

CHAPTER 5: CONCLUSION

Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) jointly pursue financial statement presentation project since 2004. According to the working principles proposed by the Boards, the proposed format financial statements must portray cohesive financial representations of the company. The financial statements are required to be categorized into (a) *Business*, (b) *Discontinued Operations*, (c) *Income Taxes*, (d) *Financing*, and (e) *Equity* (if applicable). Moreover, under the proposed financial statement presentation standard, the financial data presented and disclosed are expected to be expanded. Specifically, the by-nature as well as by-function information are required to be presented. The proposed changes are expected to enhance the quality of judgments of the investors when they evaluate the financial performance of a given firm.

The Incomplete Revelation Hypothesis (IRH) (Bloomfield, 2002), stated that the information that is more costly or more difficult to extract are less completely revealed by the market prices. This implies that if the information is presented in such as way that make it difficult to find or comprehend, that piece of information might not be incorporated or affected the judgments formed by the investors. The implication of the IRH provides an explanation to the impact of differences in presentation format of the financial statements.

In addition, the literature on Human Information Processing (HIP) provides an explanation on the impact of data aggregation level in financial reporting on investors' judgments. Specifically, prior literature proposed that more detailed and more expanded information is considered useful to the decision making process until the recipients of the information reached the information overload stage. The HIP literature provides the predictions for the differences in data aggregation level in my study.

My research question is whether the proposed financial statements, as opposed to traditional financial statements, improve the ability of the investors to evaluate operating performance of the firm. The research question is experimentally explored in two experiments. The first experiment investigates the impact of different

presentation formats, while the second experiment investigates the impact to the data aggregation level on the income statement.

In Experiment 1, a 3 x 1 between-subject design with presentation format as independent variable is employed. The presentation format is manipulated in three different levels, TFS, MFS, and WFS conditions. In Experiment 1, the disclosure of by-nature information is kept constant across all experimental conditions. While, in Experiment 2, I employ a 3 x 1 between-subject design with data aggregation level as independent variable. The data aggregation level is manipulated in three different levels, NOTES, NO, and FACE conditions. Again, in Experiment 2, the presentation format of the financial statement is held constant across all conditions.

The 138 research participants are recruited from three different programs of study from the two leading universities. The participants' characteristics are explored to ensure that random assignment of subjects to five different experimental conditions (TFS-NOTES, MFS-NOTES, WFS-NOTES, WFS-NO, and WFS-FACE) are attained. All characteristic variables (age, gender, investing experience, professional certification, and membership in professional association), except for number of accounting-related and finance-related courses taken, are not related to the experimental conditions. The evidence suggests that the participants are randomly assigned to five different experimental conditions.

In the pre-experimental stage, the participants are asked to rate their business and accounting knowledge. The results reveal that self-assessed scores of the participants across conditions on interests in capital market and securities trading are statistically different from each other. Interestingly, even though the average self-rated knowledge score across the experimental conditions is statistically different from each other, the knowledge test score is not statistically different across the conditions. This might be due to the fact that some of the participants are overly optimistic about their knowledge.

Hypotheses H1a, H1b, and H1c are tested in Experiment 1. H1a proposed that the proposed format financial statements improve investors' operating performance evaluation judgments when compared to mixed format financial statements. The experimental results do not provide support to H1a. The judgments related to operating performance of the participants in WFS-NOTES and MFS-NOTES

conditions are not statistically different from each other. This might be due to the fact that when assessing the operating performance, the participants only explore the information on the income statement. Both MFS-NOTES and WFS-NOTES conditions incorporate the proposed format income statement as part of a complete set of financial statements, the judgments on operating performance are, thus, not different from each other. The financial information presented to the participants in the MFS-NOTES condition does not induce the cognitive dissonance or uneasiness to the participants, even if the mixed financial statements present inconsistent or different formats among financial statements. The participants might be familiar with the information contained in the traditional format financial statements contained in the set of mixed format financial statements. To further explore H1a, the sample is partitioned into (1) Low-knowledge subsample and (2) High-knowledge subsample based on the knowledge variables. The experimental result from the additional analysis shows the participants with high knowledge who receive the proposed financial statements better spot the decline in operating performance of the firm when compared to those receiving just the new-format income statement, which is consistent with H1a. This is consistent with the fact that a certain level of knowledge related to business and accounting is required to understand the information on the proposed format financial statements since the investors are not familiar with the new format of financial statements.

