# How did the Covid-19 pandemic affect diversity communication among Global 500 companies?

An investigation of diversity perspectives in annual reports before and during the pandemic and the organization's financial performance role.

Student Name: Menglei Xie Student Number: 564432

Supervisor: Dr. Joep Hofhuis

Master Media Studies – Media & Business Erasmus School of History, Culture and Communication Erasmus University Rotterdam

Master's Thesis

June 2022

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# **ABSTRACT**

Diversity management has become popular among many organizations globally because of its potential positive effects on business outcomes. Over the years, organizations have communicated their diversity policies online to attract relevant stakeholders. Despite the growing importance of diversity communication, there is little research to tell us if external factors such as the Covid-19 pandemic affect diversity communication and financial performance's effect on diversity communication during Covid-19. This paper aimed to fill these gaps by exploring the trends in diversity communication across sixty Global 500 organizations by comparing pre-Covid (2018-2019) and during-Covid (2020-2021) data and investigating the interaction effects of financial performance differences in Covid-19 on those organizations' diversity communication. To do so, it employs the theoretical framework provided by Ely and Thomas (2001), which defines three types of diversity perspectives, and an automated content analysis tool -DivPAR, to analyze diversity communication. Tobin's Q was applied to measure financial performance, and subsequently, the effects of Covid-19 and the financial performance differences on diversity communication were examined.

The results elucidated that during the Covid-19 pandemic, organizations' diversity communication continued along with the same upward trend that was seen in previous years. Unexpectedly, it appears every organization continued doing what they were doing in terms of their diversity communication, despite the financial performance differences caused by the Covid-19 pandemic.

This study contributes to the underdeveloped literature on the topic and provides valuable insights, such as the interesting pattern regarding how diversity perspectives evolve in diversity management development for future research.

Due to the sample size limitation of Global 500 organizations, future research should investigate the diversity perspectives within broader cultural backgrounds and industries to examine diversity communication differences within different contexts. Other valuable avenues of research would be to examine the similarities and differences between CSR-related and diversity communication, and verify the "windowdressing" phenomenon by investigating if the diversity communication involves actual behaviours. In addition, besides using different financial measurements to investigate the effects, it is necessary to conduct other types of analyses to help us understand what other types of external elements could influence diversity communication. Finally, verifying the diversity management development pattern predicted in this study will be interesting.

<u>KEYWORDS</u>: diversity management, diversity communication, workforce diversity, diversity perspective, Covid-19 pandemic

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# 1. Introduction

Managing diverse work groups has emerged as one of the critical challenges confronted by modern organizations (Hofhuis et al., 2021). Diversity management is a type of human resource management (Shen et al., 2009). It originated in the U.S. and has become widely spread in most developed countries of the West, gradually gaining traction in many emerging economies (Nkomo et al., 2015; Syed & Özbilgin, 2009). Managing diversity is crucial for reaching an equal society and beneficial for businesses to operate smoothly and productively (Homan, 2019; Plaut, 2010). However, the unexpected Covid-19 pandemic put workforce diversity at risk, severely impacting minority and female work groups (Kalev, 2020). Thus, the Covid-19 pandemic made it more important to focus on workforce diversity than ever.

Diversity communication is sometimes seen as a form of corporate reputation management that helps organizations attract prospective employees and investors (Avery & McKay, 2006; Leslie, 2019; Singh & Point, 2004). Within the past decades, many organizations started to promote their diversity initiatives to relevant stakeholders (Hofhuis et al., 2021; Singh & Point, 2006; Uysal, 2013). In such organizational diversity communication, the diversity perspectives are seen as the identified motivations for formulating and implementing diversity management practices (Hofhuis et al., 2021).

According to Ely and Thomas (2001), there are three types of diversity perspectives: *Moral, Market and Innovation perspectives*. The *Moral perspective* refers to an organization's moral or ethical obligation toward society (Hofhuis et al., 2021). Organizations that embrace the moral perspective believe that improving diversity is the "right thing to do" (Jansen et al., 2021, p. 747). The *Market perspective* manifests as organizations using diverse work groups as a market tool to access niche markets, understand different customer groups in the market, and get information to which mainstream cultural employees would not normally have access (Hofhuis et al., 2021). Lastly, the *Innovation perspective* is embodied by organizations that target diversity because it brings unique skills and experiences that contribute to innovation and business performance. Organizations that invest in the latter two diversity perspectives believe it is the "smart thing to do" (Jansen et al., 2021, p. 747).

Given the different intentions discussed and the implications the diversity perspectives may have for the stakeholders, it is important that those practices are communicated. Hence, communicating diversity perspectives on different media to stakeholders has become commonplace (Singh & Point, 2006; Uysal, 2013). Regardless of the prominence of diversity communication, research addressing this subject is minimal and mainly focuses on websites (e.g. Guerrier & Wilson, 2011; Jansen et al., 2021; Point & Singh, 2003; Uysal, 2013). Thus, the knowledge gap this research seeks to address is the focus on diversity communication in annual reports.

A noteworthy gap in the research is the effects of financial performance on diversity communication. Previous studies indicated that promoting corporate social/environmental performance (including the performance on diversity management) is positively correlated with corporate financial performance (Orlitzky et al., 2003). Furthermore, a systematic diversity management literature review by Yadav and Lenka (2020) revealed that the effects of diversity management on financial performance account for the most significant number of studies. Despite these studies, it remains unknown to what extent financial performance influences diversity management and communication. As a consequence of the Covid-19 pandemic, organizations' financial performances either suffered seriously (e.g. airline companies) or benefited greatly (e.g. retail companies). The Covid-19 pandemic proves to be a compelling context to investigate the influence of financial performance on diversity communication during this period.

The present study examines the changes in diversity communication pre-and during the Covid-19 pandemic, investigating the impact of financial performance on diversity communication. Therefore, the research questions are as follows:

RQ: 1) How did organizational diversity communication differ pre- (2018-2019) and during (2020-2021) the Covid-19 pandemic, and 2) how was diversity communication affected by the organization's financial performance differences at that time?

This study begins by comparing the changes in diversity communication apparent in the samples of organizational annual reports drawn from 60 organizations pre-and during the Covid-19 pandemic. Subsequently, the differences in the financial performance of the 60 organizations during the same periods were calculated using Tobin's *Q*. This allowed an

investigation of how the financial performance differences influenced the three diversity perspectives provided by Ely and Thomas (2001) — Moral, Market and Innovation perspectives.

# 2. Theoretical framework

This chapter presents five sections according to the research questions and related theories. The first section describes the concept of diversity management and its development, and the positive and negative effects on organizational outcomes. The second section explains the diversity perspectives in diversity management and presents the three diversity perspectives rooted in Ely and Thomas' theory (2001). The third section explains why organizations communicate diversity and why the current research focuses on diversity communication. Additionally, the following section discusses the relationship between diversity management and financial performance, and presents the effects of diversity management on financial performance and the research gap. Lastly, the final section indicates the current studies' gaps on Covid-19 and proposes the hypotheses based on these gaps and previous theories.

# 2.1 Diversity management

#### 2.1.1 The development of diversity management

In the past decade, the concept of diversity management in the U.S. has become widely spread in most developed countries of the West and has gradually gained traction in many emerging economies (Nkomo et al., 2015; Syed & Özbilgin, 2009). The concept of diversity management originated in the U.S. in the 1980s (Guerrier & Wilson, 2011). It experienced three critical phases: before the 1980s, during the 1980s and after the 1980s.

Before the 1980s, this concept was supported by politics, and it used to be a replacement and reform of prior affirmative action initiatives (Kelly & Dobbin, 1998; Oppenheimer, 2016). Later, in the 1980s, the majority function aimed primarily at promoting equality for black Americans and women in the workplace (Köllen, 2021). Diversity management, together with the public sector, was used to combat gender and racial discrimination and was later introduced to the private sector. In the 1980s, diversity management started to lose political support (Clayton & Crosby, 1992; Garrison & Modigliani, 1994; Beckwith & Jones, 1997). Therefore, it created opportunities for private organizations to drive it. Organizations started to manage diversity, but with a different perspective (Kelly & Dobbin, 1998; Edelman et al., 2001). From the organizations'

perspective, Gilbert et al. (1999) argued that organizations are more likely to use diversity management to achieve economic profits through striving for certain social equity. This approach is called the business case for diversity. Organizations apply diversity initiatives that aim to enhance organizational productivity and profitability performance levels (Litvin, 2006).

