RELIABILITY AND NON-GAAP ADJUSTMENT EXPLANATIONS

SAMEERA KHATOON HASSAN

A DISSERTATION SUBMITTED TO
THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

GRADUATE PROGRAM IN BUSINESS ADMINISTRATION
YORK UNIVERSITY
TORONTO, CANADA

September 2024

© Sameera Khatoon Hassan, 2024

ABSTRACT

Non-GAAP Financial Measures (NGFMs) have been in the academic spotlight for the last three decades, with a particular concern around the reliability of these measures. To address this reliability concern, regulators (including the Canadian Securities Administrators, CSA, and the U.S. Securities and Exchange Commission, SEC) have recently started requiring firms to provide a written explanation of their NGFM adjustments. However, to date, our understanding of how these explanations of NGFM adjustments influence investors is limited. This dissertation employs two methods to delve into the question of how explanations of NGFM adjustments influence investors' perceptions of reliability. First, I interview financial analysts, who reported that NGFMs are used to augment GAAP measures and stated their beliefs that NGFMs are important when evaluating the core operations of firms; however, they also spoke about a lack of consistency and transparency in NGFM adjustments which, in turn, serves to undermine their reliability. Second, I use an experiment to show that when firms provide an explanation for their NGFM adjustments, regardless of whether they are mandated by regulators or voluntarily provided, investors' perception of their reliability increases. My findings also show that investors' perception of the reliability of NGFM adjustments does not differ between positive versus negative adjustments. To conclude I find that explanations increase investors' perceptions of the reliability of NGFM adjustments and financial information provided by public companies.

My findings contribute important depth and understanding about investors' perceptions of the reliability of NGFM adjustments. These findings have implications for accounting and finance academics, professionals, and standard-setters alike.

DEDICATION

This thesis is dedicated to my father, M. Rafiuddin Hyder (FCA), who I lost early in my Ph.D. journey, and to my daughters, Yusra Fatima and Zoha Fatima, who have walked with me every step of the way.

ACKNOWLEDGEMENT

Embarking and completing my Ph.D. was the most fulfilling experience of my life. Balancing studies and research with family responsibilities was challenging and I could not have done it without the unwavering support from my supervisor and committee members. I extend my utmost respect and gratitude to Dr. Linda Thorne who guided me at every step of my Ph.D. Linda's commitment to her students is beyond imagination and I aspire to be an advisor like her for my own students. I also want to thank Dr. Matt Bamber, whose guidance and encouragement were crucial in helping me finish my Ph.D. on time. I look forward to collaborating on exciting projects with him in the future. I feel incredibly fortunate to have Dr. Theo Noseworthy on my committee and to have taken my Research Design and Statistics courses with him, which enriched my understanding immensely. Thank you all for helping me grow personally and professionally and for showing me how good research is done. I would also like to express my gratitude to Schulich Ph.D. faculty who have taught me valuable research skills and to all my colleagues, friends and mentors who have given me feedback on my thesis and guided me on academia, career, research and life.

A special thanks to my sister, Saira, and my niece and nephews - Rahma, Sohaib and Mustafa for their love and care. I am deeply indebted to my bother Ibad and my sister-in-law Ilma for their unconditional support and caring for my daughters while I attended conferences. Most importantly, I owe everything to Almighty Allah and to the prayers of my mother, Shama Khatoon.

I look forward to a meaningful research journey ahead.

TABLE OF CONTENTS

Abstract ii

Dedication iii

Acknowledgement iv

List of Tables vii

List of Figures viii

Chapter 1: Introduction 1

Chapter 2: The Effectiveness of Non-GAAP Financial Measures – Evidence from the Field 8

Overview 8

2.1 Data Collection 10

2.2 The Participants 11

2.3 Data Analysis 13

2.3.1 The usefulness of Non-GAAP Financial Measures (NGFMs) 13

2.3.2 Reliability of NGFM adjustments 16

2.3.3 NGFM Adjustments and Explanations 17

2.3.4 Regulation of NGFMs 20

2.3.5 Conclusion and Observations 21

Chapter 3: Hypothesis Development 23

Overview 23

3.1 Hypothesis 1: NGFM Adjustment and Reliability 23

3.2 Hypothesis 2: NGFM Adjustment Explanation and Reliability 26

3.3 Hypothesis 3: The Moderating Role of NGFM Adjustment Explanation 28

3.4 Research Question on Voluntary versus Mandatory NGFM Explanations 29

Chapter 4: Experimental Design and Methodology 30

Overview 30

4.1 Sample Size 30

4.2 Participants 31

4.3 Experimental Material and Task 32

4.4 Independent Variables 35

4.4.1 Direction of NGFM Adjustment 35

4.4.2 NGFM Adjustment Explanation 35

4.5 Dependent Variables 36

4.6 Comprehension and Attention Checks 36

4.7 Covariates and Demographics 37

Chapter 5 – Experimental Results 38
Overview 38
5.1 Participants and Descriptive Statistics 38
5.2 Hypothesis One: NGFM Adjustment and Reliability 40
5.3 Hypothesis Two: NGFM Adjustment Explanation and Reliability 42
5.4 Hypothesis 3: The Moderating Role of NGFM Adjustment Explanation 44
5.5 Supplementary Analysis: The Role of Voluntary versus Mandatory Explanations 46
5.6 Conclusion 48
Chapter 6: Implications, Limitations and Future Research 49
Chapter 7: Bibliography 52
Appendix A: Interview Protocol 60
Appendix B: Experimental Instrument 61

LIST OF TABLES

Table 1: Summary details of interview respondents 12
Table 2: Participant Demographics 39
Table 3: Univariate test results for H1 40
Table 4: Univariate test results for H2 42
Table 5: Univariate test results for H3 44
Table 6: Univariate test results for Mandatory versus Voluntary NGFM explanations 47

LIST OF FIGURES

Figure 1: Experimental Flow 34
Figure 2: Direction and Reliability of NGFM adjustments 41
Figure 3: Explanations and Reliability of NGFM Adjustments..... 43
Figure 4: The moderating role of NGFM adjustment explanations..... 45

CHAPTER 1: INTRODUCTION

Publicly traded companies must report their financial performance measures adhering to the Generally Accepted Accounting Principles (GAAP). Strikingly, however, over 90% of publicly traded firms adjust these GAAP measures to present non-GAAP financial measures (NGFMs) as supplementary financial disclosures (Black et al., 2018; Black et al., 2021; Marques, 2017). Typically, firms adjust GAAP measures for non-recurring and non-operating transactions to arrive at the NGFMs of a firm's core performance (Guggenmos et al., 2022).[1] NGFMs are unaudited and flexible in their determination, and therefore, the credibility and utility of non-GAAP disclosures could arguably differ across firms (Entwistle et al. 2012).

Non-GAAP financial measures (NGFMs) have become increasingly prevalent in the business world over the past three decades (Campbell et al., 2022). For example, according to recent research, 97% of S&P 500 firms used NGFMs in their earnings releases (Garavagalia, 2023). Companies use NGFMs to supplement and explain their reported earnings under GAAP (Chen et al., 2021). The Center for Audit Quality found that 94% of S&P 500 companies disclosed at least one NGFM in their Q1 2020 earnings release (Guggenmos et al., 2022, CAQ, 2020). While management consistently argues that NGFMs present better reflections of their firm's core operations and recurring firm performance than traditional GAAP measures (Chen et al., 2021; Campbell et al., 2022), academic research suggests that NGFMs may sometimes be informative and other times opportunistic (Curtis et al., 2014). This variability and the potential manipulation

[1] There is no universal definition for NGFMs since adjustments included in NGFM differ by firm. However, the Canadian Securities Administrator (CSA) defines NGFM as a financial measure that is not disclosed in the financial statements and depicts the historical or expected future financial performance, financial position, or cash flow of an entity after adjusting for items that were part of the comparable GAAP measure. Some common adjustments made to arrive at the NGFM are net finance expense, depreciation and amortization, taxes (if applicable), foreign exchange gains/losses, transaction-related expenses, fair value adjustments, share-based compensation. Some examples of frequently disclosed NGFM are Adjusted Earnings Before Interest Taxes, Depreciation, and Amortization (EBITDA), Free Cash Flows, Adjusted Net Income, and Funds from Operations (Garavaglia, 2023).

of NGFMs raise significant concerns about their reliability. For example, on the one hand, some research finds NGFMs are more informative or value-relevant than GAAP-based earnings and a useful measure of the underlying or ongoing profitability of the firm (see, e.g., Helfin et al. 2015; Bhattacharya et al., 2003; Lougee & Marquardt, 2004). On the other hand, research shows that managers may use NGFMs—and in particular positive NGFM adjustments—to mislead investors by attempting to obfuscate or undermine less favorable GAAP results (see, e.g., Doyle et al. 2003; Frankel et al., 2011; Brown et al., 2012; Black et al., 2009).

Regardless of management's motives in presenting NGFMs, and underlying reliability concerns about the NGF numbers and measures, there is significant empirical evidence that analysts rely upon them in their valuation of firms (e.g., Bradshaw et al., 2018; Christensen et al., 2019; Brasel et al., 2022; Garavaglia, 2023; Anderson et al., 2022; Ha, 2021). Indeed, NGFMs may be of even more importance than GAAP measures in firm valuation as NGFM adjustments provide superior representation of a firm's continuous core operations (Andersson & Hellman, 2007; Johnson & Schwartz, 2005). As early as 2002, Bradshaw and Sloan find that investors in US-listed companies responded to NGFMs ("street earnings") more than they reacted to their counterpart GAAP financial measures in firm valuation. This trend does not seem to be abating.

The key issues with NGFMs are the inherent flexibility allowed in their preparation, alongside the conflicting uses and motives of NGFMs by management. These issues give rise to the lack of a definitive understanding of their perceived reliability of NGFMs, especially among investors. In an attempt to address the NGFM reliability concern and to respond to the clamour from various investor groups to increase and improve the regulation surrounding NGF numbers and measures, there is a drive to compel firms to provide explanations for their adjustments. Both the U.S. Securities and Exchange Commission (SEC) and the Canadian Securities Administrators

(CSA)[2] have devised regulations around NGFM reporting that seek to increase the (perceived) reliability of these measures (SEC, 2003; SEC 2022 CSA, 2021), which have included note disclosure of the reconciliation in the financial statements. This regulation has been adopted by both the U.S. and Canadian regulators. In addition, the CSA (CSA, 2021) has also required firms to provide an explanation of the NGFM adjustments, which they suggest should increase the usefulness, transparency, and reliability of the NGFM (CAQ, 2020).[3] It seems likely that the SEC will write requirements that mirror the CSA's, and thereby demand an explanation for NGFM adjustments to increase reliability (Maurer, 2023).

Reliability is widely considered an essential characteristic that contributes to the usefulness of accounting information. Here, I adopt the definition set out in the Conceptual Framework, which states that "Accounting information is reliable to the extent that users can depend on it to represent the economic conditions and events it purports to represent" (FASB 1980; p. 62)[4]. Staubus' (1961) doctoral dissertation—entitled *A Theory of Accounting for Investors*, which latterly has been referred to as *Decision-Usefulness Theory of Accounting* (1999)—, aimed to introduce an explicit objective for financial reporting via a focus on investors' decisions. In his thesis, Staubus analyzed the decisions of investors and identified reliability as one of the key factors influencing their

[2] The CSA is an umbrella organization under which regulators from 3 territories and 10 provinces have come together with the common objective of fostering harmonized regulation and efficient operation of securities industry of Canada.
[3] For example, the Council of Institutional Investors (CII) has identified that non-GAAP financial measures may be useful to understand a company's financial performance, but such figures may also be opportunistically misused, and explanation of adjustments may be useful in mitigating their opportunistic use (Maurer, 2023).
[4] The IASB's Conceptual Framework for Financial Reporting (2010) shifted away from the term reliability, and instead adopted faithful representation in its place. Over the years, there have been conversations at both academic (e.g., Bauer, O'Brien and Saeed, 2014) and standard-setter levels whether to (re-)introduce 'reliability' as a stand-alone qualitative characteristic (e.g., Staff Paper, IASB Agenda ref 10H, May 2014). For example, Bauer et al. (2014) argue for the re-introduction of the characteristics of reliability and prudence because they help to address the "inherent accounting issue of moral hazard" (p.211). Standard-setters note that: "The main reason for the change [from reliability to faithful representation] was a lack of a common understanding of the term reliability. In particular, many seemed to equate reliability with information being verifiable or free from material error. The term 'reliability' was in fact intended to describe more than just verifiability and freedom from material error" (Staff Paper, Agenda ref 10H, 2014: p.2).

decision making (1954; 1961). Over the years, the importance of reliability as a qualitative characteristic of financial information proposed by Staubus has been consistently emphasised (e.g., Choudhary, Merkley, and Schipper, 2021). Indeed, Kadous, Koonce, and Thayer (2012) write: "[…] we show that users do not view [relevance and reliability] as independent constructs. Instead, variations in properties that are associated with the *reliability* of a measurement influence users' assessments of the *relevance* of fair value. The relationship between assessed relevance and assessed reliability is unidirectional, in that factor underlying reliability influence judgments of relevance, but factors underlying relevance do not influence judgments of reliability" (p.1335). Consequently, modern accounting theory suggests that accounting information is in demand where it is reliable and relevant for decision-making purposes (Maines and Wahlen, 2006; Froystein, 2024). Additionally, studies indicate that users benefit from comprehensive disclosures, including identifying contextual factors that either enhance or diminish accounting information reliability (Hirst et al. 1995; Maines and Wahlen, 2006).

While existing research provides support for the increased reliability of NGFMs when quantitative reconciliation between the GAAP and NGFMs adjustments is provided (Elliot, 2006; Baik et al., 2008), there is yet a lack of understanding on the effect of NGFM adjustment explanations and investors' perceptions of the reliability of firms' financial information. Specifically, my research looks at the influence of NGFM explanations and investors' perceptions of reliability, which I consider for both positive and negative NGFM adjustments. I address this objective by proposing the following research questions:

(1) How does an explanation influence the reliability of investors' perceptions of NGFM adjustments? and

(2) Is the influence of the explanation on reliability similar for both positive and negative NGFM adjustments?

To address these research questions, I conducted a field study with analysts to ground my understanding of NGFMs' explanations. I follow this up with an experiment to examine the effect of NGFM adjustment explanations on investors' reliability judgment.

I use a mixed methods approach, employing qualitative (interviews) and quantitative (experimental) research methodologies to provide a comprehensive understanding of the research questions. Qualitative research, and in my case interviews with the key social actors, provides rich and detailed descriptions of phenomena (Dai et al. 2019), while experimental research provides a controlled environment for testing causal relationships (Palinkas et al., 2014). Combining qualitative and experimental research can lead to better research design by incorporating inductive and deductive reasoning (Creswell & Creswell, 2017).[5]

In Study 1, I use qualitative research to investigate how firms' explanations of NGFMs influence analysts. In particular, my study considers analysts' perceptions of the reliability of NGFMs and the extent to which an explanation might influence their view of both positive and negative NGFMs.[6] Interviewees are recruited through professional and alumni networks. I conducted 11 interviews with financial analysts, which reveal that explanations for NGFM adjustments play a key role in establishing the reliability of NGFM. During the interviews, analysts reported that they use NGFMs to augment GAAP measures, and the NGFMs are important to

[5] Therefore, qualitative research can inform the development of research questions and hypotheses, while experimental research can test these hypotheses in a controlled and systematic way. In addition, multiple research methods enhance the validity of findings by triangulating the results. Qualitative research can help identify and explore potential variables and factors influencing investor judgment of NGFMs, while experimental research can provide empirical data to support these findings (Hesse-Biber, 2010).

[6] I also supplement my interviews with documentary analysis to examine existing adjustment practices used by companies and whether an explanation is provided with the adjustments. The interviews and documentary analysis facilitate designing the instrument.

evaluate the core operations of firms. However, alongside these positive aspects, they also note a lack of consistency and transparency in NGFM adjustments which risks undermining the reliability of the measures themselves. Yet, on balance, respondents seem to acknowledge that NGFMs provide relevant information that allows them to acquire a reliable and well-rounded picture of the firm's performance above and beyond that of GAAP measures. Interviewees also agree that explanations provided by management are useful to assess the reliability of firm performance since NGFM adjustments are at the management's discretion and are vulnerable to manipulation. Respondents pointed toward the need for an improved regulatory framework for reporting NGFMs but, at the same time, expressed skepticism around the efficacy of more regulation.

In Study 2, I use a 2 x 3 experiment to examine the role of explanations of both positive and negative NGFM adjustments on investors' perceptions of reliability. I find that explanations increase investors' perceptions of the reliability of NGFM adjustments, regardless of whether they are mandated by regulators or voluntarily provided. Surprisingly, I fail to find a differential effect of NGFM explanations for positive versus negative adjustments.

Thus, the findings of both the interviews as well as the experiment provide insights into the role of explanations as they pertain to improving investors' perceptions of the reliability of NGFM adjustments. These findings have implications for our understanding of how we might increase the reliability of published financial information. While my findings contribute toward the current understanding of the influence of explanations of NGFM adjustments and their impact on investors' perceptions of the measures' reliability, they also suggest that the key to improving the reliability of NGFM adjustments is consistency and transparency, which may be facilitated by, but is not necessarily dependent upon, the existence of externally imposed regulation.