H1b hypothesized that the mixed format financial statements improve investors' operating performance evaluation judgments when compared to traditional format financial statements. The results from Experiment 1 show that the participants in MFS-NOTES condition better recognize the decline in operating performance and better observe the decreasing trend in operating profit when compared to those in TFS-NOTES condition, which is consistent with H1b. That is to say, the investors would be able to better assess operating performance if they are provided with the proposed format income statement. Recall that the proposed income statement presents the operating section separately and clearly labeled. In addition, the operating profit subtotal is saliently presented on the face of the income statement, which helps the participants notice the possible problems associated with operations of the company. In an additional analysis of hypothesis using low- and high-

knowledge subsamples, the results suggest that the presentation format is critical especially for the low-knowledge subsample. To be exact, the participants with lower level of knowledge would be able to spot the decline in operating performance if they are provided with the proposed format income statement with the operating section saliently labeled and separately presented. The experimental result is consistent with Incomplete Revelation Hypothesis because the proposed format of income statement requires less cognitive effort to extract the information related to the operating performance.

The evidence also provides supports for H1c. Remember that H1c stated that the proposed format financial statements improve investors' operating performance evaluation judgments when compared to traditional format financial statements. The results show that the participants in WFS-NOTES better notice the decreasing trend in operating profit comparing to those in TFS-NOTES condition. In an additional analysis using knowledge as control variable, the participants in the high-knowledge group better assess the poor operating performance, irrespective of the differences in presentation formats. When analyzing the complex financial information in the proposed format financial statements, the participants must have high level of business and accounting knowledge. That is to say, the participants with higher level of accounting and finance knowledge would be able to see through the presentation format and understand the real financial performance of a given firm. Moreover, the participants in the low-knowledge subsample detect the lower trend in the operating profit only when the presentation format tips off the decline in the operating performance by presenting the operating profit saliently and separately from any other activities.

Yet again, the evidence from Experiment 1 is consistent with IRH. If the operating section is saliently presented, the cognitive cost associated with the operating information extraction is, thus, lower. If that is a case, then the information has more impact on investors' judgments. When the participants are asked to extract the financial information and to determine the financial ratios, the participants in TFS-NOTES outperform those in WFS-NOTES in the determination of traditional measures such as assets, liabilities, as well as return on assets. Conversely, the participants receiving the proposed format financial statements outperform the others

if they are asked to determine operating-related measures such as operating income, operating assets and liabilities, and return on operating assets.

The results from Experiment 2 provide the evidence for H2a, H2b, and H2c. H2a hypothesized that the proposed format financial statement with disclosure of by-nature information in the notes to financial statements improves investors' operating performance evaluation judgments when compared to those without by-nature information. The experimental results do not provide support for H2a, even when controlling for different knowledge level. Interestingly, the responses from the debriefing session show that most of the participants acquire the by-nature information whether it is presented or it is disclosed. The rationale behind this might be because the weights assigned to the by-nature information might not be high. That is why the responses from the participants with and without by-nature information are not statistically different.

Also, the experimental evidence suggests that the participants in WFS-FACE better spot the decreases in operating performance of the hypothetical firm when compared to those in WFS-NO condition. This is consistent with H2b, which hypothesized that the working format financial statement with presentation of by-nature information on the face of income statement improves investors' operating performance evaluation judgments when compared to those without by-nature information. The by-nature information presented on the face of the income statement provide additional information that draws attention of the participants to the increase in cost of goods sold and, consequently, to the decreases in operating profit. Moreover, the participants with lower level of knowledge in WFS-FACE condition assess significantly lower future operating growth prospects when compared to those in WFS-NO condition.

Lastly, H2c proposed that the proposed format financial statements with presentation of by-nature information on the face of the income statement improves investors' operating performance evaluation judgments when compared to those with disclosure of by-nature information in the notes to financial statements. The experimental results show that participants in WFS-FACE who received income statement (with by-nature information presentation on the face of income statement) can spot the decreasing trend in the operating profit better than those in WFS-NOTES,

which provides supports for H2c. In an additional analysis of participants with varying level of knowledge, the participants with the lower knowledge level in WFS-NOTES condition rate the future operating growth prospects significantly higher than those in WFS-FACE condition. While the participants in the high-knowledge subsample assess the future operating growth prospects at a lower level across the two experimental conditions, which suggests that high-knowledge participants acquired the information regardless of whether it is disclosed in the notes or presented on the face.