# 2.1.2 The positive and negative effects of diversity management

Although the business case for diversity increasingly attracts organizations, managing diversity cannot always provide desirable results. Diversity management acts as a double-edged sword on organizational outcomes, depending on how organizations manage it (Hofhuis et al., 2012; Köllen, 2021). Cox and Blake (1991), the pioneers who were the first to indicate the benefits that well-managed diversity can bring to organizational performance, introduced the idea that diversity provides a competitive advantage and improves workgroup effectiveness. Over the years, many studies have proven the benefits diversity can bring to organizations. These include contributing to job satisfaction, workgroup cohesiveness, enhancing productivity, innovation and improving competitive advantages, a better workplace climate and providing organizations with competitive advantages (Hofhuis et al., 2012; Jayne & Dipboye, 2004; Pelled et al., 1999; Podsiadlowski et al., 2013). These advantages allow organizations to see the value-in-diversity that spurs them to adopt a diverse cultural approach and embrace different cultural heritage from the diverse workgroups, therefore forming a strong diversity climate that benefits the organizational performance (Boehm et al., 2014; Cho et al., 2018; Dwertmann et al., 2016; Hofhuis et al., 2012; McKay et al., 2007).

Nevertheless, managing diversity is not easy. Poorly managed diversity can also negatively impact organizations, including miscommunication, discrimination and conflict between majority and minority workgroups (Milliken & Martins, 1996; Pelled et al., 1999). While the negative impacts are more likely to affect the minority group than the majority group, the minority group is more likely to have lower job satisfaction and a higher turnover rate (McKay et al., 2007; Tsui et al., 1992).

In sum, diversity can have positive and negative effects on organizational performance. However, it is not the diversity per se that contributes to the varying levels of organizational performance; the way of managing diversity matters.

# 2.2 The diversity perspectives in diversity management

# 2.2.1 Defining diversity perspectives

How organizations manage diversity depends on which diversity perspective(s) they adopt, which directly determine the effects of diversity management. Diversity perspectives, as the fundamental rationales for organizations to develop diversity management policies, provide us with a lens to understand how organizations manage diversity (Hofhuis et al., 2021). According to Ely and Thomas (2001), diversity perspectives are the "group members' normative beliefs and expectations about cultural diversity and its role in their work group" (p. 234). In practice, different organizations hold different perspectives on diversity management. It depends on the organizational culture and their sensitivity to this aspect of organizational life, referring to the differences in the business context, industry, and organizational strategy (Ely & Thomas, 2001; Joshi & Roh, 2009; Köllen, 2021; Podsiadlowski et al., 2013; Thomas & Ely, 1996).

In the wide diversity perspective studies, as Hofhuis et al. (2021) mentioned, the most well-known framework used to examine workforce diversity was created by Thomas and Ely (1996). A few years later, in 2001, Ely and Thomas verified the framework using a group of U.S. organizations as a sample in a qualitative study. Ely and Thomas (2001) concluded that there are three perspectives that organizations usually adopt on their workforce diversity. Those perspectives are *Discrimination-and-Fairness*, *Access-and-Legitimacy and Integration-and-Learning*. According to the definition of each diversity perspective, Hofhuis et al. (2021) simplify the perspectives' names into the *Moral Perspective* (*Discrimination-and-Fairness*), the *Market Perspective* (*Access-and-Legitimacy*) and the *Innovation Perspective* (*Integration-and-Learning*). The renamed perspectives from Hofhuis et al. (2021) will be applied in this study. The following sections will introduce the three diversity perspectives and the corresponding effects on organizational outcomes.

#### 2.2.2 The three diversity perspective framework from Ely and Thomas (2001)

Firstly, the *Moral perspective* reflects equal treatment and justice for any individual in the hiring and promotion process (Ely & Thomas, 2001). By enhancing cultural diversity in the workplace, organizations aim to build a reputation in society as socially responsible organizations to restrain biases, eradicate discrimination and achieve cultural diversity as an end (Hofhuis et al., 2021). The motivations for organizations to apply this perspective may generate from the genuine idea of "doing good", the incentives from legislation and regulations, or the target to increase the positive impact on reputation (Bear et al., 2010; Bird et al., 2007; Podsiadlowski & Reichel, 2014).

Secondly, the *Market perspective* is the foundation for the well-known business case for diversity (Cox & Blake, 1991). Organizations with this perspective are driven by access to marginal markets (Ely & Thomas, 2001). Therefore, a diverse culture work group is a valuable tool to help organizations understand and access the customers and stakeholders in the corresponding markets. For example, the U.S. company Amazon would hire Dutch employees if they wanted to enter the market in the Netherlands. Amazon's local employees, with a fundamental understanding of local culture, could provide the most appropriate and efficient service to the customers and stakeholders in the Netherlands. The same formula can be followed by all kinds of organizations in different market regions (Hofhuis et al., 2021). Organizations with this perspective use diverse work groups to help them enter and adapt to the market they hardly ventured into before.

Lastly, the *Innovation perspective* refers to organizations that perceive diverse cultures to positively impact internal work processes, which can, in turn, contribute to increasing internal groups' learning potential and a better adaptation to change (Ely & Thomas, 2001). Organizations with this perspective treat employees and their tacit knowledge as important assets. In the words of Ely and Thomas (2001), the "insights, skills and experiences employees have developed as members of various cultural identity groups are potentially valuable resources that the workgroup can use to rethink its primary tasks [ ... ] in ways that will advance its mission" (p. 240). Much research has proven that when different voices are treated equally, the culturally diverse members' viewpoints help enhance flexibility, creativity and innovation in workgroups when dealing with tasks. This

improves work productivity and effectiveness (Bear et al., 2010; De Dreu & West, 2001; Shipton et al., 2005).

Overall, the explanation above shows that organizations' diversity perspectives come from different motivations and are the fundamental rationale of diversity management policies that help organizations achieve different diversity results (Hofhuis et al., 2021).

# 2.2.3 The effects of the three diversity perspectives on organizational outcomes

Ely and Thomas (2001) assume that each diversity perspective might affect the diversity outcomes differently. The authors applied their framework to analyze how highand low-status groups may be affected differently and addressed the problem from the standpoint of unequal power distribution. The results are explained below.

Ely and Thomas (2001) argued that the Moral perspective might relate to the problematic aspects of diversity, mainly focusing on the adverse outcomes of diversity. Organizations with this perspective deem the diverse work group as "relevant only insofar as they trigger others' negative reactions; they are therefore a potential source of negative intergroup conflict to be avoided in service of the task" (Ely & Thomas, 2001, p. 268). Specifically, organizations that apply this perspective mainly implement it in the recruitment process and aim to balance representation numbers in work groups but ignore, or even suppress, different voices to avoid conflict (Ely & Thomas, 2001). They (2001) explain that the variance in behaviour could be because of two reasons. Firstly, organizations think conflict is dangerous and should avoid it whenever possible (Ely & Thomas, 2001). The second reason is that the management team requires that the diverse employees obey the mainstream culture, namely, the white cultural standard: the "expectation is still that people will speak in normal English and write the way white people write" (Ely & Thomas, 2001, p. 247). Swan (2010) explains this behaviour as "we want some difference so long as underneath you are all the same as 'us'" (p. 94). Therefore, Ely and Thomas (2001) conclude that this perspective is hard to alter the operations of the organization work in any fundamental way (Ely & Thomas, 2001, p. 246). This perspective implies that conflict between work groups, potentially causing bias and hostility, may strengthen the power of the dominating group (Hofhuis et al., 2021).

The *Market perspective* refers to the utilization of the diversity group as a market tool to generate extra profits: "We are living in an increasingly multicultural country, and new ethnic groups are quickly gaining consumer power. Our company needs a demographically more diverse workforce to help us gain access to these differentiated segments. We need employees with multilingual skills to understand and serve our customers better and gain legitimacy with them. Diversity is not just fair; it makes business sense" (Thomas & Ely, 1996, p. 5). According to Ely and Thomas (2001), in this perspective, a diverse work group is mainly used to provide services to the marginal markets, while the mainstream culture work group still dominates the core markets and services. Thus, this perspective cannot fundamentally tackle diversity issues at work. For this reason, Ely and Thomas (2001) argue that this diversity perspective cannot provide organizations with sustainable diversity benefits.