The rest of this dissertation is organized as follows. Chapter 2 presents Study 1, which is based upon interviews with financial analysts used to develop our understanding of their reliance and use of explanation of NGFM adjustments. Chapter 3 presents the hypothesis development for Study 2, and Chapter 4 outlines the experimental procedures used to test these hypotheses. Results from the experiment are analyzed in Chapter 5, and the dissertation concludes with a discussion of the limitations and future research opportunities in Chapter 6.

CHAPTER 2: THE EFFECTIVENESS OF NON-GAAP FINANCIAL MEASURES – EVIDENCE FROM THE FIELD

> *It's like I said, you know, the universe of non-GAAP numbers is very large and, so, potentially, some things I think are fair and reasonable and other things are not. [Analyst # 1, A1]*

OVERVIEW

Non-GAAP Financial Measures (NGFMs) date to the 1970s when Adkerson (1978) highlighted the need for alternative performance metrics that were simpler and more helpful than traditional GAAP measures for investors. Non-GAAP financial measures (NGFMs) play a significant role in the disclosure practices of many companies, particularly publicly listed ones (Frankel et al., 2011; Marques, 2017). A core concern with NGFMs is that they can be used to manipulate financial results to make the company look better than it is (Guest et al., 2022; Bradshaw et al., 2018). Non-GAAP financial measures are 'adjusted' GAAP measures to better reflect the firm's core underlying operations. However, firms routinely make questionable adjustments, with about two-thirds of firms making positive NGFM adjustments to present a higher NGFM than the GAAP measure (Guest et al., 2022) to serve management interests.[7] Curtis et al. (2014) also found evidence for this cherry-picking behaviour and firms' inconsistent adjustments. They found that firms adjust for informative reasons but only when such adjustments enhance the perception of their core earnings. Thus, when management desires to direct investors' perceptions, it has the option to do so by making positive NGFM adjustments. This potential

[7] Numerous studies that have examined NGFMs report that the adjustment in NGFMs only considers firms reporting NGFMs that are higher than GAAP measures and do not examine investor behaviour towards firms that report NGFMs that are lower than GAAP (Frederickson & Miller, 2004; Elliot, 2006). This absence limits our understanding of NGFMs, given the prevalence of lower NGFM adjustments. Frederickson and Miller (2006) specifically call for future research to examine NGFMs that are less than the GAAP measures to broaden our understanding of NGFMs and investor psychology. This makes the direction of NGFM an important characteristic to examine, for the first time, in this dissertation.

misuse of NGFMs to obscure firm performance causes concern among the regulators (Guest et al., 2022; Veritas, 2016). Guest et al. (2022) find that positive NGFM adjustments, while opportunistic, protect the firm from shareholders, proxy advisors, and media scrutiny.[8] While regulators have attempted to curtail the misuse of NGFMs through ongoing guidelines and reporting requirements for NGFMs, most of the regulatory interventions have been reactionary and limited (Baumker, 2014).

This historical lack of regulation of NGFMs appears to have provided the opportunity for managers to manipulate NGFMs, which can mean concealing the "true" nature of a firm's financial performance (Bentley et al., 2018; Doyle et al., 2013), particularly when performance is weak. For example, companies may exclude certain expenses from their non-GAAP metrics to make their earnings appear higher than they are (Guest et al., 2022; Bradshaw & Sloan, 2002). This was reinforced by Henry and Jiang (2020), who argue NGFMs to be more prominent and overemphasized by management than GAAP measures, particularly when GAAP earning expectations are not met and to ensure that executive compensation benchmarks are achieved (Isidro & Marques., 2013). Additionally, incidences of misreporting through NGFMs cast doubt on the true intentions behind reporting NGFMs. For instance, Valeant Pharmaceutical's top executives chose to present GAAP and NGFMs to indicate strong financial results, which misstated sales and included erroneous revenue allocations (Cormier et al., 2017; Guest et al., 2022).

Nevertheless, managers claim that NGFMs are a better indicator of the firm's core operations (Bhattacharya et al., 2003), and investors' reliance on NGFM has continued to increase,

[8] I refer to positive NGFM adjustments when firms add back items to make their NGFM higher than the GAAP measure and negative NGFM adjustments when firms subtract items, resulting in an NGFM that is lower than the GAAP measure.

with approximately 94% of S&P firms' disclosing at least one NGFM as of 2018 (Curtis et al., 2018; Black et al., 2021). This increased acceptance, use, reliance, and potential manipulation of the NGFMs solicited apprehensions regarding the effect of, and inspirations behind, NGFMs (Black et al., 2018) from regulators and academics.[9]

To gain insight into how NGFM are used and relied upon in the capital markets, I turn to financial analysts as key users of financial information and NGFM (Chen et al., 2018; Graaf, 2023). A financial analyst's livelihood depends on their ability to engage with all available sources of information to understand and assess a firm's operations and financial position (Brown et al., 2015; Graaf, 2023; Twedt & Rees, 2012; Graaf, 2018; Imam et al., 2008; Spence et al., 2019). However, there is limited research that examines analysts and their perceptions about NGFMs (Brown et al., 2015; Fox, 2015). Thus, I ask analysts how they integrate and value particular sources of information, such as NGFM, in their models, recommendations, and reports (Bradshaw, 2011; Lo, 2012; Fox, 2015). In addressing the research questions outlined in the Introduction (Chapter 1), I specifically sought to gain a better understanding of three core issues: (i) analysts' perceptions of the usefulness and reliability of NGFMs; (ii) the attributes of NGFMs that analysts value most; and (iii) whether explanations of NGFM adjustments increase their value to analysts.

2.1 DATA COLLECTION

For data collection, I conducted interviews with 11 analysts who follow the largest 60 companies listed on the Toronto Stock Exchange (TSX60). Potential respondents were sourced via alumni[10] and, to a lesser extent, personal networks. All interviews were conducted in the Fall of 2022. Research ethics approval for the interview phase of the project was sought and granted in

[9] For example, Isidro and Marques (2013) discovered that most executive compensation packages are based on NGFMs because NGFMs are simpler to alter recurring items to increase management payouts and make upward adjustments and exclusions to GAAP numbers.

[10] I am grateful to Schulich School of Business Alumni Office for their assistance in this process.

the normal way from the York University Research Ethics Board. At all times, appropriate research ethics practices and processes were followed. The initial contact with participants was made via email. An invitation letter to provide details about the researcher and the project were sent to these participants, and at this stage, interest was solicited in participating in an interview. Those who agreed to be interviewed were sent a calendar invite for the meeting with the informed consent form and a Zoom/ Microsoft Teams link.[11]

Semi-structured interviews were conducted over Zoom or Microsoft Teams (according to participant preference). The interview guide is presented in Appendix A.[12] Each interview started with a description of the research project followed by a brief introduction of the researchers and the interviewee's educational background and educational and professional work affiliations, which helped build rapport with the interviewees (Kenno et al., 2017). I presented participants with an oral consent script, then obtained their consent for the interview and for recording the conversation. As part of this process, I talked participants through the anonymity and confidentiality aspects of academic research, and made assurances that these would be maintained at all times. The interviews lasted an average of 45 minutes, including the introduction, verbal informed consent and closing remarks, which is in the similar range for studies that involve a participant pool, such as analysts, who are busy and not easily accessible (e.g., Dai et al., 2019).

2.2 THE PARTICIPANTS

The following table (Table 1) presents key demographic information regarding the interviews and the interview participants, including the length of the interview, the industry that

[11] I obtained contact information for 324 analyst contacts who follow and cover the TSX60 firms from earnings calls and company websites, from where contact information for the analysts, such as their names, email addresses and telephone numbers, was gathered. I was able to interview analysts not only from Toronto but from other financial hubs where the analyst population is based, including Montreal, Calgary, Vancouver, and even US-based analysts, and responses were mostly consistent across the board.

[12] The interview guide was piloted with PhD colleagues as well as professionals (to identify any flaws and issues and gain confidence in conducting independent interviews), and they were not part of the sample pool.

the analysts cover, years of experience and country of location, and suggests the representative nature of the sample obtained.

Table 1: Summary details of interview respondents

Interviewee #	Duration of interview	Sector coverage	Years of experience	Location
A1	43 mins 57 sec	Sports retail clothing	15+	USA
A2	37 min 43 sec	Technology	9	USA
A3	60 min 10 sec	Diverse portfolio	8	USA
A4	30 min 52 sec	Canadian Energy	12	Canada
A5	62 min 9 sec	Real Estate & Financial Services	10	Canada
A6	45 min 46 sec	Real Estate & Financial Services	20	USA
A7	46 min 5 sec	Communication and Technology	15	Canada
A8	48 min 54 sec	Technology	17	Canada
A9	43 min 31 sec	Transportation	20	Canada
A10	19 min 47 sec	Communication and Technology	25	
A11	45 min 04 sec	Diverse portfolio	3	Canada

2.3 DATA ANALYSIS

The interview data was systematically analyzed using a modified Grounded Theory Approach (Glaser & Strauss, 1967; Parker et al., 1997), and specifically an open-ended coding approach. Data was coded using MAXQDA, a widely used software in qualitative research (Goretzki et al., 2018). Analysis of the data indicated that four key themes were most salient: 1) the usefulness of NGFM, 2) the reliability of NGFM, 3) the role of NGFM adjustments and explanations, and 4) the importance of regulation on NGFM.[13] Each of these is considered in turn across the next four sub-sections.

2.3.1 THE USEFULNESS OF NON-GAAP FINANCIAL MEASURES (NGFMS)

Consistent with prior research, the interview respondents told me that they encounter, use, and—often—rely upon NGFMs as a source of information daily; *"every single day"* (A9). This prevalence of NGFMs suggests that these metrics are widely used and, more importantly, considered a key measure and indicator of firm performance by companies when communicating with investors and analysts (Garavaglia, 2023).

> *I would say that every single one of them reports non-GAAP financial measures that they would define as their key performance indicators of actually how the underlying business is going. I don't think a single one of them would use a GAAP accounting measure as the most important metric. If you'd looked at the front page of a press release of the company of a Canadian company[sic], I would say that most of those measures are non-GAAP*. [A4]

Analysts see NGFMs as indicators that help them understand the management's view of the firm's performance and provide input for their models. Analysis of the data also suggests that these measures help analysts to better understand the specifics of the business and core operations

[13] 37 first-order themes were identified from the interview data, which were combined into the four key themes.

that are otherwise obscured by GAAP measures (Bhattacharya et al., 2007). In many ways, analysts explain, the reliance on NGFMs stems from their concerns about traditional GAAP measures being inadequate to accurately capture unique aspects of a firm's operations. I was told that traditional GAAP numbers and measures were overly rigid, rule-based, and generic. Hence, the data suggest that NGFMs are metrics that emerged out of necessity to overcome the limitations of the existing GAAP reporting standards. Thus, in line with expectations (e.g., Christensen et al., 2014), I find that the demand for these non-GAAP measures comes from analysts themselves. Analysts who follow multiple sectors spoke clearly and positively about how NGFMs provide "very useful" and idiosyncratic industry-specific insights. One analyst explains:

> *I find them very useful for understanding the business, I find that the GAAP and IFRS measures often aren't well tuned to the way the industry works.* [A8]

This criticism for traditional GAAP vis-à-vis NGFMs was echoed by another analyst. The following analyst elaborates the usefulness of NGFMs and how NGFMs allow analysts to garner an understanding of "the core earning power of the company", which is something which would be difficult to ascertain via other sources of information:

> *It [i.e., NGFMs] helps identify what is the true underlying recurring earning or cashflow power of a company. It helps us understand what is unusual versus normal course and helps us understand really these small number of cases that impact earnings A for given company during the course of the year. And help us understand really what is the core earning power of the company.* [A9]

Therefore, NGFMs are particularly useful when it comes to understanding businesses, trends over the years, and firms' performance in comparison to their peer firms (Gee et al., 2023).

At the same time as analysts provided an almost unanimous approval for NGFMs, ranking them above their counterpart GAAP measures, they were quick to speak about the limitations that NGFMs have. For instance, participants identified that NGFMs suffer from changing definitions and comparability issues due to inconsistencies in their composition. For this reason, most analysts concede that they must rely on both GAAP as well as NGFMs. Interestingly, the following respondent told me how the complementarity between traditional and non-GAAP measures was used to develop a separate set of measures, whereby they include and exclude certain "stuff" as deemed appropriate, thus arriving at an idiosyncratic measure that they want.

> *I'll look at both GAAP earnings and then also the non-GAAP excluding stock-based comp. Usually if I'm looking at a non-GAAP metric, I'll almost create my own non-GAAP metric where I keep in the stuff that I agree with them excluding and exclude the stuff that I don't agree with*. [A2]

Respondents emphasized that even with the usefulness of NGFMs, they also require sense-making and judgement (Elliot, 2006; Frederickson & Miller, 2004). Of course, this type of information interpretation skill has been identified as critical for analysts (Bradshaw et al., 2018) but nonetheless it is thought-provoking to hear how it is done and how NGFMs are part of that process. For example, one analyst pointed out that they have to make a judgement about how to interpret and analyze what the firm is reporting, and they are open to whether they should rely on the NGFMs or simply ignore them (Brown et al., 2015).

> *I mean, ultimately we have to make a judgement call about what the company is excluding, and that call is our call to make whether the exclusion is adequate or not adequate.* [A9]

2.3.2 RELIABILITY OF NGFM ADJUSTMENTS

Specifically, when asked about the reliability of NGFMs, analysts explicitly identified the seeming lack of specificity and clarity regarding NGFM adjustments, commenting on how this undermined their reliability. Moreover, analysis of the data suggests that a key and recurring aspect of reliability of NGFM is consistency*:*

> *I think the list of exclusions and list of non-GAAP metrics should be as short as possible and should be consistent.* [A7]

Indeed, everyone I spoke to related the need for consistency in adjustments, yet I was told that firms are not consistent between each other, and sometimes not between time periods. An analyst at one of the largest investment groups in Canada identified that firms tend "not" to be consistent in their NGFM adjustments, which concerning to the analysts, who want to see consistency in NGFM disclosures. This sentiment is expressed in the following explanation:

> *… as long as a management sticks to a six-year definition of non-GAAP metric, and it's reasonable…. And it's consistent; that's fine.* [A5]

Respondents also criticized the number of adjustments made to arrive at the NGFMs. Below are illustrations of these concerns:

> *I question why they are constantly making these adjustments. I mean, there are some that do a lot of pretty odd adjustments. Sometimes, for example, if a company is putting in a new IT system, some of that will be CAPEX, and then some of it will be operating expense. And sometimes, they will report an adjusted operating profit excluding that expense. And to me that's wrong. Because if it's an operating expense, it should be considered an operating expense. You can't just sort of arbitrarily say, well, it's an operating expense; we*

don't want you to look at it this quarter. And they're already capitalizing most of the expense anyway. [A4]

In another instance, the same analyst added:

One of the most, I guess, material examples that I can share with you from the Telcom sector ... I think over the last, maybe call it a dozen or so years, ABC Co has probably spent about $10 billion on Spectrum (payments) ... if you look at the free cash flow definition of any of these companies, it doesn't include Spectrum payments. Okay, so the question is, like, is Spectrum a one-off? Is it not material? I would argue no. [A4]

Lastly, another analyst [A3], when specifically asked about the reliability of NGFMs, stated that due to managerial discretion over NGFM reporting—which they claimed was due to the lack of regulation—they feel there is a lot of "window dressing". Thereby, they question the reliability of NGFM adjustments.

To alleviate the aforementioned concerns about NGFM adjustments, analysts claim to seek better understanding of them by reaching out to management and looking for explanations, context, and reason behind the adjustments. After this investigation, they determine whether and how to use the NGFMs in their modeling.

2.3.3 NGFM Adjustments and Explanations

Another major theme that emerged was the direction and understanding of the NGFM adjustments. Analysts are aware that, more often than not, firms use NGFM adjustments to improve upon the GAAP measure by making positive NGFM adjustments. With tongue in cheek, the following analyst told me:

So, it is a running joke in the investment community that, like, you just keep adjusting until you reach non-GAAP profitability. [A3]

The interviewees claimed to be mostly skeptical of positive adjustments as they make NGFMs look better than GAAP measures.

