014). The study has also some limitations. First, the linguistic characteristic used in the study is fairly balanced which may create some potential deviations from real life cases. Apparently, IFRS based financial footnote used in this study has some relatively abstract and relatively concrete definitions in order to provide a balanced mix because actual firms usually use both language characteristics in their footnotes. However, a footnote with high emphasis on either abstract or concrete language may give some additional insights to investors' judgments.

Second, the results of this study do not consider a financial footnote which expresses entirely negative information about a firm. The hypothetical firm used in the experiment is one of the pioneer firms of the industry with a strong financial background. Nevertheless, the footnote that described the information about the firm contains essentially positive information. Although one may guess that highlighting the concrete language in financial footnote that provides entirely negative information should decrease the willingness to invest, a new experimental design seems necessary for a conclusion. Regardless of these limitations, the results of the study may be both useful for regulators and practitioners that seek ways to attract investors' interest. Nevertheless, gender has been included as a control variable which contributes the previous literature on how gender differences affect linguistic preferences on the decision of financial instruments.

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