Ely and Thomas (2001) reckon the *Innovation perspective* is the only perspective among the three that can provide organizations with sustainable diversity benefits and help them reach diversity inclusion. This is because it gives equal chances to different work groups to present and share their ideas and experiences, enhancing intergroup learning and innovation (Podsiadlowski et al., 2013). Although this perspective is the most promising approach to Ely and Thomas (2001), they argue that applying this perspective requires organizations to spend extra time and money on exploring the different views to integrate cultural differences.

## 2.3 Diversity communication

According to Point and Singh (2003), "as diversity management is adopted by companies, they often start to promote their new strategies in their corporate literature" (p. 753). The studies of diversity communication are mainly rooted in the fields of marketing, public relations and organizational communication, investigating how organizations convey their diversity perspectives and policies to different types of stakeholders (Hofhuis et al., 2021). By purposefully choosing their diversity arguments, organizations aim to improve their corporate image and reputation (Avery & McKay, 2006; Jayne & Dipboye, 2004; Williamson et al., 2008; Windscheid et al., 2016). This practice is also known as diversity or inclusion branding (Edwards & Kelan, 2011; Jonsen et al., 2019).

Within the past decades, organizations increasingly started to promote their diversity initiatives in different media, such as through corporate websites and annual reports to relevant stakeholders (Hofhuis et al., 2021; Singh & Point, 2006; Uysal, 2013). In such organizational diversity communication, the diversity perspectives are seen as the identified motivations for formulating and implementing diversity management practices (Hofhuis et al., 2021).

Organizations aim to promote their diversity policies to two types of relevant stakeholders. The first one is prospective talents who are presented with an attractive image of employment (Avery & McKay, 2006; Leslie, 2019; Singh & Point, 2004); the other is investors whose requirements are met by the organization disclosing their diversity commitment to society (Singh & Point, 2004). Consequently, promoting a diversity statement is frequently considered an important indicator of corporate social responsibility (hereinafter: CSR) (Singh & Point, 2004; Hofhuis et al., 2021). The presence of diversity management practices in CSR statements has become a regular practice, and this CSR-related diversity practice is favoured by the market (Bird et al., 2007; Sweeney & Coughlan, 2008).

Previous studies in organizational diversity communication mainly focused on how organizations communicate their diversity perspectives on corporate websites. For instance, Point and Singh (2003) investigated how diversity management is defined and communicated across eight European corporate websites. They indicated that U.K. companies are more likely to promote *value-in-diversity* than other European companies. A few years later, the study by Guerrier and Wilson (2011) confirmed the popularity of this perspective in the U.K. and found that many big British companies often use young females as the "faces" of diversity. Meanwhile, other studies have shown that promoting diversity branding on corporate websites is becoming popular in other European countries, such as Spain, Germany, France, and Portugal (Barbosa & Cabral-Cardoso, 2010; Jonsen et al., 2019; Uysal, 2013). In the Netherlands, a study by Jansen et al. (2021) compared how the public and private sectors present their diversity statements differently on their websites to establish a good corporate image among healthcare organizations. The study indicated that the market welcomes the public sectors more if they communicate a moral motive rather

than a business motive; in contrast, the motive does not make a difference in the communication of the private sector (Jansen et al., 2021).

Another study on Dutch organizations presented a different communication channel on annual reports. Hofhuis et al. (2021) researched how Dutch organizations stated the three cultural diversity perspectives—the *Moral, Market and Innovation perspectives*—differently over two decades. The results showed that the *Moral perspective* is the most prevalent diversity perspective. However, the other two perspectives also gained popularity over time. Moreover, the researchers innovated an automated content analysis tool (DivPAR) to examine the diversity perspectives present in organizational communication, a tool which will be applied in the present study.

To sum up, this collection of studies provides readers with some insight into the types and popularity of the diversity statements present in communication media, particularly on corporate websites, and the difference between private and public sectors in the Western cultural context.

However, gaps remain. The previously described diversity communication studies cannot provide an updated understanding of how diversity communication in organizations changes in the current situation—the Covid-19 pandemic. Moreover, an increasing number of multinational companies from different cultural contexts, such as Brazilian, Latin American and Asian countries have started to implement diversity management (Jabbour et al., 2011; Magoshi & Chang, 2009; Raineri, 2018; Shena et al., 2010). There is limited empirical evidence to show exactly how diversity communication is promoted among those multinational organizations with different cultural backgrounds. These gaps in knowledge make it impossible to draw generalizable conclusions on how multinational organizations communicate their diversity policies to the public during the Covid-19 pandemic. Thus, this study aims to fill these gaps. As a final note, studies on annual reports are rare. Therefore, it is crucial to have an up-to-date study to understand how multinational organizations communicate diversity in annual reports in the current Covid-19 pandemic situation.

#### 2.4 Diversity management and financial performance

The previous sections have explained what diversity management is, what diversity perspective is and its relationship with diversity management, how it could affect

organizational outcomes, and how and why diversity perspectives are represented in communication. This section will focus on this study's object, which is the relationship between diversity management and financial performance.

In the business case for diversity, prior research on the relationship between diversity management and financial performance has indicated that diversity management can positively affect financial performance in different industries. For example, Richard (2000) examined the relationships between cultural diversity, business strategy and firm performance in the banking industry. Richard (2000) concluded that in the proper context, cultural diversity could add value to a firm business performance. A study based on a survey of 300 IT employees conducted by Patrick and Kumar (2012) concluded that successfully managing diversity can produce a higher level of loyalty, job satisfaction, and workforce performance and, therefore, can result in better financial performance. Furthermore, more recent studies have also proved the positive diversity effects on business outcomes in the healthcare industry, owing to diverse faces in the team making patients feel more comfortable (Gomez & Bernet, 2019).

Furthermore, a previous meta-analysis of 52 studies investigated the relationship between organizational social/environmental performance and organizational financial performance, and the results proved that promoting the organizational social/environmental performance (incorporating the performance on diversity management) provided organizations with positive financial performance outcomes, which are more likely to enhance the business case for diversity, and communicate it to relevant stakeholders (Orlitzky et al., 2003). Put together, this body of research provided readers with some insight into how diversity management and diversity statement promotion can provide positive financial performance within different types of industries. However, it remains unknown how financial performance impacts diversity management because the current studies on the business case for diversity do not display the effects.

Financial performance could influence diversity management. For this study's units of analysis (the Fortune Global 500 organizations), the primary goal is to serve their own interests to satisfy their investors and related stakeholders. Those organizations applying the business case for diversity aim to achieve a higher level of financial performance. The positive financial outcomes from managing diversity may drive them to invest more in

diversity. Because those organizations aim to serve their own interests first, it is reasonable to expect that financial performance may influence diversity management.

This expectation is based on two reasons. Firstly, managing diversity is time-consuming and costly because of the extra effort spent searching for diverse employees, communication between the majority and minority groups, diversity training, and infrastructure costs for minority workers (Singal & Gerde, 2015; Singal, 2014). Secondly, some organizations use diverse people as a market tool to expand in different markets. When the market shrinks or financial performance suffers, the diverse workgroup is the first to go (Ely & Thomas, 2001). Unfortunately, no previous empirical studies examine whether financial performance influences diversity management. Therefore, the question of how financial performance affects diversity communication remains unanswered.

## 2.5 Current studies on the Covid-19 pandemic

The argument above is that we do not yet know whether organizations will spend more or less effort on diversity management when confronted with economic downturns. This section will elucidate the research gap by using the current Covid-19 pandemic as the context.

The published articles regarding diversity in the Covid-19 pandemic are mainly focused on gender diversity (e.g., Bali et al., 2020; Franczak & Margolis, 2022; Joniaková et al., 2021). To the best of this researcher's knowledge, no prior work has assessed and compared the diversity communication pre- and during the Covid-19 pandemic in any communication media, and no research has analyzed how financial performance affects diversity communication during the Covid-19 pandemic. Hence, the present study poses the research questions, How did organizational diversity communication differ pre- (2018-2019) and during (2020-2021) the Covid-19 pandemic, and how is this affected by the organization's financial performance differences? are exploratory in nature. Based on previous related studies on CSR topics that have provided insights suggesting that financial performance affected by crises can impact CSR management is used to answer the first research question; The study by Ely and Thomas (2001) indicates the motivations and effects of the diversity perspectives, allowing for the formulation of corresponding

hypotheses to answer the second research question. The following sections will explain how the hypotheses are formulated based on these theories.