> *I think there's definitely some [NGFMs] out there, where the adjusted EBIT or adjusted income basically adds back almost everything …* [A7]

Thus, it appears that analysts carefully scrutinize each of the NGFM adjustments, and for each adjustment made, they seek explanations and engage in sense-making to reduce their skepticism through the presence of this added explanation. Hence, explanations are an important qualitative characteristic of NGFMs that help understand the measure and assess its reliability and quality (Chen et al., 2021). When discussing how to assess the quality of NGFM, one analyst responded:

> *I try to make sense of it. I am always worried that the more that people make adjustments, non-GAAP, I get a little bit more skeptical. I would really appreciate it when companies call out one-time items, whether they be legal expenses. I really appreciate when companies call out foreign exchange impacts. I think that is extremely helpful. Generally, the more disclosure, the better.* [A10]

This extract provides a window not only into the potential usefulness (or helpfulness) of NGFMs, but also what makes them useful. Here, the respondent expresses their belief that "more is better" when it comes to explanations for the adjustments. The following respondent told me something similar, but rather than stress quantity, they stressed quality and relevance. They said that to evaluate a firm's performance based on NGFMs, they prefer NGFMs that are logical and make sense:

> *I think it's just more information that helps you, helps your analysis, and helps you improve the quality of your analysis.* [A9]

In addition, my interviewees identified that explanations of NGFM adjustments are a key factor for understanding the core operations of an enterprise. A lack of details sometimes makes NGFMs less reliable and potentially even use-less. For example, there were reports that:

> *Any measure or metric that they're reporting, you know, as much detail as you can provide that actually helps any user analyst or investor to make out the sense of.* [A3]

The importance of the explanations for the adjustments was stressed throughout the interviews with many analysts stressing their importance in terms of understanding NGFMs. However, there is a lack of concreteness on suggestions on what kind of explanations allow the user to "make sense" of the 'non-GAAP' measures. The following respondent, for example, offers the following vague and subjective take. The one thing they stress that would diminish the usefulness of the explanation would be its lack of credibility or truthfulness:

> *I think the kind of explanation that they would give you would help you decide whether the non-GAAP is making sense or not. And if it does, then you would include it or you would pay attention to it. But if the explanation, you know … there's just making it up and it's not … believable, then you probably are going to skip it.* [A2]

The interview data also strongly suggests that analysts value explanations not just for the adjustments that have been made, but also for any changes in the adjustments. One respondent said that having an explanation helps them get a clearer picture of the firm's performance, whereby analysts are not left guessing. In the absence of information comes reliability concerns, ultimately creating information asymmetry issues and a larger dispersion of forecast errors.

In summary, combining the literature on analysts and NGFMs helps theorize why analysts are cautious when relying on financial information and how more information about the firms and their operations creates strong analysis and judgment. Specifically, if we look at NGFMs, analysts

are likely to exhibit skepticism about NGFMs since they are management-produced and are subject to various adjustments and exclusions that the management deems fit and may be questionable. The concerns around NGFMs can be alleviated by providing context and explanations for the adjustments to NGFMs to help with sense-making. This is further examined and tested experimentally in the next Chapter of this dissertation. Before moving to this, however, I want to briefly elaborate on analysts' responses to the regulation of NGFMs, not least because it is useful to understand the context in which the experiment took place.

2.3.4 REGULATION OF NGFMS

The final theme that emerged from the interviews was the role, or lack thereof, of regulation with respect to the current regulatory landscape of NGFMs. When I inquired about their understanding and perspective on the existing regulation for NGFM reporting, most respondents seemed almost entirely uninformed. For example, one analyst stated:

> *I don't know anything about the regulation of non-GAAP financial measures*. [A8]

This points to the lack of awareness of the regulatory initiatives pertaining to NGFMs, which is an integral part of analysts' work. Despite this, in further discussion, some analysts expressed their view that regulation about what to disclose in NGFM is "adequate," while others felt that additional regulation could improve the quality of NGFM disclosures to some extent. To illustrate, on the one hand, an analyst responded,

> *... I think the disclosure I get today is adequate for investors. I don't feel like there's a pressing need for regulation for more disclosure.* [A2]

While on the other hand, some interviewees emphasized the need for regulation to ensure that firms are making reliable NGFM disclosures and not just disclosing details about NGFMs when convenient. For example:

… unless regulators go and say you have to disclose this kind of data points, they won't, I mean, some might, some might not. And even if they disclose, they might do it for a quarter or two quarters, and then just stop, and those things may not be in the focus, right. So … again, that's been our experience…if there are certain data points, which is not regulatory mandated by the regulators, you cannot be sure of getting those disclosures every quarter … or even on an annual basis … [A5]

Thus, the interviewees reinforced the value of regulation to ensure consistent disclosures, which increases investors' understanding and reliability of NGFM disclosures.

I mean, I think providing a framework to have it disclosed and explained is, is [sic] probably a good thing, I mean, we've been moving in that direction. But that's what I think is adequate is to disclose and reconcile and ultimately … this is information of value … to investors. [A9]

2.3.5 CONCLUSION AND OBSERVATIONS

To conclude, from the interviews, I determined that the analysts find NGFMs to be informative as they are more likely to be reflective of the firm's core business operations and profitability than GAAP measures. Interview findings highlight that most analysts perceive NGFMs to be useful and that they are used along with GAAP measures to obtain a reliable and comprehensive evaluation of firms' core business operations and profitability. However, analysts also recognize and are wary of the shortcomings of NGFM that stem from the lack of consistency and transparency of the measures over time, which casts their reliability into doubt. Additional concerns identified were the limited comparability across firms even in the same industry, management's ability to use NGFMs opportunistically, and the lack of a framework for NGFM disclosures. Analysts attest to carefully evaluating the adjustments made to calculate NGFM to

understand these measures. Analysts weigh the context and quality of information before they incorporate NGFMs into their analysis and use their judgements when inputting NGFMs into their models. They use their experience, industry insights, and additional explanations to understand why management chose particular NGFM adjustments or excluded them from their analytical models.

NGFM adjustments, they claimed, open a pathway to better understanding the underlying performance of the firm. However, analysts also recognize and are wary of the limitations that come with these measures—which some argue stems from the lack of regulation—, which allows management to use them opportunistically to disguise poor firm performance. The discussions reinforced that NGFM regulations would be beneficial to analysts if they were stronger and had a proper framework. Analysts believe that additional information through explanations for NGFM adjustments will increase insights and/or augment the consistency of NGFM reporting and, in turn, enhance their usefulness and reliability.

Building on existing literature on NGFMs and based on the findings from the interview study, the next Chapter develops the hypotheses to be tested through an experiment.

CHAPTER 3: HYPOTHESIS DEVELOPMENT

OVERVIEW

This Chapter develops three hypotheses to examine the effect of (Non-GAAP Financial Measure) NGFM adjustment explanations and the direction of NGFM adjustment on reliability.[14]

In particular, Hypothesis 1 and Hypothesis 2 pertain to the main effects of the direction of NGFM adjustment (positive and negative adjustments) and NGFM adjustment explanation on investors' perception of reliability of NGFM adjustment, and Hypothesis 3 examines the moderation effect of NGFM adjustment explanation. Specifically, Hypothesis 1 considers the relative influence of positive and negative NGFM adjustments on reliability; Hypothesis 2 considers how explanations for NGFM adjustments influence reliability; and Hypothesis 3 examines whether explanation of NGFM adjustments moderates reliability. Each is considered in turn.

3.1 HYPOTHESIS 1: NGFM ADJUSTMENT AND RELIABILITY

The first hypothesis examines one of the key themes highlighted in the interviews and reinforced by the academic literature, being the directional influence of NGFM adjustments on the reliability of financial information.

Reliability is an essential characteristic that contributes to the usefulness of accounting information. The Conceptual Framework states, “Accounting information is reliable to the extent that users can depend on it to represent the economic conditions and events it purports to represent” (FASB 1980; p. 62). The Conceptual Framework further notes that reliability is not an all-or-nothing characteristic of accounting information; rather, it is a matter of degree. Accounting

[14] I refer to the direction of NGFM as positive NGFM adjustments when firms add back items to make their NGFM higher than the GAAP measure and negative NGFM adjustments when firms subtract items, resulting in an NGFM that is lower than the GAAP measure.

information must possess some threshold level of reliability to be useful to investors, creditors, and other financial statement users (Maines & Wahlen, 2006). The objective of financial reporting is to "provide information to help investors, creditors, and others assess the amounts, timing, and uncertainty of prospective net cash inflows to the related enterprise" (FASB 1978, p. 51).

Increased concerns over the reliability of NGFM disclosures led to the issuance of guidance from regulators (SEC, 2003; SEC, 2022; CSA, 2021). Regulators such as the U.S. Securities and Exchange Commission (SEC) and the Canadian Securities Administrators (CSA) continue to increase regulatory requirements on NGFM disclosure (SEC, 2003; SEC, 2022; CSA, 2021) to limit the perceived misreporting done through NGFMs and increase reliability of NGFMs.[15] Regulatory interventions to curtail the opportunistic use of NGFM have empirical support as well (Heflin & Hsu, 2008; Entwistle et al., 2006). For example, Bond et al. (2017) show a positive response to regulatory requirements for NGFM (Reg G and C&DI), which resulted in a smaller number of positive adjustments and improved earnings response coefficient (ERC) (i.e., Isidro & Marques, 2015). Studies have observed how the reliability of NGFMs has increased by providing quantitative reconciliation between the GAAP and the NGFMs (Elliot, 2006; Baik et al., 2008), and by offering greater transparency to the NGFM disclosures (Baik et al., 2008). In particular, empirical evidence by Baik et al. (2008) found increased reliability of NGFMs among REITs after regulation required firms to disclose a reconciliation between the GAAP and NGFMs.

[15] The regulation of non-GAAP financial measures (NGFMs) reporting was initiated in 2003, with the SEC issuing Regulation G, popularly known as Reg G (SEC, 2003; Marques, 2006). Reg G required firms to report NGFMs with equal prominence as the GAAP measure and provide a reconciliation with the GAAP numbers. Subsequently, Reg G went through a series of revisions, and now the latest guidance is known as the Compliance and Disclosure Interpretation (CD&I), which was issued in 2016 (Lee & Chu, 2016). Regulatory reforms on NGFMs also evolved in Canada. The first guidance came from the Canadian Securities Administrator (CSA) in 2003 in CSA Staff Notice (S.N.) 52-306 (CSA, 2003) with similar requirements to report NGFMs with equal prominence as the GAAP measure and provide reconciliation with the GAAP numbers.

Nevertheless, while the majority of NGFM adjustments are positive, a substantial number of NGFM adjustments are negative (Henry et al., 2020; Guest et al., 2022). Prior research (Frederickson & Miller, 2004; Elliot, 2006; Guest et al., 2022) has generally focused on positive NGFM adjustments to the GAAP measure with no empirical evidence to examine negative NGFM adjustments.[16] In particular, an empirical comparison of how investors perceive the reliability of positive to negative NGFM adjustments is yet to be conducted (c.f., Frederickson & Miller, 2004),[17] despite repeated concerns voiced by regulators and various users (Veritas, 2016; Curtis et al., 2014; Guggenmos et al., 2022).

Given that there is limited direct evidence on the reliability of positive and negative NGFM adjustment, I turn to the extant literature on revisions and restatements, which shows that any revision and adjustments to financial information generally decrease the reliability of the financial information being presented (Choudhary et al., 2021; Tan & Young, 2015). While Guest et al. (2022) do not find a significant reaction from investors to positive NGFM adjustment, Callen et al. (2006) document an asymmetric market reaction for positive versus negative adjustments due to management's motive to use positive NGFM adjustments opportunistically.[18] I thereby formulate Hypothesis 1 to posit that reliability is lower for positive NGFM adjustments than negative NGFM adjustments due to managers' motivation to use NGFM adjustments opportunistically:

[16] Curtis et al. (2014) also found evidence for this inflating behaviour and firms' inconsistent NGFM adjustments. They suggest that firms are more likely to make NGFM adjustments to enhance understanding of core earnings but only when such adjustments enhance the perception of their core earnings. In addition, a higher NGFM number protects the firm from shareholders, proxy advisors, and media scrutiny and likely accounts for the prevalence of positive NGFM adjustments, for which Guest et al. (2022) are twice as likely to be positive than negative.

[17] Frederickson and Miller (2004) call on future research to examine the influence of negative NGFM adjustments on investor judgment.

[18] Although Guest et al. (2022) find that positive NGFM adjustments are opportunistic in that their future earnings are weaker than predicted NGFM adjustments, due to the lack of evidence, I am only predicting a difference between the two directional adjustments.

H1: Positive NGFM adjustments decrease reliability more than negative NGFM adjustments.

3.2 HYPOTHESIS 2: NGFM ADJUSTMENT EXPLANATION AND RELIABILITY

My second hypothesis considers how the provision of explanations of NGFM adjustments influences reliability. As of the last three years, both the Securities and Exchange Commission (SEC) (SEC, 2022) and the Canadian Securities Administrators (CSA) (CSA, 2021) have updated the guidelines and regulations for reporting NGFMs. Under the latest National Instrument (N.I. 52-112), the CSA now requires an explanation to be provided for all NGFM adjustments to improve transparency and reliability (Maurer, 2023; Marques, 2017).[19] In particular, Section 6 requires the reporting entity to explain each reconciliation, particularly if there is a change in composition or what is referred to as inconsistent adjustment; then an explanation for the change must be provided, described under N.I. 52-112 as follows:

(A) An explanation of the adjustment or composition of the non-GAAP financial measure,
(B) An explanation of how the non-GAAP financial measure provides useful information to an investor and explains the additional purposes, if any, for which management uses the non-GAAP financial measure,
(C) A quantitative reconciliation of the non-GAAP financial measure for its current and comparative period, if disclosed under paragraph (f) to the most directly comparable financial measure referred to in paragraph (c), and that reconciliation is disclosed in the permitted format, and

[19] The Securities and Exchange Commission (SEC), in a series of recent letters, has asked some companies to explain performance metrics that go beyond generally accepted accounting principles (GAAP), and it is likely to approach more companies with similar questions (Maurer, 2023). In letters released in January and February 2023, the SEC questioned 20 companies about their compliance with the relevant section of the SEC's guidance on non-GAAP financial measures, according to MyLogIQ, a data provider. One such company, Lyft, was asked to explain an adjustment to its EBITDA. In response, Lisa Blackwood-Kapral, Lyft's chief accounting officer, wrote in September 2023 that the company believes that this adjustment provides investors with additional useful information related to the company's operating performance during the current period, rather than including the impacts associated with insurance claims which occurred in prior periods. The SEC responded in December 2023 to tell the company that the adjustment is inconsistent with its guidance on adjusted accounting, and to request the company to remove the adjustment from its non-GAAP calculations. Lyft said that it would reflect the change in future filings and did so on February 9, 2024.

(D) If the label or composition (adjustment) of the non-GAAP financial measure has changed from what was previously disclosed, explain the reason for the change.

Thus, concerns regarding the lack of consistency and transparency in NGFM adjustments have resulted in regulation that now requires firms to explain NGFM adjustments (Maurer, 2023). Regulators expect explanations for NGFM adjustments to act as an intervention and improve NGFM reporting and investors' reliability and judgment (CSA, 2021; Maurer, 2023).

Referring to the broad literature on explanations, I find support for the notion that explanations are useful for investor judgement (Skinner, 1994; Asay et al., 2018). Explanations and narratives supplementing accounting reports are means through which management can legitimize the company's activities and outcomes, such as changes in costs, expenses, and profits (Aerts, 1994). Hutton et al. (2003) support the informativeness of management explanations and maintain that explanations assist users in better understanding firm performance, help mitigate information asymmetry (Akerlof, 1970; Aerts, 1994; Hutton et al., 2003: Lawrence, 2013) and, thereby, increase reliability (Tennyson et al., 1990). Accounting research (Merkley, 2014; Lipe, 2018) indicates that when explanations are provided, investors are more likely to trust the information, viewing them as a legitimate reflection of the company's financial health rather than a tool for earnings management.

As specifically applied to NGFM adjustments, an explanation provides an understanding and context of why certain items are excluded or included in the reconciliation and thereby increases the reliability of the NGFM adjustment being presented (Cannon et al., 2021) than when no such explanation is offered. This gives rise to H2, which posits that by providing explanations, reliability is enhanced:

H2: Reliability is greater in the presence rather than the absence of an explanation for NGFM adjustments.

3.3 Hypothesis 3: The Moderating Role of NGFM Adjustment Explanation

The third hypothesis explores the interactional influence of explanation on reliability for positive and negative NGFM adjustments. Guest et al. (2022) show that companies typically use NGFM adjustments opportunistically to present a more favourable view of a company's core operating performance and experience shareholder dissent. Nevertheless, it is unclear to what extent the investors' perception of reliability will be different between positive and negative NGFM adjustments. This gives rise to H3, which states:

H3: In the presence of an explanation, the influence on reliability will be different for positive versus negative NGFM adjustments.

This third hypothesis attempts to provide further experimental evidence of the recent regulation on the requirement to provide an explanation for NGFM adjustments and how the effect of explanations for NGFM adjustments might be different for positive and negative NGFM adjustments. Prior literature claims that investors demand more explanation when performance is poor (Bloomfield, 2008; Bushee et al., 2018). Additionally, managers may also understand this demand and respond with more informative disclosures (Merkley, 2014). By providing additional information, including explanations for NGFM adjustments, firms can reduce the asymmetric information between management and investors and potentially increase the reliability of the information (Davies et al., 2012), particularly for positive NGFM adjustments. Because I expect positive NGFM adjustments to be less reliable than negative NGFM adjustments, the effect of the explanation for NGFM adjustment will be different for positive NGFM adjustments than for negative NGFM adjustments.