The results of Hypothesis 2, collectively, are consistent with HIP literature in that the more expanded and more detailed information presented would help investors form better judgments. The detailed information presented on the face of the income statement helps rather than hurts the investors assess the operating performance of the firm; i.e., the information overload stage is not an issue in this case.

In conclusion, the results from both experiments provide the support for both Incomplete Revelation Hypothesis and Human Information Processing literature. More specifically, the proposed financial statements with operating section presented saliently and by-nature information presented or disclosed improve the ability of investors in assessing operating performance of the firm.

My study is theoretically and practically important in that it provides the insights on the potential impacts as well as benefits of the revised accounting standard on financial statement presentation. Theoretically, this study exemplifies that cognitive costs of extracting and processing information have some bearing on the usefulness and information content of the financial information presented. I applied the Incomplete Revelation Hypothesis to the accounting information presentation context. Particularly, my paper addresses the issues related to cognitive costs associated with information presentation and classification in financial analysis. Moreover, the literature on Human Information Processing provides justification to the standard setters to require the firms to disclose or present more-detailed information in their financial statements.

The implications of my paper extend to forthcoming accounting standard on financial statement presentation. Particularly, this paper provides practical contributions to various groups of stakeholders such as standard setters, investors, management, as well as academia.

This paper has practical contribution to the standard setters by providing *ex ante* empirical evidence on the impact of proposed accounting standard pertaining to financial statement presentation on the financial statement users' judgments when they evaluate the firm performance. That is to say, this paper has a policy-implication. I illustrate that the proposed classification based on the core activities is beneficial, especially when the financial statement users assess the operating performance of a given firm. Moreover, the results from this study suggest that more-expanded and more-detailed presentation of by-nature information is advantageous to the investors, mainly when they assess operating performance of a firm. However, the concern of the Boards regarding the appropriate level of details presented on the face of financial statements is valid, especially for the financial statement users with lower level of knowledge.

In addition, the standard setters should be aware of unfamiliarity issue when the proposed format financial statement becomes effective. From the experimental results, even though the proposed financial statements actually help investors in their operating performance evaluation, the investors evaluate that the proposed format financial statements are less useful compared to the traditional format financial statements. The rationale behind this is that if the investors are not familiar with the new presentation format and classification, they would perceive that the information presented is not to their advantage. Thus, the standard setters should educate and familiarize the investors with the new presentation format and promising benefits. This would certainly increase the efficiency and effectiveness in utilizing financial information from proposed format financial statements for credit and investment decisions.

My study suggests that the investors with a higher knowledge level are able to fully utilize the information presented in the new financial presentation environment. In particular, given a reasonable level of investment and accounting knowledge, the financial statement users attain the benefits from the detailed information provided

without being exhausted by the information overload. This paper also shows that knowledge plays role in financial analysis. Also, the investors should learn that, in the proposed format of financial statements, there are new financial measures that are useful to them, especially the operating-related measures and financial ratios. Thus, it is very important that the investors acquire certain fundamental knowledge in investment and accounting so that they can extract and process relevant information and make meaningful and knowledgeable business decisions in a new financial reporting environment.

Management should be aware of the proposed changes as well. The authoritative guidance demands more-detailed and more-expanded information. The accounting information system installed in a given firm might need to be modified so as to accommodate the additional information required. In addition, the management might need to alter their presentation strategies so that they can effectively convey private information to market participants to reduce the information asymmetry.

It is important to note that academia plays important role in the success of the new standard implementation. The academic community should educate the investing public as well as the students so that they are aware of the proposed changes in financial statement presentation. My paper also provides the opportunity for interested public to observe the recent development of authoritative guidance on financial statement presentation. Moreover, the academic must shed light on the potential benefits that can be drawn from the new presentation or from more-expanded information. This would positively increase the likelihood of successful implementation of this new accounting standard and also increase the information utilization in credit and investment decisions.

There are numerous venues for future research since authoritative guidance on financial statement presentation alters various aspects in classifying and presenting financial items. Future research should explore (a) the impact of the proposed financial statements on judgments of professional investors like financial analysts, (b) the effect of the proposed financial statements related to the presentation of other comprehensive income on ability to detect earnings management engaged by management, (c) the impact of the proposed liquidity disclosure on the risk judgments of investors, (d) the impact of direct-direct method versus indirect-direct method of

statement of cash flows on judgments related to uncertainty or predictability of future cash flows, (e) the effect of the proposed format of balance sheet on judgments related to risk and financial position assessment, or (f) the effect of reconciliation schedule of the statement of cash flows on the judgments related to assessment of future cash flows.