Research Question 1. How did organizational diversity communication differ pre- (2018-2019) and during (2020-2021) the Covid-19 pandemic?

Diversity management is often viewed as a component of CSR in the paradigm in which organizations apply different diversity perspectives to communicate with related stakeholders (Hofhuis et al., 2021). Previous research on CSR communication during the 2008 financial crisis showed that organizations would alter their investment in CSR projects during the financial crisis. For example, a study on the Global Fortune 500 organizations found that communication of organizations' CSR projects dropped significantly during the 2008 financial crisis because investing in CSR activities is costly, and they need to save costs in difficult times to maintain basic operations and meet revenue expectations (Karaibrahimo, 2010; Lee et al., 2013). The conclusion was that organizations would decrease CSR activities when facing a financial crisis. Similar to investing in CSR activities, diversity management is time-consuming and costly (Singal & Gerde, 2015). Thus, when facing a crisis, organizations could reduce their diversity management and communicate less diversity to the public and related stakeholders. The Covid-19 pandemic poses a significant economic threat (e.g., Chaudhary et al., 2020; Hossain, 2021). Thus, organizations could put diversity management aside and reduce their diversity communication during the Covid-19 pandemic. Consequently, the first hypothesis is as follows:

Hypothesis 1: It is expected to see an overall decrease in organizational diversity communication when comparing the pre- and during-Covid-19 pandemic.

Research Question 2. How was diversity communication affected by the organization's financial performance differences at that time?

The impact of the Covid-19 pandemic on the world economy severely threatened workforce diversity (Eikhof, 2020). In other words, facing a financial crisis, organizations are more likely to treat cultural diversity as less important. However, this statement may apply

only to the cases of organizations that financially suffered from the Covid-19 pandemic. Organizations that benefited from the Covid-19 pandemic may treat cultural diversity the opposite way. According to the motivations and effects of the three diversity perspectives from Ely and Thomas (2001), this study formed three hypotheses regarding the impacts of financial performance on diversity perspectives in communication. The hypotheses are based on the order of the Moral, Market and Innovation perspectives.

Firstly, Ely and Thomas (2001) state that the *Moral perspective* (*discrimination-and-fairness* perspective) is the "ethical or moral obligation that organizations have toward society" (Hofhuis et al., 2021, p. 2). Organizations with this perspective are either motivated by the idea of doing the right thing for society, inspired by external laws and regulations or aim to use it to improve their reputation (Hofhuis et al., 2021; Jansen et al., 2021).

The justification for the second hypothesis is threefold. Firstly, the *Moral perspective* is different from the *Market and Innovation perspectives* because it is not tied to business-related motives (Jansen et al., 2021). Secondly, the diversity business case scholars highlight the need for a moral basis for diversity management. They discussed the importance of corporate investment in social issues that do not necessarily impact the business' bottom line but make an unambiguous social contribution (Porcena et al., 2020). Thirdly, the data from Hofhuis et al. (2021) show that the *Moral perspective* is the only one that increased among all diversity perspectives in Dutch organizations' communication during the 2008 financial crisis. This result is one basis on which to speculate that the *Moral perspective* continued to increase during the pandemic.

It is thus reasonable to assume that promoting the *Moral perspective* is necessary for organizational diversity management regardless of the business-related motives. Therefore, this study does assume that presenting the *Moral perspective* has become an organizational ethical norm in society, regardless of financial performance. Considering the arguments mentioned above, the hypothesis is formulated as follows:

Hypothesis 2: Compared to the pre-Covid-19 pandemic situation, it is expected to see an increase in the Moral perspective in all organizational diversity communication regardless of the financial performance during the Covid-19 pandemic.

Ely and Thomas (2001) concluded that the *Market perspective* could not provide organizations with sustainable diversity outcomes because organizations with the Market perspective do not incorporate diverse cultures into their core functions. Organizations usually use this diversity perspective as a marketing tool to approach diverse stakeholders and access marginal markets (Ely & Thomas, 2001). This gives the diverse employees hired for this purpose a sense of exploitation and devaluation (Thomas & Ely, 1996). Many of these employees claim that when their organizations need to downsize or cut their marketing scope, their special departments are the first to go (Thomas & Ely, 1996).

The Covid-19 pandemic caused many organizations worldwide to suffer financially, and it could lead organizations to reduce risks on the margins by solely focusing on the core business. Thus, when facing a bad business situation, managers may be reluctant to hire more diverse workers or even fire diverse work groups to reduce costs and risks. This behaviour can cause the management team to disregard the *Market perspective*. Therefore, it is estimated that organizations with poor financial performance during the Covid-19 pandemic will likely decrease their *Market perspective* in their diversity communication. Thus, the last hypothesis is formulated as follows:

Hypothesis 3: Compared to the pre-Covid-19 pandemic, organizations whose financial performance suffered during the Covid-19 pandemic are more likely to show a decrease in the Market perspective on diversity communication.

The *Innovation perspective* (the *integration-and-learning* perspective) is the only one that can provide sustainable diversity benefits because organizations consider diversity as a "resource for learning and adaptive change" (Ely & Thomas, 2001, p. 240). Organizations with this perspective appreciate the knowledge, skills and experiences shared by culturally diverse employees and their choices at work (Ely & Thomas, 2001; Thomas & Ely, 1996). Organizations utilize these special resources to reassess their key missions and innovate new markets, new products, new strategies, and new business models in ways that will help organizations achieve their goals (Ely & Thomas, 2001). Specifically, Ely and Thomas (2001) pointed out that organizations that hold this perspective encourage employees to learn from diverse groups and integrate learning outcomes into their core work functions. Therefore, cultural diversity helps organizations improve innovation and competitive

advantages. Moreover, this perspective also benefits the work process and financial performance (Ely & Thomas, 2001).

It is thus reasonable to assume that organizations that financially benefited from diversity management during the Covid-19 pandemic had already incorporated the *Innovation perspective* into their operation pre-Covid-19 pandemic.

Furthermore, with the benefits of the Innovation perspective, organizations are more likely to increase their investment in it. Another reason is that, compared to the Moral and Market perspectives, investing in the *Innovation perspective* requires more time and money as it requires more internal communication, training programmes and management to achieve diversity inclusion (Singal, 2014). Thus, organizations that financially benefited during the Covid-19 pandemic are more likely to invest time and money in the *Innovation perspective* to achieve a better business performance than other organizations. Given these points, the fourth hypothesis is formulated as follows:

Hypothesis 4: Compared to the pre-Covid-19 pandemic situation, organizations whose financial performance benefited during the Covid-19 pandemic are more likely to increase in the Innovation perspective in diversity communication.

# 3. Methodology

#### 3.1 Choice of method

Considering the nature of the research questions, the best research method is the quantitative approach. As the research entails an investigation of diversity communication through examining annual reports, a quantitative content analysis is appropriate.

Quantitative content analysis research is described as "the systematic assignment of communication content to categories according to rules, and the analysis of relationships involving those categories using statistical methods" (Riffe et al., 2019, p. 3).

To avoid the strenuous and time-consuming activity of examining a large text dataset manually and the high possibility of low accuracy, an automated quantitative content analysis research method is applied. Automated quantitative content analysis allows us to draw conclusions and describe the longitudinal development of content in text in a short period. This automated method is able to analyze the diversity perspectives from Ely and Thomas (2001) in annual reports. Specifically, it can indicate an answer to the research questions regarding the prevalence of diversity perspectives and the longitudinal trend of each perspective in annual reports. Thus, automated quantitative content analysis is especially useful for this study.

# 3.2 Sampling

# 3.2.1 Units of analysis

The annual report is one of the most formal and regular organizational communication forms that regularly includes financial statements, quantitative information, narratives, organizational strategy, management decisions, long-term plans, and colour images and graphs (Hofhuis et al., 2021; Stanton & Stanton, 2002). The letter from the CEO is prominent in the first section which is arranged by the line of business (Marino, 1995). Organizations combine the theory of marketing and communication and use management tools to create organizational identities in the annual reports (Stanton & Stanton, 2002). Annual reports are one of the primary channels via which organizations communicate with important stakeholders (Stanton & Stanton, 2002). Meanwhile, stakeholders and potential investors rely heavily on annual reports to make investment decisions (Lord, 2002).