3.4 Research Question on Voluntary versus Mandatory NGFM Explanations

Under the current practice, while most companies voluntarily provide (disclose) a brief explanation of the NGFM adjustments, with the updated regulations, companies will now be required, i.e., 'mandated' to explain the NGFM adjustment, and violators will be disciplined by the regulators. We know from prior research that any additional disclosures help investors in their decision-making by reducing information asymmetry (Verrecchia, 2001; Bertomeu et al., 2021). This is also observed from my interview results, where analysts appreciated increased NGFM disclosures through detailed explanations for the adjustments. However, there is little causal evidence examining how investors respond to mandated requirements for NGFM adjustment explanations (Leuz & Wysocki, 2016) versus being provided with voluntary NGFM adjustment explanations (Arena et al., 2023). Few studies that look into some form of voluntary and mandatory disclosures either report mixed evidence or fail to find a significant difference in investor response to voluntary versus mandatory disclosures (Fishman & Hagerty, 2003; Dye, 1986; Bulter et al., 2007). Additionally, there is also limited causal evidence that compares investors' perceptions of reliability for voluntary versus mandatory disclosures (Luez & Wysocki, 2016), which I provide through my experiment. Accordingly, instead of formulating a formal hypothesis, I explore the effect of mandated versus voluntary NGFM explanation through a research question (Frederickson & Miller, 2004):

Research Question: Do mandatory explanations for NGFM adjustment increase the reliability of the NGFM adjustment more than voluntary explanations?

CHAPTER 4: EXPERIMENTAL DESIGN AND METHODOLOGY

OVERVIEW

I employ a randomized experiment to test the effect of the explanation of NGFM adjustments on investors' perceptions of reliability. The experiment is a 2 (**Direction of NGFM adjustments:** positive versus negative) x 3 (**NGFM adjustment Explanation:** No explanation versus voluntary explanation versus mandated explanation provided).[20]

The experiment seeks to test whether investors' perceptions of reliability of NGFM adjustments is different for positive versus negative NGFM adjustment through H1. Also, I examine in H2, if NGFM adjustment explanations increase reliability and in H3, I examine the moderating role of NGFM adjustment explanation for positive and negative NGFM adjustment. Lastly, through supplementary analysis, I examine if mandatory NGFM adjustment explanations increase reliability more than voluntary NGFM adjustment reliability.

This Chapter documents the experimental design used to test the three hypotheses, followed by Chapter 5 which presents the results from the experiment and the findings.

4.1 SAMPLE SIZE

To estimate the number of participants needed for the study, I used G-Power, a commonly used software for power, effect size, and sample size calculation (Erdfelder et al., 1996; Faul et al., 2007). The required sample size to achieve 80% statistical power, with an effect size of 0.25 and a type I error rate of 5%, was 158 participants, with 23 participants in each cell. I targeted to recruit an average of 40 participants per cell to allow for reduced sample size after cleaning/treating the data for incompletes, failed attention, and comprehension checks, which would require 240

[20]A supplementary analysis is also performed to examine the difference between voluntary and mandatory explanations and isolate the impact of regulation versus the influence of voluntary explanations on reliability. The results are presented in section 5.5.

participants to complete the study. This sample size choice is also consistent with prior studies on NGFM (Garavaglia, 2023; Anderson et al., 2022). Specifically, in a recent study by Brosnan et al. (2023), the researchers targeted a medium to large effect size, using an alpha level of 0.05, and recruited an average of 30 participants per group, in line with Cohen (1992).

4.2 PARTICIPANTS

Participants were recruited through Prolific, an online crowdsourcing platform similar to Amazon's Mechanical Turk (MTurk), and Qualtrics Panel. Prolific enables researchers to access a large pool of high-quality participants worldwide and has been used in various studies, particularly when examining investor behaviour (Durney et al., 2023; Fredrich, 2021). The experiment was launched in Winter 2024 (March 10, 2024, to March 11, 2024) on Prolific with the link sent to participants who are involved in stock market investing and who evaluate firms' financial information when making investment decisions, either always or most of the time (Durney et al., 2023). This helps us target retail investors who are relatively more experienced, well-versed, and sophisticated than average investors and who are more consistent with the type of participants in my interview study. Additionally, using Prolific's pre-screening functionality, I limited participants to those who were fluent in the English language, had an approval rate of 99%, were a minimum of 22 years of age and were residents of the U.S. or Canada.[21] (Durney et al., 2023). I also excluded all participants who were part of the pilot test or had participated in any other of my prior experiments to eliminate participant bias. Participants who satisfied these criteria were automatically emailed the Qualtrics link to the survey directly by Prolific, with no interference from the researcher. After clicking on the link to participate, they were taken to the informed consent form to be aware of the ethical aspects of the study and then asked if they agreed to

[21] Given that the NGFM regulation extends to the U.S. and Canada, only U.S. and Canadian participants were included in the sample.

participate. Those who consented progressed to the next set of questions, where they had to identify their financial experience and use of financial information. Only those who fulfilled these two criteria were included in the experimental sample. Participants were paid the equivalent of CAD$6 for an average of 20 minutes of time commitment to complete the study.[22] Those who completed the study were paid directly by Prolific.

4.3 Experimental Material and Task

The experimental material was adapted from and based on prior studies examining NGFMs, specifically Elliot (2006) and Anderson et al. (2022), who provided me with their experimental instrument to adapt to my research.[23] Additionally, to maintain realism in the experimental instrument, the experimental material was ensured to be similar to real-life non-GAAP disclosures by the firm. To refine the experimental materials, I reviewed them with analysts and internal audit risk managers. Based on their comments and feedback from my committee members, I updated the experimental material.

At the beginning of the experiment, participants were provided with an overview of the study. They were to evaluate the performance of a company based on the information provided about the company and answer additional questions to help the researcher gain insights into investor judgement. Next, the participants were presented with excerpts from the earnings announcement of SKH Inc., a listed company that offers cloud-based point-of-sale software.[24] Similar to prior research, the case was based on a tech firm (Garavaglia, 2023; Elliot, 2006). Participants were presented with key financial highlights for 2022 and 2023, such as growth,

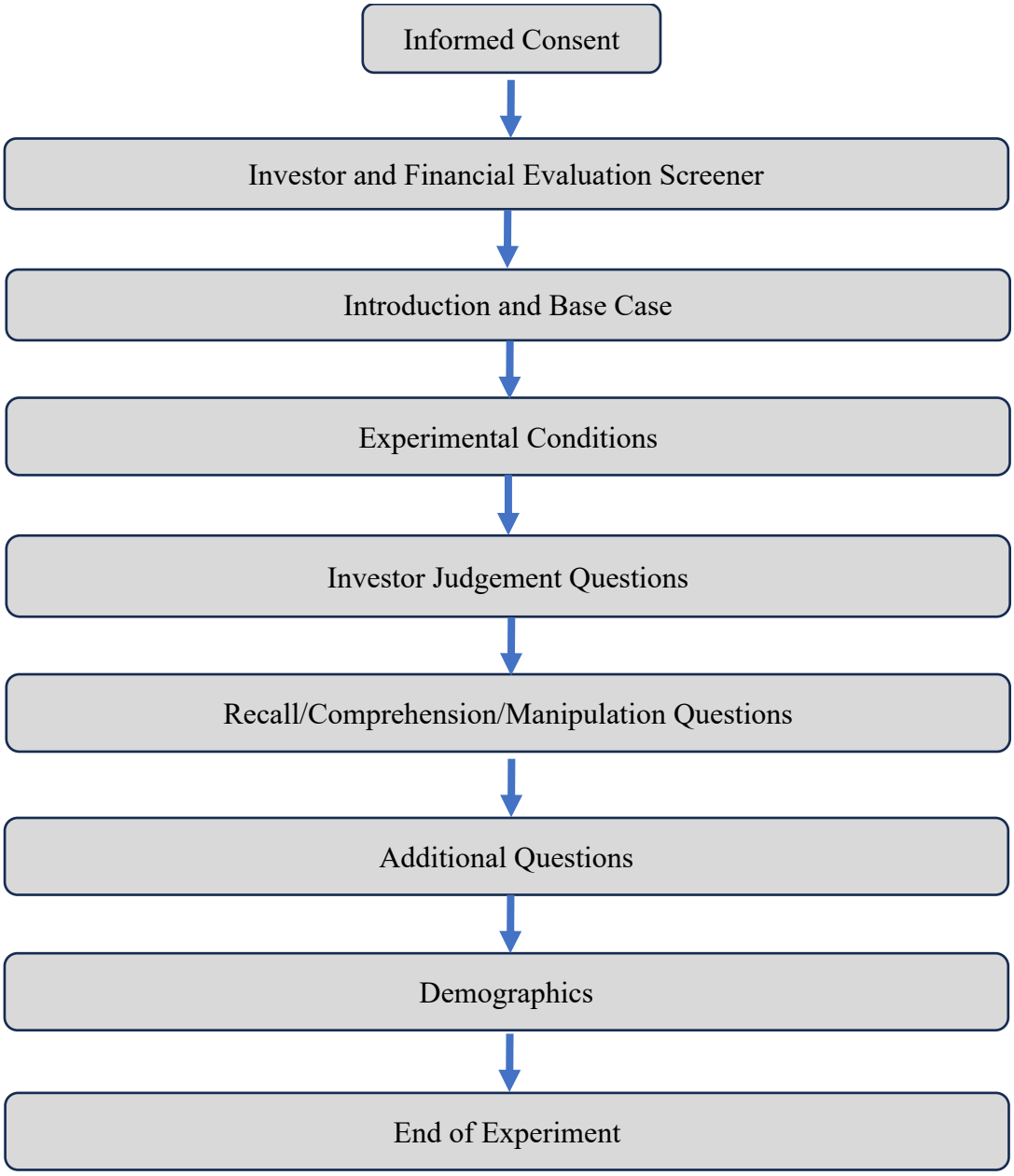
[22] The total cost of the experiment was CAD$2230.00, including the Prolific service fee.
[23] Consistent with Anderson et al. (2022), I did not identify or label the adjustment as a particular expense to decontextualize the manipulation and ensure that the nature of the adjustment does not bias or influence participant judgment.
[24] The company's earnings announcement and financial information were modelled after a real-life listed company.

revenue, GAAP and non-GAAP earnings to mimic real-life earnings announcements (Elliot, 2006). The experimental material is provided in Appendix B.

Participants were randomly assigned to one of the experimental conditions (NGFM adjustment direction: positive versus negative by NGFM adjustment explanation: mandatory versus voluntary versus no explanation), after which they proceeded to answer the primary dependent variable questions, which was to evaluate the reliability of NGFM adjustments.

To ensure participants carefully tended to the manipulation, they were asked to answer comprehension check questions before proceeding to answer additional demographic questions. Participants were taken to the end of the survey page to thank them for their participation and provide the completion code for payment from Prolific. Figure 1 summarizes the experimental design flow, and Appendix B provides all information provided to the participants during the experiment.

Figure 1: Experimental Flow



4.4 INDEPENDENT VARIABLES

As presented in the experimental instrument presented in Appendix B, I manipulate two independent variables: i) Direction of NGFM adjustment (Positive versus Negative adjustments) and ii) NGFM adjustment explanation (No explanation, voluntary explanation, and mandatory explanation). Each of these independent variables is discussed below.

4.4.1 DIRECTION OF NGFM ADJUSTMENT

The direction of NGFM adjustment was manipulated at two levels: i) positive NGFM adjustment and ii) negative NGFM adjustment. Similar to Elliot (2006), Positive NGFM adjustment was operationalized by adding an NGFM adjustment to Net Earnings (a GAAP measure), such that the NGFM is higher than (exceeds) the GAAP measure. The resulting adjusted NGFM was Adjusted Net Earnings.[25] In contrast, Negative NGFM adjustments were operationalized by deducting a NGFM adjustment from Net earnings, such that the NGFM is lower than the GAAP measure.

4.4.2 NGFM ADJUSTMENT EXPLANATION

The second independent variable is the NGFM adjustment explanation manipulated at three levels, where i) no explanation is provided, ii) management voluntarily provides the explanation, and iii) management is mandated to provide an explanation.

The No explanation was operationalized by the following: "The Management is **neither required by the securities regulator nor do they voluntarily provide an explanation** for the adjustments."

[25] Net earnings for 2023 were reported at $653 million, and for 2022, Net earnings were reported at $591 million. I specifically did not identify or label the adjustment as a particular expense to decontextualize the manipulation, consistent with prior research (Anderson et al., 2022). Instead, the reconciliation showed 'Adjustment X' to be $217 million for the year 2023 and $181 million for 2022. I also included a control condition where the Net Earnings and Adjusted Net earnings were the same, with no adjustment made for additional analysis, if needed.

The second and third condition (where explanations for the NGFM adjustment are provided by management) was operationalized by the following:

"Net earnings for the year are reported at $653 million. After making Adjustment X, the Adjusted Net earnings for the year are reported at $870 million." [26]

Adjustment X relates to a specific non-cash, non-recurring item that does not reflect the firm's core operations. This adjustment provides a more accurate picture of our underlying operating performance and is useful to investors in evaluating our financial results."

To further manipulate and differentiate between voluntary versus mandatory explanations, the following was included respectively: "The Management **voluntarily provides an explanation** for the adjustments" for voluntary NGFM explanations versus "The Management is **required by the securities regulator to provide an explanation** for the adjustments" for mandated NGFM explanations.

4.5 Dependent Variables

The hypotheses for this study consider the influence of NGFM adjustment explanation on investors' perceptions of reliability for positive and negative NGFM adjustments. For my dependent variable (reliability of NGFM adjustments), I require participants to indicate their assessment of reliability by asking, "How reliable are the adjustments made by SKH Inc.?" from 'not at all unreliable' to 'very reliable' on a scale of 0-100 (Elliot, 2006).

4.6 Comprehension and Attention Checks

I used comprehension and attention checks to ensure the measures used were valid. I included three comprehension checks. After reading the case materials, the first comprehension checks asked participants to identify the amount of Net Earnings and Adjusted Net Earnings. The

[26] This was $436 in case of negative adjustment.

second comprehension check asked participants which type of explanation was provided. Those participants who incorrectly answered the comprehension check question were prompted to review the material again and were permitted to proceed further in the experiment once correct answers were submitted (Durney et al., 2023; Garavaglia, 2023). The third comprehension check (more of a verification of recall) required participants to identify whether the Adjusted Net Earnings were higher, lower, or the same as Net Earnings, which was presented before demographic questions were administered.

4.7 Covariates and Demographics

Demographic information about the participants was solicited towards the end of the survey to assess the possible effects of other factors affecting investor judgment. The demographic questions asked participants for their age, gender, investing experience, type of investor, and financial evaluation; the results are presented in Chapter 5.

The experiment concluded by soliciting additional comments from the participants, providing them with a Prolific completion code, and lastly, thanking them for their time to participate in the survey.

CHAPTER 5 – EXPERIMENTAL RESULTS

OVERVIEW

This study empirically examines the three hypotheses as presented in Chapter 4: Hypothesis 1 considers the relative influence of the direction of the NGFM adjustment on reliability;[27] Hypothesis 2 considers how explanations for NGFM adjustments influence investors' perceptions of reliability, and finally, Hypothesis 3 examines the moderating effect of NGFM explanations. Finally, I present an additional supplementary analysis to explore the difference between voluntary and mandatory NGFM adjustment explanations for investors' perceptions of reliability. The following sections present empirical findings from the experiment and results to examine each of the above-stated hypotheses.

5.1 PARTICIPANTS AND DESCRIPTIVE STATISTICS

The final sample used in the experiment was 217 participants, as shown in Table 2.[28] Participants completed the experiment in an average of 22.65 minutes. Table 2 summarizes the relevant demographics for the final sample of the experiments.[29] Participants ranged between the ages of 22 and 78 with a mean age of 41.51 (*SD* = 12.577), 69.1% were male, and 30.0% were females, with the remaining as non-binary or who chose not to report. Participants had an average of 8.89 years (*SD* = 5.171) of investing experience, with approximately 96% of the participants having more than two years of investing experience. Approximately half of the participants rely upon financial information when making an investment decision most of the time (50.7%) or

[27] I refer to the direction of NGFM as positive NGFM adjustments when firms add back items to make their NGFM higher than the GAAP measure and negative NGFM adjustments when firms subtract items, resulting in an NGFM that is lower than the GAAP measure.

[28] The initial complete responses to test this hypothesis were based on 242 participants. Twenty-five responses were removed for failing validity checks as follows: Nineteen participants failed for inconsistent screening responses, and six were removed for failing attention checks.

[29] No outliers were identified in the sample. As per Cochran (1963), I conducted an outlier analysis to identify extreme outliers, which are observations that are 1.5 box lengths.

always (49.3%). None of the covariates were significant, except for Investing Experience and Evaluating performance using financial Information; however, including the two as covariates does not change the results of my analysis. The sample was evaluated to ensure it met the assumption for univariate analysis.[30]

Table 2: Participant Demographics

Demographic Variable	**Total (N=217)**		
	Number	Mean [S.D.]	Percentage
Gender			
Male	150		69.1%
Female	65		30.0%
Non-Binary or other	2		0.9%
Evaluating Performance Using Financial Information			
Most of the time	107		50.7%
Always	110		49.3%
Age		41.51 [12.577]	
Investing Experience		8.89 [5.171]	

Fifteen participants (7%) failed the comprehension check (verification of recall), giving a passing rate of 93%, which is consistent with prior experimental work on NGFMs (Frederickson & Miller, 2004; Elliot, 2006; Anderson et al., 2022; Garavaglia, 2023). Since including and excluding those who failed did not alter my results, I retained all participants in my final sample (Frederickson & Miller, 2004; Elliot, 2006).