In recent years, it has been more common to see global organizations across countries include CSR statements in their annual reports (Hackston & Milne, 1996; Roberts, 1991). These CSR statements recount the organizations' concerns regarding the environment, communities, employees and customers (Sweeney & Coughlan, 2008). In doing so, annual report statements have become a crucial communication channel for managing organizational reputation, and thus also a communication channel for diversity and inclusion branding (Bebbington et al., 2008; Jonsen et al., 2019). Additionally, the annual reports of most large organizations are publicly available and written in English, which minimizes language barriers and thus makes them the ideal medium for researchers from other regions (Hofhuis et al., 2021).

Except for the regular annual reports, the 10-K reports were also included in this data collection because some organizations present their annual reports in the 10-K format. The 10-K is a type of annual report designed by the U.S. Securities and Exchange Commission (SEC) (Lord, 2002). Organizations are required to file 10-K forms to disclose all material information within ninety days after the end of their fiscal year (Lord, 2002). As a result, U.S. companies and companies listed in the U.S. are required to fill out 10-K forms.

There are similarities and differences between the regular annual reports and the 10-K reports. Similar to the regular annual reports, the 10-K content includes an overview of business operations, the current and future risks, recent financial performance, management's discussion and analysis, the results of operations from the previous fiscal year, audit financial statements and letters from the organizational senior management team (Investopedia, 2021). 10-K reports also include CSR-related statements, which are usually under the management discussion and analysis section (Cannon et al., 2020). Thus, 10-K reports are included as sources under investigation for diversity communication in this study.

However, the 10-K reports are different from the regular annual reports because 10-K reports are designed and required by the SEC. Hence, 10-K reports are standardized and externally audited (Cannon et al., 2020). According to Lebar (1982), the significant difference between 10-K reports and regular annual reports is how information is conveyed. Regular annual reports have more flexibility in this regard, meaning they contain more intentional language, such as unqualified, generalized and evaluative language.

Comparatively, 10-K reports have less flexibility because the SEC requires organizations to

write in plain English (Lord, 2002). Moreover, 10-K reports do not include images, and graphs like regular annual reports do (Investopedia, 2021).

In sum, for the reasons explained above, regular annual and 10-K reports are valuable communication media to study diversity communication in this research.

#### 3.2.2 Time dimension

Most organizations were affected by the Covid-19 pandemic, and their financial performance either improved or deteriorated. The time dimension range from 2018 to 2021 was selected to define the pre-Covid-19 (2018-2019) and during Covid-19 (2020-2021) periods based on two reasons.

Firstly, it is tricky only to choose 2019 to represent the pre-Covid-19 situation. The Covid-19 pandemic began at the end of December 2019 in Wuhan, China (Taylor, 2021). Most organizations published the 2019 annual reports in early 2020, when the pandemic was already underway. Considering this timeline of events, this study includes 2018 in the pre-Covid-19 time range.

Secondly, to ensure the amount of data from pre- versus during the Covid-19 pandemic is equal, it was decided that the during-pandemic time range would be from 2020 to 2021.

Thus, this study compares 2018 and 2019 (the pre-Covid-19 period) to 2020 and 2021 (the during-Covid-19 period).

#### 3.2.3 Size of sample

In total, 60 organizations were selected for this study. The organizations come from twelve countries, namely Australia, Belgium, Canada, China, France, Germany, Japan, South Korea, Sweden, Switzerland, the United Kingdom and the United States. The selected organizations operate in 31 different sectors respectively, such as mining, retailers, telecommunication and health care.

The 60 organizations were selected from the Fortune Global 500 list, published annually by Fortune magazine. The Global 500 list contains the 500 top global organizations. It is an annual ranking determined by the organization's performance, including revenue, profit, balance sheet and the number of employees, based on the organization's fiscal year

(Belanger, 2021). Because the Global 500 list is published annually, Fortune measures organizations' performance each year. Some organizations with poor performance are excluded, while some with good performance are included. For this reason, this study resulted in a total of 257 organizations which were consistently listed in the Fortune Global 500 from 2018 to 2019. These 257 organizations were used to select the sample of 60 organizations.

To serve the purpose of this study's research questions and hypotheses, the selection of the 60 organizations was based on the Global 500 organizations' financial performance differences. These differences were then compared to the average financial performance value pre-and during the Covid-19 pandemic, with the aim of extracting a sample that approached a normal distribution. The financial performance value is calculated by Tobin's Q, ranging from negative (below zero) to positive (above zero). To calculate the financial performance differences, each year's Tobin's Q value for the respective Global 500 organizations was first calculated in an Excel sheet. Secondly, the average values pre- and during the Covid-19 pandemic were calculated. Subsequently, the average values pre- and during the Covid-19 pandemic were used to calculate the differences (during-Covid-19 average values minus pre-Covid-19 average values). A detailed explanation of how Tobin's Q was calculated to find the financial performance differences can be found in the operationalization section. Once all the Global 500 organizations' financial performance differences were calculated in an Excel sheet, the values were transferred into SPSS.

A random sampling strategy was applied in order to use SPSS to find a qualified normal distribution and consequently confirm the 60 organizations for further analysis. In the SPSS output, a total sample size of *N*= 55 was included in the analyses. The 60 organization list is attached in Appendix A.

#### 3.2.4 Data collection

This study aimed to collect 240 annual reports ranging from 2018 to 2021 (regular annual reports and 10-K reports) from those 60 Fortune Global 500 organizations.

The process of collection entailed a search within a website with the keywords annual report. During the search, it was found that some U.S. organizations, such as Alphabet and Coca-Cola, only present their annual reports in a 10-K format. As explained in

the previous section, 10-K reports are a type of annual report similar to regular annual reports and include CSR-related statements. Thus, those 10-K reports were collected for analysis.

Some organizations, such as KDDI, Samsung and Caterpillar, divide their annual reports into different topics, including sustainability (KDDI and Samsung) and diversity and inclusion (Caterpillar) reports in which they present their diversity communication. Thus, those reports were relevant for analysis. It is important to note that some organizations had alternative names for their annual reports, such as integrated reports (Denso) and group reports (BMW).

Lastly, for unknown reasons, 3 Chinese organizations (JD.com, Midea Group and CRRC) have not published their 2021 annual reports yet. Thus, ultimately a total of 237 annual reports were collected.

All the annual reports were saved in PDF format and stored in a file before being transferred into the DivPAR tool to be analyzed.

# 3.3. Operationalization

Based on the research questions and hypotheses, it is necessary to operationalize the following four concepts: *diversity communication, diversity communication differences,* financial performance and financial performance differences.

#### 3.3.1 Diversity communication

*Diversity communication* refers to the diversity perspectives apparent in the 237 annual reports measured by the DivPAR tool.

The DivPAR tool belongs to the automated quantitative content analysis method. Hofhuis et al. (2021) created the tool to analyze the annual organizational reports through the lens of the three diversity perspectives from Thomas and Ely (2001). The DivPAR tool is not only highly efficient but "can be used to analyze the prevalence and longitudinal development of these perspectives in a sample of organizations" (Hofhuis et al., 2021, p. 8). In applying the DivPAR tool, this study has two goals. The first goal is to identify the trend in all three diversity perspectives by comparing the pre- and during Covid-19 situations. The

result will be used to confirm or reject the first hypothesis. The second goal is to understand the changes in each diversity perspective pre- and during the Covid-19 situation. The results will be used to confirm or reject the last three hypotheses.

The DivPAR tool is based on a Python script which uses the top-down dictionarybased approach (Hofhuis et al., 2021). The Python scripts contain both trigger strings and search strings. According to the study from Hofhuis et al. (2021), the trigger strings include words related to diversity (cultural, culture, ethnic, ethnicity, race, racial, national, multinational, etc. <AND> diversity, differences, variety, people, teams, groups, composition, etc.). Furthermore, the search strings, which are divided into three groups based on the three diversity perspectives from Thomas and Ely (2001), are identified as the moral perspective (moral, ethical, fair, fairness <AND> composition, recruitment, selection, representation; equal opportunities, non-discrimination, against discrimination, social responsibility, socially responsible, moral responsibility, meet diversity standards, achieve diversity targets, etc.); the market perspective (market, markets <AND> local, labor, labour, job, access, accessing; community, society, population, customers; partners; stakeholders; groups; end-users <AND> reflect, reflects, reflecting, serve, serving, mirror, mirrors, mirroring, understand; understanding needs, etc.); and the innovation perspective (improve performance, better performance, competitive advantage, competitive edge, flexibility, innovation, creativity, use of human capital, operational excellence, intercultural competence <AND> differences are recognized, valued, learning, inclusion, inclusiveness, problem solving, learning, inspiration, etc.) (Hofhuis et al., 2021, p. 6). These two types of strings work together. The trigger strings guide the script to select the sections that include diversity information in the annual reports. The search strings then identify the corresponding diversity perspective "within four lines above or below the trigger strings" (p. 5) in the specific sections found by the trigger strings (Hofhuis et al., 2021).

The DivPAR tool searched for the diversity perspectives in each annual report across the relevant years and formulated a list outlining the frequency of each diversity perspective in each year. The overview of the percentage of each diversity perspective in annual reports by year is shown in the table below.

Table 3.3.1: Overview of the percentage of each diversity perspective in annual reports across the relevant years.

Perspective	2018(%)	2019(%)	2020(%)	2021(%)
Moral	81.0	78.4	78.0	78.0
Market	8.0	10.3	11.0	12.0
Innovation	11.0	11.3	11.0	10.0
Frequency of Perspectives in total	174	194	284	313

*Note.* The percentage (%) of each diversity perspective in each year equals the sum of the diversity perspective in that year divided by the total number of diversity perspectives in that year.

# 3.3.2 Diversity communication difference

The list provided by the DivPAR tool was used to analyze the differences in diversity communication. Firstly, to identify the pre- and during-Covid-19 diversity communication, this researcher computed two variables: PrePerspectives (2018-2019) and DuringPerspectives (2020-2021). The PrePerspectives variable represents the sum of all the diversity perspectives (*Moral, Market and Innovation*) between 2018 and 2019, and the DuringPerspectives variable represents the sum of all the diversity perspectives between 2020 and 2021. These two variables were used to answer Hypothesis 1 (RQ1).

Furthermore, this researcher calculated the average value of each diversity perspective in the 2018-2019 and 2020-2021 ranges in SPSS. This resulted in six different variables, differentiated by pre- and during-Covid-19 diversity communication: PreMoral (2018-2019), PreMarket (2018-2019) and PreInnovation (2018-2019) versus DuringMoral (2020-2021), DuringMarket (2020-2021) and DuringInnovation (2020-2021). These six variables were used to analyze Hypotheses 2 through 4 (RQ2) and the extra analysis of the difference in each diversity perspective before and during Covid-19.

## 3.3.3 Financial performance and financial performance difference

This study applied Tobin's *Q* to measure financial performance. Tobin's *Q* equals a firm's total asset value divided by the total market value. Tobin's *Q* is the most commonly used measurement of financial performance (Anderson & Reeb, 2003). It reflects the actual economic condition, future growth opportunities, and the investors' expectation of a firm's value to asset replacement cost (Anderson & Reeb, 2003; Lo & Liao, 2021; McGahan, 1999). A Tobin's *Q* value greater than one represents investors' confidence in the firm and its growth prospects, whereas a Tobin's *Q* value less than one reflects the opposite (Brahma et al., 2021). The equation is shown below:

Tobin's Q = Total Market Value of Firm / Total Asset Value of Firm

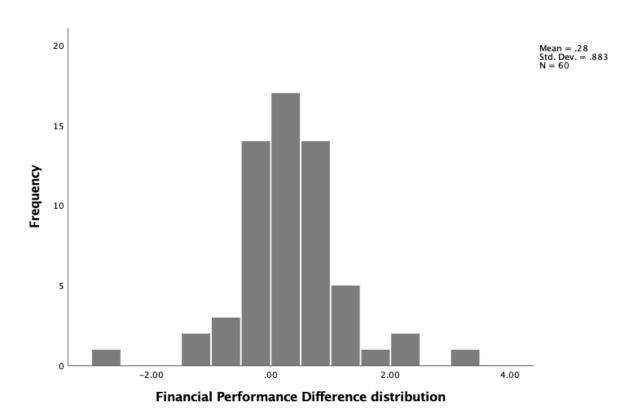
The total market value is also named the market cap. The market cap data was generated directly from the website: https://companiesmarketcap.com/. The total asset value was collected from the Fortune Global 500 list. All the data from all the relevant years are accessible from both sources.

After calculating all Tobin's *Q* values for each year, the average values for 2018-2019 and 2020-2021 were calculated to represent the pre- and during-Covid-19 financial performances. Subsequently, this research computed a new variable (FinancialPerformanceDifference) in SPSS to represent the financial performance difference, calculated by subtracting the pre-Covid-19 financial performance from the during-Covid-19 financial performance.

To illustrate how to calculate the financial performance and the difference, take Shell as an example. The total market value of Shell in 2018 was 242,140, and its total asset value in 2018 was 407,097. Therefore, Shell's Tobin's *Q* value in 2018 equals 242,140 divided by 407,097, which is 0.56. Following the same method, Shell's Tobin's *Q* values in 2019, 2020 and 2021 are 0.60, 0.34 and 0.44. The next step is to calculate the average Tobin's *Q* values pre- and during Covid-19, which equals 0.60 for 2018-2019 and 0.39 for 2020-2021. The final step is to calculate the financial performance difference, subtracting the average pre-Covid-19 value (0.60) from the average during-Covid-19 value (0.39). Thus, Shell's financial performance difference between pre- and during Covid-19 is -0.21.

The financial performance difference is used to a) find the normal distribution of the sample, b) answer the second research question, and c) answer Hypotheses 2 through 4. The normal distribution figure is shown below.

Figure 3.3.3: The normal distribution of 60 organizations' financial performance differences.



*Note.* The *Mean* of all 60 organizations' financial performance difference = .28, SD = .883, total N = 60.

# 3.4. Data Analyses

After confirming the 60 Global 500 organizations and collecting the 237 annual reports, those annual reports were transferred into the DivPAR tool to analyze the diversity perspectives in the reports. The DivPAR tool searched for the diversity perspectives in each annual report across the relevant years and formulated a list outlining the frequency of each diversity perspective in each year. The overview of the percentage of each diversity perspective in annual reports by year is shown in Table 1 above. The diversity perspective frequency in the list was transferred to SPSS to compute new variables: PrePerspectives (2018-2019) and DuringPerspectives (2020-2021). The PrePerspectives variable represents

the sum of all the diversity perspectives between 2018 and 2019, and the DuringPerspectives variable represents the sum of all the diversity perspectives between 2020 and 2021. These two variables were used to analyze Hypothesis 1. This study applied the repeated measures ANOVA (General Linear Model) to analyze the first hypothesis by using time as the independent variable and the two diversity perspectives as the dependent variables.

Once the financial performance differences were calculated, the results were transferred to SPSS. Meanwhile, an additional six new variables were computed, differentiated by pre-and during-Covid-19 diversity communication: PreMoral (2018-2019), PreMarket (2018-2019) and PreInnovation (2018-2019) versus DuringMoral (2020-2021), DuringMarket (2020-2021) and DuringInnovation (2020-2021). The financial performance difference and these six variables were used to analyze Hypotheses 2 through 4. The repeated measures ANOVA (General Linear Model) was applied to analyze Hypotheses 2 through 4 by using the time as the independent variable and the diversity perspectives as the dependent variables, adding the financial performance difference as a second independent variable to investigate a possible interaction effect on the diversity communication.

In addition, an extra analysis was conducted to examine the differences between each diversity perspective in diversity communication before and during the Covid-19 pandemic. Those six variables mentioned above were used to analyze the differences with the analysis of repeated measures ANOVA.

## 4. Results

To determine the changes (if any) in diversity communication within the 60 organizations' annual reports pre-and during the Covid-19 pandemic and to investigate if the changes in each diversity communication perspective were affected by the financial performance differences, a repeated measures ANOVA (General Linear Model) was run to answer the hypotheses separately (*N*=55).