[30] I rely upon Levene's test for homogeneity of variance to ensure the error variance of the dependent variable is equal for the sample. My analysis fails to reject the null hypothesis, which shows that the sample meets the assumption of equality of variance. The data is non-normally distributed, for which I conduct additional non-parametric tests to ensure the results from my F-test are consistent.

5.2 HYPOTHESIS ONE: NGFM ADJUSTMENT AND RELIABILITY

For my first hypothesis, I examine how investors' reliability judgment is differentially influenced by positive and negative NGFM adjustments to provide insight into whether negative NGFM adjustments increase reliability more than positive NGFM adjustments.

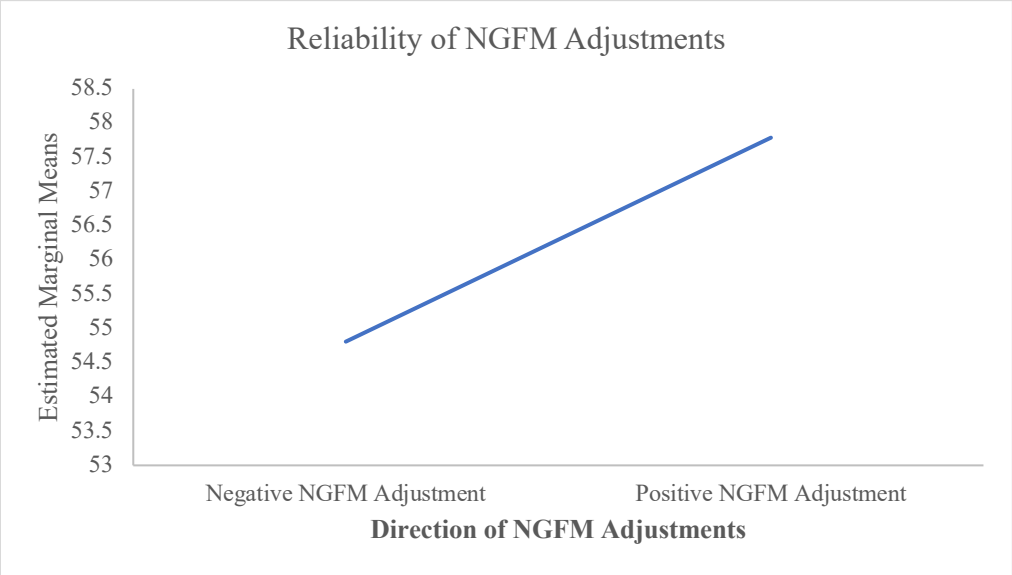
Recall that according to H1, **positive NGFM adjustments will decrease reliability more than negative NGFM adjustments**. Table 3 presents the results of the univariate test.

Table 3: Univariate test results for H1

TABLE 3: PANEL A - Descriptive Statistics		
Dependent Variable	**Negative NGFM Adjustment [N = 104] Mean (S.D.)**	**Positive NGFM Adjustment [N = 113] Mean (S.D.)**
NGFM Adjustment Reliability *(AdjReliab)*	54.81 (24.175)	57.79 (24.339)
TABLE 3: PANEL B – F-*test*		
***F*-stats**	***df***	**Significance (two-tailed)**
0.817	215	0.367

Results show that for negative NGFM adjustments, investors score the reliability of NGFM adjustments as 54.81 on a scale of 0 – 100, as compared to positive NGFM adjustments, where investors perceive the reliability of NGFM adjustments to be slightly higher at a value of 57.79 on a scale of 0 - 100, although not statistically different. Hence, I do not find any significant difference in investors' perception of reliability of NGFM adjustments, for when the NGFM adjustment is negative or positive NGFM, F_{215} (0.817), p = 0.367 [31] and therefore, I do not find support for H1. Results for H1 support the observations of Guest et al. (2022), who do not find any negative investor reaction to positive NGFM adjustments, and my results extend similar conclusions for negative NGFM adjustments as well. Figure 2 provides a graphical representation of the results.

Figure 2: Direction and Reliability of NGFM adjustments



[31] With an observed power of 14.7% and a partial eta squared of 0.004

5.3 HYPOTHESIS TWO: NGFM ADJUSTMENT EXPLANATION AND RELIABILITY

For my second hypothesis, I examine how reliability is influenced by the explanation of NGFM adjustment. Recall that H2 posits that when NGFM adjustments are explained, investors perceive NGFM adjustments to be more reliable than when no explanation is provided. H2 is evaluated using a univariate analysis to compare the difference in *Reliability of NGFM adjustment (AdjReliab)* among three conditions of explanation for NGFM adjustment, i.e., when a) no explanation, b) a voluntary explanation for NGFM adjustment is provided by management and c) a mandated explanation for the NGFM adjustment is provided by the management.

Table 4: Univariate test results for H2

TABLE 4: PANEL A - Descriptive Statistics

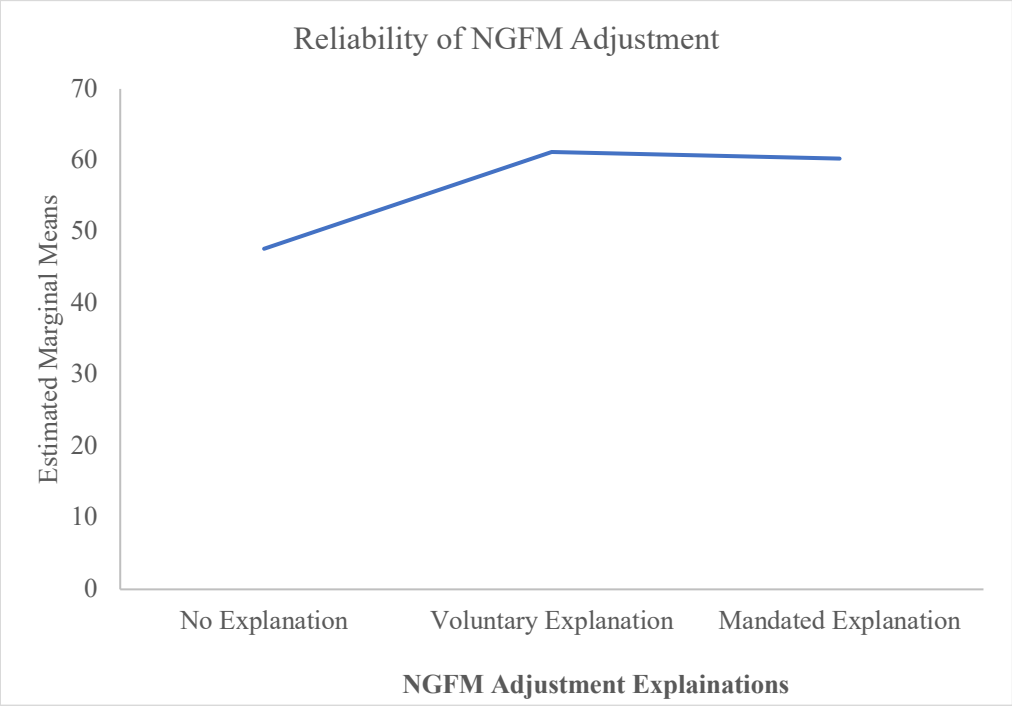
Dependent Variable	**No NGFM Adjustment Explanation [N = 72] Mean (S.D.)**	**NGFM Adjustment Voluntary Explanation [N= 70] Mean (S.D.)**	**NGFM Adjustment Mandatory Explanation [N = 75] Mean (S.D.)**
NGFM Adjustment Reliability *(AdjReliab)*	47.64 (26.722)	61.14 (21.301)	60.27 (22.299)

TABLE 4: PANEL B – F- ***tests***

	F-static	***Df***	**Significance (two-tailed)**
	7.405	214	<0.001

Table 4, panel A presents descriptive statistics for the sample, whereas panel B presents the results of the F-test for H2 for the difference in reliability when NGFM adjustment explanations are absent versus present (voluntary as well as mandated). Table 4 shows that when there is no explanation provided, investors' perception of reliability is 47.64, which is significantly lower than when an explanation for the NGFM adjustment is provided either voluntarily or mandated, with a reliability of 61.14 and 60.27, respectively, with F (14.826), $p < 0.01$.[32] Thus, explanations, both voluntary and mandated, increase the reliability of NGFM, which provides support for H2 and extends support for providing an explanation for NGFM adjustments, which will increase the reliability of the adjustments to investors. Figure 3 depicts the results in a graph.

Figure 3: Explanations and Reliability of NGFM Adjustments



[32] With an observed power of 96% and a partial eta squared of 0.065

5.4 HYPOTHESIS 3: THE MODERATING ROLE OF NGFM ADJUSTMENT EXPLANATION

The third hypothesis examines the moderating effect of NGFM adjustment explanation such that in the presence of explanation, the influence on reliability will be different for positive versus negative NGFM adjustments. H3 is addressed using the univariate analysis to compare the difference in *Reliability of NGFM adjustment (AdjReliab)* among the three conditions of explanation for NGFM adjustment, i.e., when a) no explanation, b) a voluntary explanation for NGFM adjustment is provided by management, and c) a mandated explanation for the NGFM adjustment is provided by the management and when the NGFM adjustment is a) negative and b) positive.

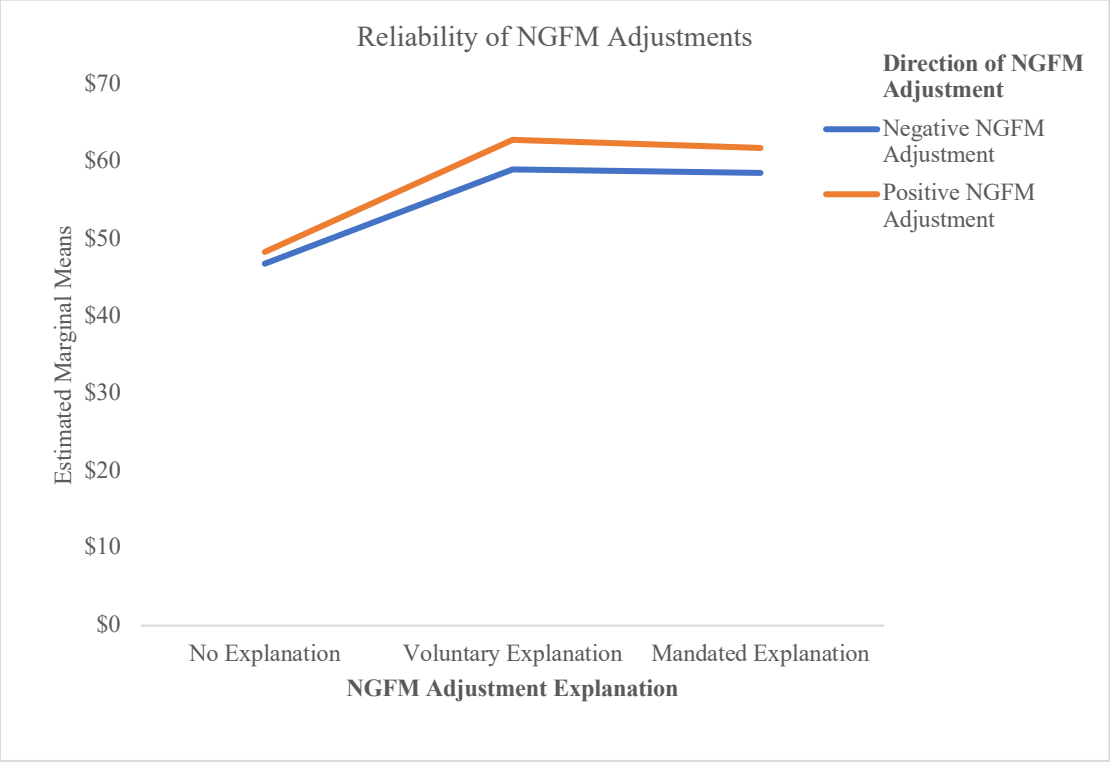
Table 5: Univariate test results for H3

TABLE 5: PANEL A - Descriptive Statistics			
Dependent Variable: **NGFM Adjustment Reliability** *(AdjReliab)*	**No NGFM Adjustment Explanation [N = 72]** **Mean (S.D.)**	**NGFM Adjustment Voluntary Explanation [N = 70]** **Mean (S.D.)**	**NGFM Adjustment Mandated Explanation [N = 145]** **Mean (S.D.)**
Negative NGFM Adjustment [N = 104]	46.86 (25.870)	59.06 (23.329)	58.65 (21.879)
Positive NGFM Adjustment [N = 113]	48.38 (27.840)	62.89 (19.578)	61.84 (22.881)

TABLE 5: PANEL B – F- ***tests***			
	F-static	***df***	**Significance (two-tailed)**
	0.045	211	0.956

Table 5, panel A presents descriptive statistics for the sample whereas panel B presents the results of the F-test for H3 for the moderating effect of explanation on the direction of NGFM adjustment. From Table 5, I do not find any significant moderating effect of NGFM adjustment explanation on positive and negative NGFM adjustment with *F* (0.045), p = 0.956 and fail to find support for H3. Thus, while the explanation for NGFM adjustment increases perceptions of reliability, as supported by H2, there is no differential effect of NGFM explanations for positive versus negative adjustments. This is an interesting finding from my experimental results, which suggests that the perception of reliability is influenced not by whether the NGFM adjustment is positive or negative, but by the explanation provided for the adjustment. Figure 4 reports the results in a graph.

Figure 4: The moderating role of NGFM adjustment explanations



5.5 Supplementary Analysis: The Role of Voluntary versus Mandatory Explanations

My primary analysis included comparing perceptions of reliability when there is no explanation versus when there is a management-provided explanation, whether voluntary or mandated. However, under the current practice, while some companies voluntarily provide a brief explanation of the NGFM adjustments, with the updated regulations (CSA, 2021), all companies will now be required, i.e., 'mandated,' to explain the NGFM adjustment. Therefore, I conduct a supplementary analysis to explore the effect of voluntary versus mandatory NGFM adjustment explanations on reliability. Recall that in the absence of direct evidence examining investor reaction to mandated versus voluntary disclosures, I resort to exploring the relationship through my research question: **Do mandatory explanations for NGFM adjustment increase the reliability of the NGFM adjustment more than voluntary explanations?**

Using the Tukey test, I examine the difference in investors' perceptions of the reliability of NGFM adjustment when firms voluntarily provide the explanation versus when the explanations are mandated, i.e., 'required' by regulators to be provided. Results are presented in Table 6, Panels A and B.

Table 6: Univariate test results for Mandatory versus Voluntary NGFM explanations

TABLE 6: PANEL A - Descriptive Statistics				
Dependent Variable	**No NGFM Adjustment Explanation [N = 72] Mean (S.D.)**	**Voluntary NGFM Adjustment Explanation [N = 70] Mean (S.D.)**	**Mandated NGFM Adjustment Explanation [N = 75] Mean (S.D.)**	**Total [N = 217] Mean (S.D.)**
Adjustment Reliability *(AdjReliab)*	47.64 (26.722)	61.14 (21.301)	60.27 (22.299)	56.36 (24.250)

Table 6: PANEL B – Tukey Comparison for NGFM Adjustment Explanations					
Dependent Variable	**Comparison Codes**		**Mean Difference (I-J)**	**Std. Error**	***p*-value**
Adjustment Reliability *(AdjReliab*	No Explanation	Voluntary Explanation	13.50*	3.955	.002
	No Explanation	Mandated Explanation	12.63*	3.887	.004
	Voluntary Explanation	Mandated Explanation	-.88	3.916	.973
*Mean difference is significant at the .05 level.					

Table 6, panel A presents descriptive statistics for the sample, whereas panel B presents the results of the Tukey test for the difference in perceptions of reliability when NGFM adjustment explanations are absent versus voluntary and mandated. Results from Table 6 show that while the presence of explanations, both voluntary and mandatory, significantly increases reliability perceptions of the NGFM adjustment as compared to when there is no explanation, with $p < 0.01$, there is no significant difference in how investors perceive NGFM adjustment reliability for voluntary NGFM adjustment explanations as compared to mandated NGFM adjustment explanation, with a negligible mean difference of -0.88, and $p = 0.973$.

5.6 CONCLUSION

The findings from the experiment provide evidence that the explanation of NGFM adjustments increases reliability, and reliability does not differ between positive or negative NGFM adjustments. These findings extend the observations by Guest et al. (2022) in an experimental setting and suggest that the positive NGFM adjustments may not be discounted for the opportunism of managers any more than that for negative NGFM adjustments. In addition, the experiment shows that explanations (whether voluntary or mandated) increase the reliability of the NGFM adjustments reported, which supports the most recent regulatory initiatives by the SEC and the CSA that require an explanation for NGFM adjustments.