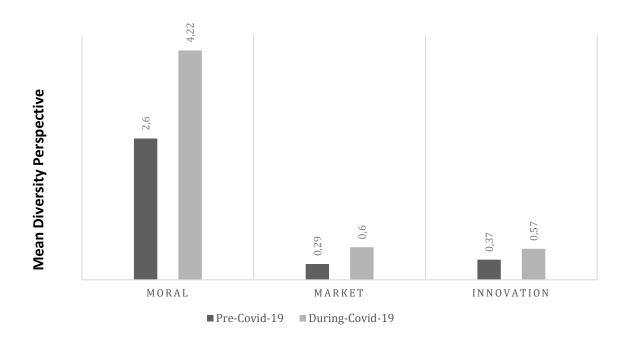
Hypothesis 1: It is expected to see an overall decrease in organizational diversity communication when comparing the pre-and during-Covid-19 pandemic.

A repeated measures ANOVA with a Greenhouse-Geisser correction revealed that the mean of the presence of diversity communication (equal to the sum of all diversity perspectives) differed significantly between pre-Covid-19 (M = 6.53, SD = 8.96) and during the Covid-19 pandemic (M = 10.78, SD = 11.66), F(1, 54) = 22.40, p < .001. Therefore, a change occurred in diversity communication within the 60 organizations' annual reports from before and during the Covid-19 pandemic. However, the result is not as expected. Contrary to the expectation of an overall decrease, the results show that the overall diversity communication increased significantly from pre-Covid-19 to during Covid-19. Thus, there was an overall increase in organizational diversity communication during the Covid-19 pandemic compared to before the Covid-19 pandemic. Hence, Hypothesis 1 is rejected.

Although there was an overall increase, the results could not provide details on what are the differences of each diversity perspective in diversity communication before and during the Covid-19 pandemic. Thus, an additional analysis was conducted to investigate these changes. The results from the repeated measures ANOVA with a Greenhouse-Geisser correction reveal that the means of the *Moral and Market perspectives* differ significantly between pre- and during the Covid-19 pandemic. In contrast, the mean of the *innovation perspective* did not differ significantly. The *Moral perspective* pre-Covid-19 (M = 2.60, SD = 3.90) increased significantly during Covid-19 (M = 4.22, SD = 4.87), F(1, 54) = 16.74, p < .001. The *Market perspective* pre-Covid-19 (M = .29, SD = .55) increased significantly during Covid-19 (M = .60, SD = .80), F(1, 54) = 9.08, p = .004. Although the results show that the *Innovation perspective* pre-Covid-19 (M = .37) increased during Covid-19 (M = .57), the

change is not significant, F(1, 54) = 3.4, p = .590. The change of each diversity perspective pre-and during Covid-19 is illustrated in the figure below.

Figure 4: The change of each diversity perspective pre- and during the Covid-19 pandemic.



Note. The mean Diversity Perspective in Figure 2 shows the mean of the Moral, Market and Innovation Perspectives pre- (2018-2019) and during (2020-2021) the Covid-19 pandemic.

Hypothesis 2: Compared to pre-Covid-19, it is expected to see an increase in the Moral perspective in all organizational diversity communication regardless of the financial performance during the Covid-19 pandemic.

A repeated measures ANOVA was conducted with time as the independent variable and the *Moral perspective* as the dependent variable. The financial performance difference variable was added as a second independent variable to investigate a possible interaction effect on the *Moral perspective*. Two results are interpreted below: the interaction effect and the main effect.

The results revealed that the interaction effect of financial performance differences on the *Moral perspective* is insignificant, F(1, 53) = 1.22, p = .270. Thus, the *Moral perspective* is not affected by the financial performance differences, regardless of whether

the organizations financially benefited from, suffered from or remained the same during the Covid-19 pandemic. The main effect is significant. The results related to Hypothesis 1 above show an increase in the *Moral perspective* pre- and during the Covid-19 pandemic. Hence, the *Moral perspective* increased during the Covid-19 pandemic from the pre-Covid-19 period, regardless of the financial performance differences. Therefore, Hypothesis 2 is accepted.

Hypothesis 3: Compared to pre-Covid-19, organizations whose financial performance suffered during the Covid-19 pandemic are more likely to show a decrease in the Market perspective on diversity communication.

A repeated measures ANOVA was conducted with time as the independent variable and the Market perspective as the dependent variable. The financial performance difference variable was added as a second independent variable to investigate a possible interaction effect on the *Market perspective*. Two results are interpreted below: the interaction effect and the main effect.

The results revealed that the interaction effect of financial performance difference on the *Market perspective* is insignificant, F(1, 53) = .004, p = .951. Therefore, the *Market perspective* is not affected by the financial performance differences, regardless of whether the organization's financial performance suffered from the Covid-19 pandemic. The main effect is significant. Moreover, contrary to the expectation that the *Market perspective* decreased during the Covid-19 pandemic, the results related to Hypothesis 1 show that the *Market perspective* actually increased between pre-Covid-19 and during Covid-19. Thus, it is not true that organizations whose financial performance suffered from Covid-19 decreased from the *Market perspective*. Thus, Hypothesis 3 is rejected.

Hypothesis 4: Compared to the pre-Covid-19 pandemic situation, organizations whose financial performance benefited during the Covid-19 pandemic are more likely to increase in the Innovation perspective in diversity communication.

A repeated measures ANOVA was conducted with time as the independent variable and the *Innovation perspective* as the dependent variable. The financial performance

difference variable was added as a second independent variable to investigate a possible interaction effect on the Innovation perspective. Two results are interpreted below: the interaction effect and the main effect.

The results reveal that the interaction effect of financial performance difference on the *Innovation perspective* is insignificant, F(1, 53) = .18, p = .673. Therefore, the *Innovative perspective* is not affected by the financial performance differences, regardless of whether the organization's financial performance benefitted from the Covid-19 pandemic. The main effect is also insignificant. As explicated in the results related to Hypothesis 1, there was no significant change in the *Innovation perspective* between pre- and during Covid-19. As no significant change was detected in the *Innovation perspective* between pre- and during Covid-19, regardless of the financial performance difference, Hypothesis 4 is rejected.

The results detailed above suggest that there was indeed an overall increase in diversity communication during the Covid-19 pandemic compared to the pre-Covid-19 period. Specifically, according to the additional analyses conducted on the changes in each perspective of diversity communication between pre- and during the Covid-19 pandemic, both the *Moral and Market perspectives* increased significantly, whereas the *Innovation perspective* increased insignificantly. Thus, the results failed to prove Hypothesis 1. The investigation into the effects of financial performance differences on the different perspectives of diversity communication for Hypotheses 2 through 4 revealed no significant interaction effects, regardless of whether organizations financially benefited or suffered from the Covid-19 pandemic. Thus, the results failed to prove Hypotheses 3 and 4, while Hypothesis 2 was accepted.

## 5. Discussion and Conclusion

#### 5.1 Discussion

This study's main objectives were to analyze the changes in diversity communication between pre- and during the Covid-19 pandemic and to investigate the interaction effects of financial performance differences on diversity communication during that time. By utilizing the automated quantitative content analysis DivPAR tool as a research method to examine 237 annual reports and applying Tobin's Q as the financial performance measurement to calculate the 60 organizations' financial performance differences between pre- and during Covid-19, the present study aims to bridge existing theoretical and methodological gaps in the body of research on this topic.

This paper presented the research questions, 1) How did organizational diversity communication differ pre- (2018-2019) and during (2020-2021) the Covid-19 pandemic, and 2) How was this affected by the organizations' financial performance differences at that time? The results elucidate that during the Covid-19 pandemic, organizations' diversity communication continued along with the same upward trend that was seen in previous years. Unexpectedly, it appears every organization continued doing what they were doing in terms of their diversity communication, despite the financial performance differences caused by the Covid-19 pandemic.

The results produced a particularly interesting finding that the Moral perspective was the dominant perspective among the three and was unaffected by financial performance differences. In the same vein, Thomas and Ely (1996) postulate that there may be a pattern in how the diversity perspectives evolve over time in the practice of diversity management, and Porcena et al. (2020) indicate that organizations use the Moral perspective as the foundation to construct the business case for diversity. These offer a reasonable explanation as to why the Moral perspective was the dominant perspective among the three—organizations normally develop the Moral perspective first in the practice of diversity management, and they use it as the foundation on which to build diversity management.