The purpose of the experiment was to specifically examine the extent to which NGFM explanations influenced the reliability for both positive and negative NGFM adjustments. Consistent with the analysts' discussion, the results of the experiment demonstrate that providing explanations for NGFM adjustments significantly enhances their perceived reliability, which is consistent regardless of whether the NGFM adjustments are positive or negative. These findings not only illustrate the importance of the explanation of NGFM adjustments to increase their reliability but also suggest that the analysts similarly view and scrutinize both positive and negative NGFM adjustments. Also of importance are the results of the experiment, which indicate that increased understanding as facilitated by an explanation for NGFM adjustments, irrespective of whether these explanations are offered voluntarily or mandated by regulation, bolster the perceived reliability of reported NGFM adjustments. Thus, results support that the primary usefulness of regulating NGFM adjustments may be to facilitate understanding and transparency and, by so doing, enhance reliability by the requirement to provide additional explanations to investors.

CHAPTER 6: IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH

The findings from this dissertation have several important implications for investors, regulators, and accounting academics. Given the ongoing efforts of regulators to increase the reliability of financial information for investors through increased requirements for transparency and disclosure, this dissertation provides validation for their efforts. More specifically, the findings of this dissertation reinforce the usefulness and the increased reliability of financial information when management provides an explanation of NGFM adjustments. By providing insights into analysts' perceptions of NGFMs, the findings of this research highlight the continued need for better disclosures and a continuation of regulators' efforts to facilitate investors' desire for increased levels of transparency, consistency, and reliability of NGFMs. In particular, the results of the study underscore the importance of providing investors with an understanding not only of GAAP reporting as historically provided by regulators and the accounting profession but also of expanding the domain of regulation to all financial information, which includes supplementary reporting management. The importance of regulation of NGFM disclosures is reinforced by the heavier emphasis that NGFM disclosures are given compared to GAAP (Bhattacharya et al., 2003; Elliot, 2006).

Results from this dissertation present support for the usefulness of additional explanations to facilitate investors' understanding of the financial position of firms and, thereby, reinforce the importance of recent steps taken by regulators to increase transparency of NGFM adjustments through the requirement that firms must provide explanations for NGFM adjustments. By so doing, it is hoped that these findings will continue to encourage regulators to undertake additional regulatory measures to ensure that management provides consistent, reliable, and transparent financial information for all disclosures by devising effective regulations and guidelines to ensure

consistency, transparency and reliability of NGFMs.

The key finding in this study identifies the usefulness of explaining NGFM adjustments in enhancing the reliability of NGFM and financial information for investors. The finding adds to the body of scholarly investigations that consider how supplementary disclosures are used by investors in their assessment of firms' performance above and beyond that provided by GAAP and other regulated disclosures. In addition, my findings extend existing academic research that is largely centred on positive NGFM adjustments by specifically considering both positive and negative NGFM disclosures and providing indications that investors do not appear to attribute different levels of reliability between positive and negative NGFM adjustments. This latter finding also suggests that further investigation of management's motivations for NGFM adjustments, and specifically the extent to which investors' attribution of opportunistic disclosure historically applied only to positive NGFM adjustments and "informational" objectives to negative NGFM adjustments, may or may not be appropriate.

As with any research, this dissertation is subject to several limitations that provide numerous interesting opportunities for future research. Firstly, I interviewed equity analysts who are covering large-cap firms to understand their perceptions of NGFMs and the role of explanations, and then I used other experienced investors in my experiment who were not. Therefore, future research is necessary to corroborate the findings of this research and determine whether my findings extend to all sizes of firms and types of investor groups, including whether these findings apply to disclosures made by smaller publicly listed firms.

From an experimental design perspective, the experiment manipulated the presence or absence of explanations, but the quality and the content of NGFM explanations were not examined over time, nor were the magnitude of adjustments and explanations. Typically, when investors

evaluate financial information, they have access to multiple years of data from multiple sources. However, I limited the amount of information participants received to a press release reporting earnings for the two years only so that participants could complete the task in a reasonable amount of time, which also facilitated my ability to isolate the effect of the manipulation and minimize attrition from the experimental study. Future research is necessary to consider the use of "boilerplate" explanations as compared to those of quality and also to consider the "uniqueness" or the "repetitiveness" of the NGFM adjustment for investors' perceptions of reliability across adjustments of varying magnitudes in single and multiperiod settings.

CHAPTER 7: BIBLIOGRAPHY

Adkerson, R. C. (1978). Discussion of DAAM: the demand for alternative accounting measurements. *Journal of Accounting Research*, 31-36.

Aerts, W. (1994). On the use of accounting logic as an explanatory category in narrative accounting disclosures. *Accounting, organizations and society*, *19*(4-5), 337-353.

Akerlof, G. A. (1970). 4. The market for 'lemons': quality uncertainty and the market mechanism. *Market Failure or Success*, *66*.

Anderson, S. B., Hobson, J. L., & Sommerfeldt, R. D. (2022). Auditing non-GAAP measures: Signaling more than intended. *Contemporary Accounting Research*, *39*(1), 577-606.

Andersson, P., & Hellman, N. (2007). Does pro forma reporting bias analyst forecasts? European Accounting Review, 16(2), 277-298.

Arena, C., Bozzolan, S., & Imperatore, C. (2023). The trade-off between mandatory and voluntary disclosure: Evidence from oil companies' risk reporting. *Journal of Accounting, Auditing & Finance*, *38*(4), 986-1008.

Asay, H. S., Libby, R., & Rennekamp, K. M. (2018). Do features that associate managers with a message magnify investors' reactions to narrative disclosures?. *Accounting, Organizations and Society*, *68*, 1-14.

Baik, B., Billings, B. K., & Morton, R. M. (2008). Reliability and transparency of non-GAAP disclosures by real estate investment trusts (REITs). *The Accounting Review*, *83*(2), 271-301.

Baumker, M., Biggs, P., McVay, S. E., & Pierce, J. (2014). The disclosure of non-GAAP earnings following regulation G: An analysis of transitory gains. *Accounting Horizons*, *28*(1), 77-92.

Bentley, J. W., Christensen, T. E., Gee, K. H., & Whipple, B. C. (2018). Disentangling managers' and analysts' non-GAAP reporting. *Journal of Accounting Research*, *56*(4), 1039-1081.

Bertomeu, J., Vaysman, I., & Xue, W. (2021). Voluntary versus mandatory disclosure. *Review of Accounting Studies*, *26*, 658-692.

Bhattacharya, N., Black, E., T., & Larson, C. (2003). Assessing the relative informativeness and permanence of pro forma earnings and GAAP operating earnings. Journal of Accounting and Economics, (36), 285–319.

Bhattacharya, N., Black, E., Christensen, T., & Mergenthaler, R. (2007). Who trades on pro forma earnings information? The Accounting Review, (82), 581–619.

Black, D. E., Christensen, T. E., Ciesielski, J. T., & Whipple, B. C. (2018). Non-GAAP reporting: Evidence from academia and current practice. *Journal of Business Finance & Accounting*, *45*(3-4), 259-294.

Black, D. E., Christensen, T. E., Ciesielski, J. T., & Whipple, B. C. (2021). Non-GAAP earnings: A consistency and comparability crisis?. *Contemporary Accounting Research*, *38*(3), 1712-1747.

Black, D., & Christensen, T. (2009). US managers' use of 'pro forma' adjustments to meet strategic earnings targets. Journal of Business Finance & Accounting, (36), 297–326.

Bauer, A. M., O'Brien, P. C., & Saeed, U. (2014). Reliability makes accounting relevant: a comment on the IASB Conceptual Framework project. *Accounting in Europe*, *11*(2), 211-217.

Bloomfield, R. (2008). Discussion of "annual report readability, current earnings, and earnings persistence". *Journal of Accounting and Economics*, *45*(2-3), 248-252.

Bond, D., Czernkowski, R., Lee, Y. S., & Loyeung, A. (2017). Market reaction to non-GAAP earnings around SEC regulation. Journal of Contemporary Accounting & Economics, 13(3), 193-208.

Bradshaw, M. T. (2011). Analysts' forecasts: what do we know after decades of work?. *Available at SSRN 1880339*.

Brown, L. D., Call, A. C., Clement, M. B., & Sharp, N. Y. (2015). Inside the "black box" of sell-side financial analysts. *Journal of Accounting Research*, *53*(1), 1-47.

Bradshaw, M., & Sloan, R. (2002). GAAP versus the street: An empirical assessment of two alternative definitions of earnings. Journal of Accounting Research, (40), 41–66.

Bradshaw, M. T., Christensen, T. E., Gee, K. H., & Whipple, B. C. (2018). Analysts' GAAP earnings forecasts and their implications for accounting research. Journal of Accounting and Economics, (66), 46-66.

Brasel, K. R., Hill, M. S., & Taylor, G. K. (2022). The relevance of GAAP vs. non-GAAP net assets to creditors: An examination of the credit default swap market. *Advances in accounting*, *56*, 100580.

Brosnan, M., Duncan, K., Hasso, T., & Hollindale, J. (2023). Non-GAAP earnings and executive compensation: An experiment. *Accounting & Finance*, *63*(4), 4375-4398.

Brown, N. C., Christensen, T. E., Elliott, W. B., & Mergenthaler, R. D. (2012). Investor sentiment and pro forma earnings disclosures. *Journal of Accounting Research*, *50*(1), 1-40.

Bushee, B. J., Gow, I. D., & Taylor, D. J. (2018). Linguistic complexity in firm disclosures: Obfuscation or information?. *Journal of Accounting Research*, *56*(1), 85-121.

Butler, M., Kraft, A., & Weiss, I. S. (2007). The effect of reporting frequency on the timeliness of earnings: The cases of voluntary and mandatory interim reports. *Journal of Accounting and Economics*, *43*(2-3), 181-217.

Callen, J. L., Livnat, J., & Segal, D. (2006). Accounting Restatements: Are They Always Bad News for Investors?. *The Journal of Investing*, *15*(3), 57-68.

Campbell, J. L., Gee, K. H., & Wiebe, Z. (2022). The determinants and informativeness of non-GAAP revenue disclosures. *The Accounting Review*, *97*(7), 23-48.

Canadian Securities Administrators. (2016). CSA Staff Notice 52-306 (Revised) - Non-GAAP Financial Measures. Available at: http://www.osc.gov.on.ca/documents/en/SecuritiesCategory5/csa_20160114_52-306_non-gaap.pdf. Accessed April 27, 2018.

Canadian Securities Adminstrators (CSA). (2021). Proposed National Instrument 52-112 Non-GAAP and Other Financial Measures Disclosure, Proposed Companion Policy. Retrieved from https://www.osc.ca/en/securities-law/instruments-rules-policies/5/52-112/national-instrument-52-112-non-gaap-and-other-financial-measures-disclosure. Accessed October 1, 2023.

Cannon, J. N., Denison, C. A., & Watanabe, O. V. (2021). Do Detail and Its Verifiability Serve as Indicators of Strategy Effectiveness and as Sources of Credibility in Voluntary Qualitative Disclosure?. *Journal of Accounting, Auditing & Finance*, *36*(3), 557-584.

Curtis, A. B., McVay, S. E., & Whipple, B. C. (2014). The disclosure of non-GAAP earnings information in the presence of transitory gains. *The Accounting Review*, *89*(3), 933-958.

CAQ, 2020. https://www.thecaq.org/wp-content/uploads/2020/09/2020_09_caq-role-of-the-auditor-non-GAAP-and-KPIs.pdf

Chen, H. C., Lee, Y. J., Lo, S. Y., & Yu, Y. (2021). Qualitative characteristics of non-GAAP disclosures and non-GAAP earnings quality. *Journal of Accounting and Economics*, *72*(1), 101402.

Choudhary, P., Merkley, K., & Schipper, K. (2021). Immaterial error corrections and financial reporting reliability. *Contemporary Accounting Research*, *38*(4), 2423-2460.

Christensen, T., Drake, M., & Thornock, J. (2014). Optimistic reporting and pessimistic investing: Do proforma earnings disclosures attract short sellers? Contemporary Accounting Research, 31, 67–102.

Christensen, T. E., Pei, H., Pierce, S. R., & Tan, L. (2019). Non-GAAP reporting following debt covenant violations. Review of Accounting Studies, 24(2), 629-664.

Clarkson, P. M., Kao, J. L., & Richardson, G. D. (1999). Evidence that management discussion and analysis (MD&A) is a part of a firm's overall disclosure package. Contemporary accounting research, 16(1), 111-134.

Cochran, W. G. (1963). Sampling techniques. New York: John Wiley & Sons.

Cohen, J. (1992). Statistical power analysis. *Current directions in psychological science*, *1*(3), 98-101.

Cormier, D., Demaria, S., & Magnan, M. (2017). Beyond earnings: do EBITDA reporting and governance matter for market participants? Managerial Finance, 43(2), 193-211.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Curtis, A., Li, V., & Patrick, P. (2018). The use of adjusted earnings in performance evaluation. Working paper. Available at SSRN 2682652.

Dai, N. T., Free, C., & Gendron, Y. (2019). Interview-based research in accounting 2000–2014: Informal norms, translation and vibrancy. *Management Accounting Research*, *42*, 26-38.

Davis, A. K., Piger, J. M., & Sedor, L. M. (2012). Beyond the numbers: Measuring the information content of earnings press release language. *Contemporary Accounting Research*, *29*(3), 845-868.

Doyle, J. T., Lundholm, R. J., & Soliman, M. T. (2003). The predictive value of expenses excluded from pro forma earnings. *Review of Accounting Studies*, *8*, 145-174.

Doyle, J. T., Jennings, J. N., & Soliman, M. T. (2013). Do managers define non-GAAP earnings to meet or beat analyst forecasts?. *Journal of Accounting and Economics*, *56*(1), 40-56.

Durney, M. T., Smith, J., & Wynes, M. J. (2023). Connecting the dots: Helping investors use risk disclosures when evaluating financial statements. *Available at SSRN 3947286*.

Dye, R. A. (1986). Proprietary and nonproprietary disclosures. *Journal of business*, 331-366.

Elliott, W. B. (2006). Are investors influenced by pro forma emphasis and reconciliations in earnings announcements? The Accounting Review, 81(1), 113-133

Entwistle, G. M., Feltham, G. D., & Mbagwu, C. (2006). Financial reporting regulation and the reporting of pro forma earnings. *Accounting Horizons*, *20*(1), 39-55.

Entwistle, G. M., Feltham, G. D., & Mbagwu, C. (2012). Credibility Attributes and Investor Perceptions of Non-GAAP Earnings Exclusions. *Accounting Perspectives*, *11*(4), 229-257.

Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior research methods, instruments, & computers*, *28*, 1-11.

FASB. (1978). Statement of Financial Accounting Concepts No. 1: Objectives of Financial Reporting by Business Enterprises. *Stamford Conn*.

FASB. (1980). Statement of financial accounting concepts No. 2: qualitative characteristics of accounting information. *Stamfort, CT: FASB*.

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods*, *39*(2), 175-191.

Fishman, M. J., & Hagerty, K. M. (2003). Mandatory versus voluntary disclosure in markets with informed and uninformed customers. *Journal of Law, Economics, and organization*, *19*(1), 45-63.

Frankel, R., McVay, S., & Soliman, M. (2011). Non-GAAP earnings and board independence. Review of Accounting Studies, 16(4), 719-744

Frederickson, J. R., & Miller, J. S. (2004). The effects of pro forma earnings disclosures on analysts' and nonprofessional investors' equity valuation judgments. *The Accounting Review*, *79*(3), 667-686.

Friedrich, C. (2021). Private Investigations and Self-Disclosure of Suspected Fraud: Experimental Evidence on Forensic Accounting Services. *Behavioral Research in Accounting*, *33*(1), 65-79.

Froystein, Gjesdal, Relevance and Reliability: A Decision Theory Perspective (June 08, 2024). Available at SSRN: https://ssrn.com/abstract=4866431 or http://dx.doi.org/10.2139/ssrn.4866431

Fox, K. A. (2015). *Framing a Franchise–Financial Disclosure, non-GAAP Earnings, and Equity Valuation in the Formation of a Socio-Technical Agencement* (Doctoral dissertation, University of Alberta).

Garavaglia, S. (2023). What's in a Name? Investors' Reactions to Non-GAAP Labels. *Contemporary Accounting Research*, *40*(2), 897-924.

Gee, K. H., & Park, K. J. (2023). On the potential outcomes of standardizing non-GAAP financial measures: Evidence from the REIT industry. *Available at SSRN*.

Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: strategies for qualitative research (grounded theory). *Taylor & Francis eBooks DRM Free Collection*.

Goretzki, L., Mack, S., Messner, M., & Weber, J. (2018). Exploring the persuasiveness of accounting numbers in the framing of 'performance'–a micro-level analysis of performance review meetings. *European Accounting Review*, *27*(3), 495-525.

Graaf, J. (2018). Equity market interactions: Exploring analysts' role performances at earnings presentations. *Accounting, Auditing & Accountability Journal*, *31*(4), 1230-1256.
Graaf, J. (2023). Can sell-side analysts compete using public information? Analysts as frame-makers revisited. *European Accounting Review*, *32*(1), 141-167.

Gu, F., & Li, J. Q. (2007). The credibility of voluntary disclosure and insider stock transactions. *Journal of accounting research*, *45*(4), 771-810.

Guest, N. M., Kothari, S. P., & Pozen, R. C. (2022). Why do large positive non-GAAP earnings adjustments predict abnormally high CEO pay?. *The Accounting Review*, *97*(6), 297-326.

Guggenmos, R. D., Rennekamp, K., Rupar, K., & Wang, S. (2022). The relationship between non-GAAP earnings and aggressive estimates in reported GAAP numbers. *Journal of Accounting Research*, *60*(5), 1915-1945.

Ha, K. (2021). Non-GAAP Disclosure and Classification Shifting. *Available at SSRN 3821240*.

Heflin, F., & Hsu, C. (2008). The impact of the SEC's regulation of non-GAAP disclosures. Journal of Accounting and Economics, (46), 349–365.

Heflin, F., Hsu, C., & Jin, Q. (2015). Accounting conservatism and street earnings. *Review of Accounting Studies*, *20*, 674-709.

Henry, E., Hu, N., & Jiang, X. (2020). Relative emphasis on non-GAAP earnings in conference calls: Determinants and market reaction. *European Accounting Review*, *29*(1), 169-197.

Hesse-Biber, S. (2010). Qualitative approaches to mixed methods practice. *Qualitative inquiry*, *16*(6), 455-468.

Hirst, D. E., Koonce, L., & Simko, P. J. (1995). Investor reactions to financial analysts' research reports. *Journal of Accounting Research*, *33*(2), 335-351.

Hutton, A. P., Miller, G. S., & Skinner, D. J. (2003). The role of supplementary statements with management earnings forecasts. *Journal of Accounting Research*, *41*(5), 867-890.

Imam, S., Barker, R., & Clubb, C. (2008). The use of valuation models by UK investment analysts. *European Accounting Review*, *17*(3), 503-535.

Imam, S., & Spence, C. (2016). Context, not predictions: a field study of financial analysts. *Accounting, Auditing & Accountability Journal*, *29*(2), 226-247.

Isidro, H., & Marques, A. (2013). The effects of compensation and board quality on non-GAAP disclosures in Europe. *The International Journal of Accounting*, *48*(3), 289-317.

Johnson, W. B., & Schwartz Jr, W. C. (2005). Are investors misled by "pro forma" earnings?. *Contemporary Accounting Research*, *22*(4), 915-963.

Kadous, K., Koonce, L., & Thayer, J. M. (2012). Do financial statement users judge relevance based on properties of reliability?. *The Accounting Review*, *87*(4), 1335-1356.

Kenno, S. A., McCracken, S. A., & Salterio, S. E. (2017). Financial reporting interview-based research: A field research primer with an illustrative example. Behavioral Research in Accounting, 29(1), 77-102.

Lawrence, A. (2013). Individual investors and financial disclosure. *Journal of accounting and economics*, *56*(1), 130-147.

Leuz, C., & Wysocki, P. D. (2016). The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. *Journal of accounting research*, *54*(2), 525-622.

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Newberry Park.

Lo, K. (2012). What do analysts do? Discussion of "Information interpretation or information discovery: which role of analysts do investors value more?." *Review of Accounting Studies*, *17*, 642-648.

Lougee, B. A., & Marquardt, C. A. (2004). Earnings informativeness and strategic disclosure: An empirical examination of "pro forma" earnings. *The Accounting Review*, *79*(3), 769-795.

Maines, L. A., & Wahlen, J. M. (2006). The nature of accounting information reliability: Inferences from archival and experimental research. *Accounting horizons*, *20*(4), 399-425.

Marques, A. (2006), "SEC interventions and the frequency and usefulness of non-GAAP financial measures," Review of Accounting Studies, Vol. 11, pp. 549-574.

Marques, A. (2017). Non-GAAP earnings: International overview and suggestions for future research. *Meditari Accountancy Research*, *25*(3), 318-335.

Maurer (2023) https://www.wsj.com/articles/sec-expected-to-raise-more-questions-about-how-firms-calculate-non-gaap-measures-4ab42b9

Merkley, K. J. (2014). Narrative disclosure and earnings performance: Evidence from R&D disclosures. *The Accounting Review*, *89*(2), 725-757.

Palinkas, L. A. (2014). Causality and causal inference in social work: Quantitative and qualitative perspectives. *Research on social work practice*, *24*(5), 540-547.

Parker, L. D., & Roffey, B. H. (1997). Methodological themes: back to the drawing board: revisiting grounded theory and the everyday accountant's and manager's reality. *Accounting, Auditing & Accountability Journal*, *10*(2), 212-247.

Securities and Exchange Commission (SEC) Regulation G (2003). Conditions for Use of Non-GAAP Financial Measures. Retrieved from https://www.sec.gov/rules/final/33-8176.html. Accessed Feb 25, 2018.

Securities and Exchange Commission (SEC) Division of Corporation Finance issues Compliance & Disclosure Interpretations of regulations on non
GAAP measures (2022). Retrieved from https://www.sec.gov/divisions/corpfin/guidance/nongaapinterp.html. Accessed Oct 25, 2020.

Skinner, D. J. (1994). Why firms voluntarily disclose bad news. *Journal of accounting research*, *32*(1), 38-60.

Spence, Crawford, Mark Aleksanyan, Yuval Millo, Shahed Imam, and Subhash Abhayawansa. "Earning the "write to speak": Sell-side analysts and their struggle to be heard." *Contemporary Accounting Research* 36, no. 4 (2019): 2635-2662

Staubus, G. J. (1961). A theory of accounting to investors.

Staubus, G. J. (1954). *An accounting concept of revenue* (Doctoral dissertation, The University of Chicago).

Staubus, G. J. (1999). The Decision-Usefulness Theory of Accounting: A Limited History (New York: Garland).

Tan, C. E., & Young, S. M. (2015). An analysis of "Little r" restatements. *Accounting Horizons*, *29*(3), 667-693.

Tennyson, B. M., Ingram, R. W., & Dugan, M. T. (1990). Assessing the information content of narrative disclosure in explaining bankruptcy. *Journal of Business Finance & Accounting*, *17*(3).

Twedt, B., & Rees, L. (2012). Reading between the lines: An empirical examination of qualitative attributes of financial analysts' reports. *Journal of Accounting and Public Policy*, *31*(1), 1-21.

Veritas Investment Research. (2016, September 8). Performance Measurement: The rise of non-GAAP metrics. Retrieved from https://maximizer.veritascorp.com/virdocs/Accounting-Alert-The-Riseof-Non-GAAP-Metrics-Veritas-September-8-2016.pdf. Accessed October 22, 2018

Verrecchia, R. E. (2001). Essays on disclosure. *Journal of accounting and economics*, *32*(1-3), 97-180.

APPENDIX A: INTERVIEW PROTOCOL

1. **(i) What and why are non-GAAP financial numbers and measures *useful* to analysts?**
    a. How do you feel about being presented with non-GAAP numbers?
    b. Why do you think firms primarily produce them?
    c. Could you provide examples of the most relevant non-GAAP financial number in terms of your work?
    d. Why do you think the GAAP numbers are adjusted?

2. **How do you feel about the relevance and accuracy of the non-GAAP numbers and measures?**
    a. Where and when do you use non-GAAP financial numbers?
    b. What kind of relationship does a non-GAAP financial measure have with GAAP measure?
    c. To what extent do you rely on the non-GAAP numbers that the firm reports?
    d. How do you decide which non-GAAP financial measures to evaluate?
    e. What work are you doing to the firm's non-GAAP numbers, if any?
    f. Is there anything that frustrates you about non-GAAP numbers and measures?
    g. What makes them high vs low quality?

3. **To what extent should non-GAAP financial measures be regulated?**
    a. What is your understanding regarding the regulations that are in place to report non-GAAP numbers and measures?
    b. What are your thoughts on regulating this area of accounting or a potential audit?
    c. Should firms have the freedom to not disclose, to adjust/not adjust?

Final Questions

- What advice you would give to the regulators regarding non-GAAP financial measures?
- What advice would you give to firms that report non-GAAP financial measures?
- Would you be willing to answer any follow-up questions about this interview today or participate in a survey?

APPENDIX B: EXPERIMENTAL INSTRUMENT

Start of Block: PID

Q1 Please enter your unique Prolific ID.

_____

End of Block: PID

Start of Block: Informed Consent Form

Q2 **Study Name:** Evaluation of firm performance through financial information

Researchers: Sameera Khatoon, Ph.D. Candidate Department of Accounting, Schulich School of Business – York University; Principal Investigator under the supervision of Dr. Linda Thorne. You can contact the Principal Investigator of this study via email at: samkha@schulich.yorku.ca.

Purpose of the Research: This study aims to increase our understanding of investor judgment using financial information. You are being asked to participate in this study because you self-identify as someone familiar with evaluating firm performance and have experience investing in stocks. The findings from this study will become part of my dissertation and be published as a journal article.

What You Will Be Asked to Do in the Research: This study asks you to read a short case and evaluate the performance of a firm presented in the case. You will be asked to make an assessment based on the information provided. There are no right or wrong answers; we seek your honest assessment. In addition, you will also fill out some basic demographic information to categorize your responses. Participation in this study will take a total of 20 minutes. You may participate one time. You will be paid £3.5 for your time and participation in this study.

Risks and Discomforts: We do not foresee any risks or discomfort from your participation in the research.

Benefits of the Research and Benefits to You: This study may interest you. Additionally, the results of this study will be helpful to accounting researchers, regulators, policy setters and practitioners.

Voluntary Participation and Withdrawal: Your participation in the study is completely voluntary, and you may choose to stop participating at any time. Your decision not to volunteer, to stop participating, or to refuse to answer particular questions will not influence the treatment you may be receiving, the nature of the ongoing relationship you may have with the researchers or study staff and the nature of your relationship with York University either now, or in the

future. If you stop participating, you will still be eligible to receive the inducement for agreeing to be in the project, even if you withdraw without completing the research. If you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

Confidentiality: Confidentiality will be provided to the fullest extent possible by law. Your responses will be completely confidential. The researcher will not have access to any of your identifying information, including your name, and your name will not appear in any report or publication of this research. All data will be electronically collected and stored on a secure computer with restricted password-protected access. Additionally, only aggregated data will be included in any resulting publication(s) or presentation(s). You will never be identified with York University or any other involved party. Data will be collected through Qualtrics, CloudResearch and/or Prolific, an online survey platform, and distributed to the researcher thereafter. Data will be safely stored on a password-protected computer in a locked facility, and only research staff will have access to this information for the project's duration. The electronic data will be deleted when the data collection round is complete and saved without identifying information to ensure anonymity. The electronic data will be deleted no later than December 31, 2028. The data collected in this research project may be used – in an anonymized form - by members of the research team in subsequent research investigations exploring similar lines of inquiry. Such projects will still undergo ethics review by the HPRC, our institutional REB. Any secondary use of anonymized data by the research team will be treated with the same degree of confidentiality and anonymity as in the original research project. The researcher(s) acknowledge that the host of the online survey (e.g., Qualtrics, Prolific, etc.) may automatically collect participant data without their knowledge (i.e., IP addresses). Although this information may be provided or made accessible to the researchers, it will not be used or saved without the participant's consent on the researchers' system. Further, because this project employs e-based collection techniques, data may be subject to access by third parties because of various security legislation now in place in many countries and thus the confidentiality and privacy of data cannot be guaranteed during web-based transmission.
Questions About the Research? If you have questions about the research in general or your role in the study, don't hesitate to contact me at samkha@schulich.yorku.ca.
This research has received ethics review and approval by the Delegated Ethics Review Committee, delegated authority to review research ethics protocols by the Human Participants Review Sub-Committee, York University's Ethics Review Board, and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process or your rights as a participant in the study, please contact the Director, Research Ethics in the Office of Research Ethics, 3rd Floor, Kaneff Tower, York University (e-mail: ore@yorku.ca).

Please consent by selecting "yes" below, you consent to participate in this study.

- ○ Yes, I consent. (1)
- ○ No, I do not consent. (2)

End of Block: Informed Consent Form
Q3 **Thank you for agreeing to participate in this research.**

All responses will be anonymous and there is no way for the administrators of the survey to individually identify any participant. There are no right or wrong answers.

You will require a Desktop, Laptop, or Tablet to complete this survey.

Q4 **Please answer a few questions on the next screen to get started.**

Start of Block: Screener: Investor Type

Q5 Which of the following best describes your primary investing activities?

- My job requires me to analyze and/or invest in stocks (7)
- My investments in stocks are outside the scope of my employment (2)
- None of the above (8)

End of Block: Screener: Investor Type

Start of Block: Screener Use of Financial Statements



Q6 When evaluating a company's stock as a potential investment, how often do you examine their financial information (such as Annual reports, Earnings announcements, etc.)?

- Always (1)
- Sometimes (2)
- Never (3)
- Rarely (4)
- Most of the time (5)

End of Block: Screener Use of Financial Statements

Start of Block: Introduction + Base Case

Q7 OK, so what's next? Please read the following carefully.

To provide insight into how financial information is evaluated, we ask you to respond to a short-case scenario about SKH Incorporated (SKH Inc.). On the next few screens, you will be presented with excerpts from the earnings announcement, such as;

1. The company information
2. Net Earnings (A standardized measure prepared in accordance with generally accepted accounting principles, GAAP)
3. Adjusted Net Earnings (A non-GAAP measure, calculated after management makes adjustments to the GAAP Net Earnings)

The information presented might not be similar to what you would encounter in the real world as it has been condensed in the interest of time. Please respond the best you can, based on the information provided.

After reading and reviewing the information, we ask you to evaluate the firm's performance and make an investment decision. We also include a few questions to help us understand which factors and information influenced your assessment of the firm's financial performance.

You are welcome to screenshot, take a picture or use pen and paper, etc. to record the information on the next screen if you want.

Please review the material carefully. You will be asked a few attention-check questions to ensure you have understood the material.

Thank you again for participating.

Q8 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q9 **SKH Inc. Announces Full Fiscal Year 2023 Financial Results**

05/30/2023

SKH Inc. reports in U.S. dollars and in accordance with the generally accepted accounting principles (GAAP)

May 30, 2023 /SKH Inc. (Ticker symbol: SKH)

SKH Inc (or the "Company"), a leading provider of omnichannel point-of-sale platforms, today announced financial results for the twelve-month period ended March 31, 2023.

About SKH Inc.

SKH Inc. offers a cloud-based commerce platform that connects suppliers, merchants and consumers while enabling omnichannel point of sale experiences. Our software platform provides our customers with the critical functionality they need to engage with consumers, manage their operations, accept payments, and grow their businesses. We serve customers globally, empowering our customers to compete successfully in an omnichannel market environment by engaging with consumers across online, mobile, social, and physical channels.

Key Performance Indicators and Non-GAAP Measures

The company reports "Net Earnings" as a key performance measure in accordance with the GAAP and also supplements this with "Adjusted Net Earnings". Adjusted net earnings is a non-GAAP measure, intended to provide investors with information about the Company’s continuing income-generating capabilities.

Non-GAAP measures are not recognized under GAAP, do not have a standardized meaning prescribed by the GAAP and are therefore unlikely to be comparable to similar measures presented by other companies. Accordingly, these measures should not be considered in isolation nor as a substitute for analysis of our financial information reported under GAAP. Rather, the non-GAAP measures are used to provide investors with supplemental measures of our operating performance, from management's perspective and thus highlight trends in our core business that may not otherwise be apparent when relying solely on GAAP measures. We also believe that securities analysts, investors and other interested parties frequently use non-GAAP measures in the evaluation of company.

Page Break

Q10 **To ensure you have read the material carefully, please answer the following questions. You can go back to the previous screens to review the information again.**

Q11 Based on the scenario, which of the following financial measures does SKH Inc. report? Select all that apply.

- [ ] Net Earnings (1)
- [ ] Adjusted Net Earnings (2)
- [ ] Free Cash Flows (3)

Q12 Which of the following statements are true? Select all that apply.

- [ ] Adjusted Net Earnings is a non-GAAP measure (1)
- [ ] Net Earnings is a GAAP measure (2)
- [ ] Net earnings are adjusted by management to calculate Adjusted Net Earnings (4)

End of Block: Introduction + Base Case

Start of Block: Control Condition: GAAP=Non-GAAP

Q13 **Key Financial Highlights for 2023:**

- The company's market share grew by 3%
- Revenue for the year was $4,346 million
- Net earnings and Adjusted Net Earnings for the year are reported at $653 million.

The following table reconciles Adjusted Net Earnings with the Net Earnings for the periods indicated:

Reconciliation of Adjusted Net Earnings

(in millions of US dollars)	2023	2022
Net Earnings	**$ 653**	**$ 591**
Adjustments		
Adjustment X	$ -	$ -
Adjusted Net Earnings	**$ 653**	**$ 591**

Q14 The management is **neither required by the securities regulator, nor do they voluntarily provide an explanation** for the adjustments.

Page Break

Q15 **To ensure you have read the material carefully, please answer the following questions. You can go back to the previous screen to review the information again.**

Q16 What were the Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

Q17 What were the Adjusted Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

End of Block: Control Condition: GAAP=Non-GAAP

Start of Block: Higher: No Explanation

Q18 **Key Financial Highlights for 2023:**

- The company's market share grew by 3%
- Revenue for the year was $4,346 million
- Net earnings and Adjusted Net Earnings for the year are reported at $653 million and $870 million, respectively.

The following table reconciles Adjusted Net Earnings with the Net Earnings for the periods indicated:

Reconciliation of Adjusted Net Earnings

(in millions of US dollars)	2023	2022
Net Earnings	**$ 653**	**$ 591**
Adjustments		
Adjustment X	$ 217	$ 181
Adjusted Net Earnings	**$ 870**	**$ 772**

Q19 The management is **neither required by the securities regulator, nor do they voluntarily provide an explanation** for the adjustments.

Page Break

Q20 **To ensure you have read the material carefully, please answer the following questions. You can go back to the previous screen to review the information again.**

Q21 For Adjustment X, which one of the following is supported by the information provided to you by SKH Inc.?

- ○ No explanation was provided for Adjustment X (1)
- ○ The management voluntarily provided an explanation for Adjustment X (2)
- ○ The management was required by the Securities Regulator, to provide an explanation for Adjustment X (3)

Page Break

Q22 What were the Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

Q23 What were the Adjusted Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

End of Block: Higher: No Explanation

Start of Block: Higher: Voluntary Explanation

Q24 **Key Financial Highlights for 2023:**

- The company's market share grew by 3%
- Revenue for the year was $4,346 million
- Net earnings and Adjusted Net Earnings for the year are reported at $653 million and $870 million, respectively.

The following table reconciles Adjusted Net Earnings with the Net Earnings for the periods indicated:

Reconciliation of Adjusted Net Earnings

(in millions of US dollars)	2023	2022
Net Earnings	**$ 653**	**$ 591**
Adjustments		
Adjustment X	$ 217	$ 181
Adjusted Net Earnings	**$ 870**	**$ 772**

Q25 The management **voluntarily provides an explanation** for the adjustments, as outlined below.

Q26 Net earnings for the year are reported at $653 million. After making Adjustment X, the Adjusted Net earnings for the year are reported at $870 million.
Adjustment X relates to a specific non-cash, non-recurring item that does not reflect the firm's core operations. This adjustment provides a more accurate picture of our underlying operating performance and is useful to investors in evaluating our financial results.

Page Break

Q27 **To ensure you have read the material carefully, please answer the following questions. You can go back to the previous screens to review the information again.**

Q28 For Adjustment X, which one of the following is supported by the information provided to you by SKH Inc.?

- ○ No explanation was provided for Adjustment X (1)
- ○ The management voluntarily provided an explanation for Adjustment X (2)
- ○ The management was required by the Securities Regulator, to provide an explanation for Adjustment X (3)

Page Break

Q29 What were the Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

Q30 What were the Adjusted Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

End of Block: Higher: Voluntary Explanation

Start of Block: Higher: Mandated Explanation

Q31 **Key Financial Highlights for 2023:**

- The company's market share grew by 3%
- Revenue for the year was $4,346 million
- Net earnings and Adjusted Net Earnings for the year are reported at $653 million and $870 million, respectively.

The following table reconciles Adjusted Net Earnings with the Net Earnings for the periods indicated:

Reconciliation of Adjusted Net Earnings

(in millions of US dollars)	2023	2022
Net Earnings	**$ 653**	**$ 591**
Adjustments		
Adjustment X	$ 217	$ 181
Adjusted Net Earnings	**$ 870**	**$ 772**

Q32 The management is **required by the securities regulator to provide an explanation** for the adjustments, as outlined below.

Q33 Net earnings for the year are reported at $653 million. After making Adjustment X, the Adjusted Net earnings for the year are reported at $870 million.
Adjustment X relates to a specific non-cash, non-recurring item that does not reflect the firm's core operations. This adjustment provides a more accurate picture of our underlying operating performance and is useful to investors in evaluating our financial results.

Page Break

Q34 **To ensure you have read the material carefully, please answer the following questions. You can go back to the previous screens to review the information again.**

Q35 For Adjustment, which one of the following is supported by the information provided to you by SKH Inc.?

- ○ No explanation was provided for Adjustment X (1)
- ○ The management voluntarily provided an explanation for Adjustment X (2)
- ○ The management was required by the Securities Regulator, to provide an explanation for Adjustment X (3)

Page Break

Q36 What were the Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

Q37 What were the Adjusted Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

End of Block: Higher: Mandated Explanation

Start of Block: Lower: No Explanation

Q38 **Key Financial Highlights for 2023:**

- The company's market share grew by 3%
- Revenue for the year was $4,346 million
- Net earnings and Adjusted Net Earnings for the year are reported at $653 million and $436 million, respectively.

The following table reconciles Adjusted Net Earnings with the Net Earnings for the periods indicated:

Reconciliation of Adjusted Net Earnings

(in millions of US dollars)	2023	2022
Net Earnings	**$ 653**	**$ 591**
Adjustments		
Adjustment X	$ (217)	$ (181)
Adjusted Net Earnings	**$ 436**	**$ 410**

Q39 The management is **neither required by the securities regulator, nor do they voluntarily provide an explanation** for the adjustments.

Page Break

Q40 **To ensure you have read the material carefully, please answer the following questions. You can go back to the previous screens to review the information again.**

Q41 For Adjustment, which one of the following is supported by the information provided to you by SKH Inc.?

- ○ No explanation was provided for Adjustment X (1)
- ○ The management voluntarily provided an explanation for Adjustment X (2)
- ○ The management was required by the Securities Regulator, to provide an explanation for Adjustment X (3)

Page Break

Q42 What were the Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

Q43 What were the Adjusted Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

End of Block: Lower: No Explanation

Start of Block: Lower: Voluntary Explanation

Q44 **Key Financial Highlights for 2023:**

- The company's market share grew by 3%
- Revenue for the year was $4,346 million
- Net earnings and Adjusted Net Earnings for the year are reported at $653 million and $436 million, respectively.

The following table reconciles Adjusted Net Earnings with the Net Earnings for the periods indicated:

Reconciliation of Adjusted Net Earnings

(in millions of US dollars)	2023	2022
Net Earnings	**$ 653**	**$ 591**
Adjustments		
Adjustment X	$ (217)	$ (181)
Adjusted Net Earnings	**$ 436**	**$ 410**

Q45 The management **voluntarily provides an explanation** for the adjustments, as outlined below.

Q46 Net earnings for the year are reported at $653 million. After making Adjustment X, the Adjusted Net earnings for the year are reported at $436 million.
Adjustment X relates to a specific non-cash, non-recurring item that does not reflect the firm's core operations. This adjustment provides a more accurate picture of our underlying operating performance and is useful to investors in evaluating our financial results.

Page Break

Q47 **To ensure you have read the material carefully, please answer the following questions. You can go back to the previous screens to review the information again.**

Q48 For Adjustment, which one of the following is supported by the information provided to you by SKH Inc.?

- ○ No explanation was provided for Adjustment X (1)
- ○ The management voluntarily provided an explanation for Adjustment X (2)
- ○ The management was required by the Securities Regulator, to provide an explanation for Adjustment X (3)

Page Break

Q49 What were the Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

Q50 What were the Adjusted Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

End of Block: Lower: Voluntary Explanation

Start of Block: Lower: Mandated Explanation

Q51 **Key Financial Highlights for 2023:**

- The company's market share grew by 3%
- Revenue for the year was $4,346 million
- Net earnings and Adjusted Net Earnings for the year are reported at $653 million and $436 million, respectively.

The following table reconciles Adjusted Net Earnings with the Net Earnings for the periods indicated:

Reconciliation of Adjusted Net Earnings

(in millions of US dollars)	2023	2022
Net Earnings	**$ 653**	**$ 591**
Adjustments		
Adjustment X	$ (217)	$ (181)
Adjusted Net Earnings	**$ 436**	**$ 410**

Q52 The management is **required by the securities regulator to provide an explanation** for the adjustments, as outlined below.

Q53 Net earnings for the year are reported at $653 million. After making Adjustment X, the Adjusted Net earnings for the year are reported at $436 million.
Adjustment X relates to a specific non-cash, non-recurring item that does not reflect the firm's core operations. This adjustment provides a more accurate picture of our underlying operating performance and is useful to investors in evaluating our financial results.

Page Break

Q54 **To ensure you have read the material carefully, please answer the following questions. You can go back to the previous screens to review the information again.**

Q55 For Adjustment, which one of the following is supported by the information provided to you by SKH Inc.?

- ○ No explanation was provided for Adjustment X (1)
- ○ The management voluntarily provided an explanation for Adjustment X (2)
- ○ The management was required by the Securities Regulator, to provide an explanation for Adjustment X (3)

Page Break

Q56 What were the Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

Q57 What were the Adjusted Net Earnings for 2023?

- ○ $ 653 million (1)
- ○ $ 436 million (2)
- ○ $ 870 million (4)

End of Block: Lower: Mandated Explanation

Start of Block: Investor Judgement

Q58 **Please respond to these questions carefully, based on the information presented so far about SKH Inc.**

Q59 What is your assessment of SKH Inc's earnings performance for the current year?

Very Weak Very Strong

0 10 20 30 40 50 60 70 80 90 100

()



Q60 What is your assessment of SKH Inc's future earnings potential?

Very Weak Very Strong

0 10 20 30 40 50 60 70 80 90 100

()



Page Break

Q61 How attractive is an investment in SKH Inc.'s stock?

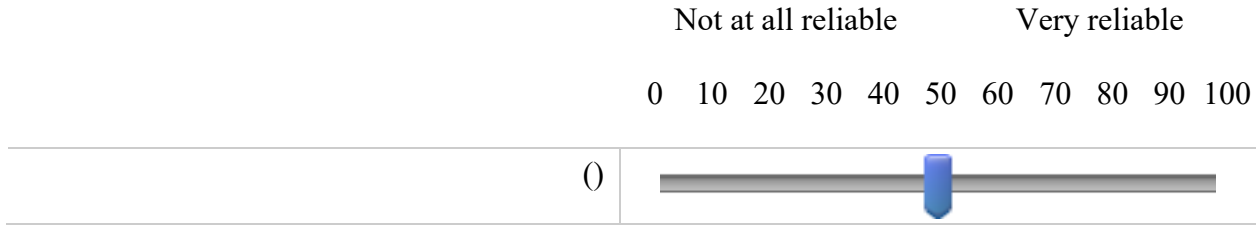
	Not at all attractive									Very attractive
	0	10	20	30	40	50	60	70	80	90	100
()											

Q62 How likely are you to invest in SKH Inc.'s stock?

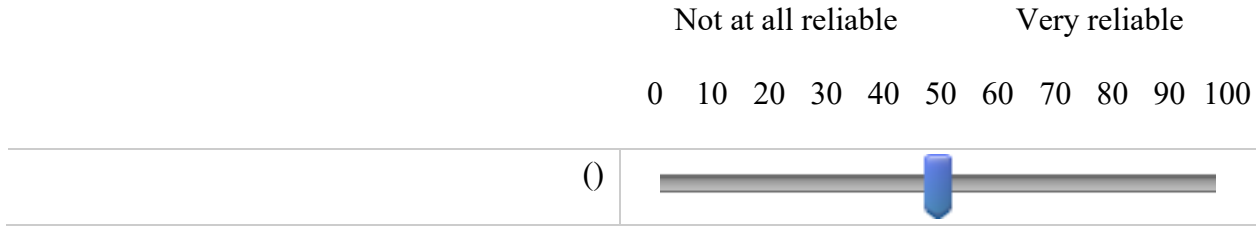
	Not at all Likely									Very Likely
	0	10	20	30	40	50	60	70	80	90	100
()											

Page Break

Q63 How reliable are SKH Inc's **Adjusted Net Earnings** as a non-GAAP measure?



Q64 How reliable are the adjustments made by SKH Inc.?



Page Break

Q673 How appropriate is the non-GAAP adjustment made by the management of SKH Inc.?

	Not at all Appropriate 0 10 20 30 40 50 60 70 80 90 100 Very Appropriate
()	

Q65 How transparent is SKH Inc. regarding its non-GAAP adjustments?

	Not at all Transparent 0 10 20 30 40 50 60 70 80 90 100 Very Transparent
()	

End of Block: Investor Judgement

Start of Block: Additional Checks

Q66 **Now that you have reviewed SKH Inc.'s financial performance, the following screen will present a few important questions to ensure that you have understood the material.**

Q67 Did Adjustment X make Adjusted Net Earnings to be,

- Higher than Net Earnings (1)
- Lower than Net Earnings (2)
- Same as Net Earnings (4)

Q68 Which of the following influenced your assessment of SKH Inc.? That

- **No** explanation was provided for the adjustment (1)
- **Voluntary explanation** was provided for the adjustment (2)
- **Required explanation** by Security regulators was provided for the adjustment (3)

End of Block: Additional Checks

Start of Block: OBER

Q69 Please answer the next set of questions to indicate your perceptions of non-GAAP measures (Adjusted Net Earnings) presented in the case of SKH Inc., where **1 suggests 'strongly disagree'** and **5 suggests 'strongly agree'.** There are no "correct" or "incorrect" answers to the following questions.

Q70 We can depend on getting the truth in most non-GAAP measures.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
()					

Q71 Non-GAAP measures aim to inform the investor.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
()					

Q72 Non-GAAP measures are generally truthful.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
()					

Q73 I believe non-GAAP measures are informative.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
()					



Q74 Non-GAAP measures are a reliable source of information about the performance of the firm.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
()					



Q75 To ensure you are paying attention to the questions, this is an attention check question. Please select 'Somewhat agree'.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
()					



Q76 Non-GAAP measures are truth well told.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
()					



Q77 In general, non-GAAP measures present a true picture of the performance of the firm.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
()					

Q78 I feel I've been accurately informed about firm performance after viewing most non-GAAP measures.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
()					

Q79 Most non-GAAP measures provide investors with essential information.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
	1	2	3	4	5
()					

End of Block: OBER

Start of Block: Additional Question

Q80 **The following questions are designed to enhance our understanding of your assessment of financial measures.**

Q81 To what extent do you think that the explanation for Adjustment X are believable?

	Not at all believable		Somewhat believable		Completely believable
	0	25	50	75	100
()					

Q82 To what extent do you feel that the explanation for Adjustment X influenced your judgment as an investor?

	Not at all influenced my judgment		Somewhat influenced my judgment		Completely influenced my judgment
	0	25	50	75	100
()					

Page Break

Q83 How reliable are SKH Inc's **Net Earnings** as a GAAP measure?

Not at all reliable Very reliable

0 10 20 30 40 50 60 70 80 90 100

() 

Q84 What do you think Adjustment X could possibly be related to? You can provide more than one possible response.

- Adjustment X (1) _____

Page Break

Q85 Do you believe that the reporting of non-GAAP financial measures should be regulated?

- Yes (1)
- No (2)

Q86 To what extent is the regulation of non-GAAP financial measures considered legitimate?

Not at all legitimate Very legitimate

0 10 20 30 40 50 60 70 80 90 100

() 

Q87 How familiar are you with non-GAAP adjustments?

	Not at all familiar 0 10 20 30 40 50 60 70 80 90 100 Very familiar
()	

Q88 Are you aware of the latest regulations issued by the Securities Regulators regarding Non-GAAP Financial Measures? (If so, please provide a brief elaboration, if possible)

- Yes (1) _____
- No (2)

End of Block: Additional Question

Start of Block: Demographic Questions

Q89 **Congratulations, you are almost done! Just a few more questions to describe yourself.**

Q90 Which of the following best describes yourself as an investor?

- I am a professional investor with a job that requires me to analyze and/or invest in stocks (7)
- I am a nonprofessional investor and my investments in stocks are outside the scope of my employment (2)
- I am not an investor (8)

Q91 When evaluating a company's stock as a potential investment, how often do you examine its financial statements (for example, through its annual report or earnings announcements) as part of your evaluation?

- Never (1)
- Rarely (2)
- Sometimes (3)
- Most of the time (4)
- Always (5)

Q92 How many years of stock market investing experience do you have?

- ○ 1 year or less (4)
- ○ 2 - 4 years (5)
- ○ 5 - 7 years (6)
- ○ 7 - 9 years (7)
- ○ 10 years or more (8)

Page Break

Q93 What is your current job title?

_____

Q94 Please indicate your highest level of education completed.

- ○ High School (6)
- ○ Undergraduate Degree (Please specify the major discipline below) (1)

_____

- ○ Graduate Degree (Please specify the major discipline below) (2)

_____

- ○ Other (Please specify the major discipline as well) (5)

_____

Q95 Please, indicate your gender:

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary or other (3)
- ○ Do not wish to disclose (4)

Q96 In what country do you currently reside?

- ○ Canada (1)
- ○ United States of America (2)
- ○ United Kingdom (3)
- ○ Other, please specify (4) _____

Q97 What is your age in years?

	0 10 20 30 40 50 60 70 80 90 100
Age ()	

Page Break

Q98 Can you guess the hypothesis for this study?

_____

Q99 Do you have any additional comments that you want to share with the researchers?

_____

_____

_____

_____

_____

End of Block: Demographic Questions

Start of Block: Completion Code

Q100 Please copy and paste the following completion code on Prolific: C174LB8C

End of Block: Completion Code