Compared to most Western organizations, many Asian organizations are still in the early stages of diversity management because diversity management was first developed and adopted in the West and by Western organizations (Syed & Özbilgin, 2009). It was

apparent in the data that most Asian organizations present Moral perspectives but not Market and Innovation perspectives. However, the data showed that Western organizations either only focus on Moral perspectives or focus on a multitude of Moral perspectives in addition to a few other diversity perspectives. This reflects that diversity management in Western organizations might also be in the early stages, only slightly further along than in Asian organizations.

The data also shows that the Market perspective increased during Covid-19 regardless of whether or not the organizations financially suffered from the Covid-19 pandemic. This reflects the organizations' ambition to expand the markets even during the Covid-19 pandemic and their faith in diverse work groups to help them generate more profit in different markets.

Only the Innovation perspective did not change significantly during the Covid-19 pandemic, regardless of whether or not the organizations financially benefited from the Covid-19 pandemic. The Innovation perspective is deemed to be the only perspective that can provide organizations with sustainable diversity, results to Ely and Thomas (2001). However, it is also the most difficult to achieve because of the excessive time and human resources necessary to develop this perspective (Ely & Thomas, 2001). In this way, it is unsurprising that the Innovation perspective is not the priority for most organizations' diversity management. Furthermore, this reinforces the proposed conclusion that many global organizations are still in the early stages of diversity management.

#### 5.2 Theoretical implications

Diversity communication in online corporate communication media has been studied by a number of scholars (e.g., Guerrier & Wilson, 2011; Hofhuis et al., 2021; Jansen et al., 2021; Point & Singh, 2003). Most focused on European and British organizations, meaning there are limited studies on organizations from different cultural contexts. The present study bridges that gap by investigating diversity communication in Fortune Global 500 organizations, proposing a new theoretical model to understand diversity communication in a global context. Moreover, considering the limited number of studies conducted on annual reports as the medium of diversity communication, this study offers an expansion of the literature on diversity communication in annual reports and provides a useful starting point

for future research. Naturally, this new theoretical model needs to be replicated with wider sample sizes. This is because organizations adopting the diversity perspective differ from the organizations' business contexts, such as different cultural backgrounds and industries (Ely & Thomas, 2001; Joshi & Roh, 2009; Köllen, 2021; Podsiadlowski et al., 2013; Thomas & Ely, 1996). Regarding the cultural context, this study reflects that alongside Western countries, Asian countries also implement diversity management, but the management practices may be different. For example, cultural dimensions such as power distance and masculinity in China could guide Chinese organizations to implement diversity management differently from U.S. organizations. Thus, it would be worthwhile to compare diversity perspectives between different cultural contexts.

Furthermore, in the industry context, the Market and Innovation perspectives are related to the business case for diversity, and organizations use the business case for diversity to leverage business performance (Litvin, 2006). Although the results show that there were different trends in these two perspectives, the explanation for the differences in these two perspectives may change from industry to industry. According to Kalev et al. (2006), for example, the service industry is one of the key drivers of diversity management, therefore, it is reasonable to assume that the industry plays an important role in organizational diversity communication.

The study's first objective aimed to fill the research gap in the Covid-19 pandemic and update the knowledge on diversity communication. The results concerning this study's first research question rejected the hypothesis derived from Karaibrahimo's (2010) CSR-related topic communication study. Specifically, Karaibrahimo's (2010) results suggest that Fortune 500 organizations dropped the CSR-related topic communication on their websites during the 2008 financial crisis. However, the present trend in diversity communication revealed the opposite. This could imply that although diversity communication acts as a component of CSR, they are different. Alternatively, one could argue that the Covid-19 pandemic is different from the 2008 financial crisis and thus carries different implications. Either way, further research is needed to investigate the similarities and differences between CSR and diversity communication, as well as the diversity communication differences between the 2008 financial crisis and the Covid-19 pandemic, to progress towards a comprehensive understanding.

A possible reason for the increase in diversity communication during Covid-19 is that not all diversity statements translate into actual interventions that contribute to society. Organizations could have engaged in "windowdressing" — a term used to denote when organizations promote diversity for the purposes of branding and good reputation (Dobbin & Kalev, 2018; Forehand & Grier, 2003; Jonsen et al., 2019). To provide a more definitive answer, future research could examine whether the diversity communication involved actual diversity management during the Covid-19 pandemic.

The trends of the perspectives in diversity communication present another intriguing theoretical implication. These results show that both the Market and Moral perspectives increased over the years, and only the Innovation perspective showed no significant change. As Thomas and Ely (1996) proposed, there may be a pattern in which organizations develop the Moral perspective before developing the other two. The present research in diversity communication may provide a more detailed order for this pattern: organizations develop the Moral perspective first as the foundation on which to build diversity management; this is followed by the employment of the Market perspective to reach more markets and consequently generate more profit; finally, with extra profit and human resources to manage the Innovation perspective, organizations aim to achieve sustainable diversity results.

This is an extension of Thomas and Ely's (1996) proposal of the diversity management development pattern and emphasizes the indication from Porcena et al. (2020) that the Moral perspective is the foundation for building up the business case for diversity. This ordering of the diversity management development pattern is thus compelling and worth verifying. A particularly valuable avenue of exploration would be to use the organizations that reached the Innovation perspective as samples to examine whether the pattern assumed in this study is correct. The findings may reveal the specific diversity management pattern, contributing to the diversity management literature and providing organizations with valuable insights regarding how to develop diversity management.

This study's second objective is to investigate the interaction effect of financial performance differences on diversity communication between pre- and during the Covid-19 pandemic. Such an interaction effect has not been studied to date. Unexpectedly, the results posited that the financial performance differences did not impact diversity

communication during that time. Thus, it can be true that diversity management positively affects financial performance, but it is not true that financial performance affects diversity management, according to this study. Thus, future research is needed to understand why financial performance does not appear to have any causal relationship with diversity communication. Instead, companies appear to follow the trend. One justification could be that organizations are constrained by pressure from investors, stakeholders, and related legislation. Conducting more detailed analyses could help us understand how diversity communication is affected by external influences.

Additionally, a previous study on Dutch organizations from Hofhuis et al. (2021) concludes that the three diversity perspectives are neither incompatible nor fully independent. The present study affirms this conclusion in a broader organizational context. Not limited to Dutch organizations, this research shows how the three diversity perspectives co-exist in global organizations. However, more thorough research is required to confirm this finding in a bigger sample size.

#### 5.3 Limitations and Future research

There are limitations of this study that could be eradicated in future studies. Firstly, this study drew its sample from the Fortune Global 500 list to represent organizations globally. However, one might argue that the sample is not completely representative of organizations globally. The organizations in this sample are mainly from Europe and the U.S., with few Asian organizations. Therefore, the research could be enhanced by broadening the sample size to include organizations from more regions.

Secondly, despite annual reports being one of the most formal and regular organizational communication forms which assist in understanding an organization's perspective on cultural diversity, it is possible that annual reports do not reflect the complete range of diversity management practices in real-world organizations. Thus, the results could reflect the organizational diversity communication in annual reports but not in other online and offline organizational, managerial routines.

Lastly, the financial performance measurement—Tobin's *Q*—only measures organizations' market and asset value, meaning other financial aspects were excluded from

this study. These exclusions could prove to limit the presentation of an organization's financial performance in its entirety.

Finally, although the directions for future studies were mentioned in the previous section, the limitations also produced two extra guidelines for future research, namely broadening the research scope on organizational managerial materials and other financial performance measurements.

## **5.4 Practical implications**

The practical implications are as follows. First, diversity perspectives have been proven to affect organizational outcomes differently (Ely & Thomas, 2001). Thus, comparing the diversity communication pre- and during Covid-19 allows organizations to assess, review, and adjust their diversity management to align with their organizational diversity outcomes. From the social perspective, these results may serve as references for the relevant governments and related stakeholders to examine the organizations' diversity practices. In this way, enhancing the regulations and supervision for organizational accountability contributes to an equal society. In response to this, the Global 500 organizations should ensure they have well-developed diversity policies and practices to protect their diverse work groups' rights and be abreast of government regulations and laws.

Second, investing in diversity communication may show that some organizations are under pressure from the government as well as society to comply with domestically and internationally defined non-discrimination and fairness standards. This is probably more evident in organizations situated in non-Western environments because the Western world leads in diversity management. Seeing that diversity management is beneficial for both organizations and society, this pressure may encourage organizations and governments from non-Western countries to learn more about diversity management and develop a diversity management policy that fits their respective cultural backgrounds.

Third, the prevalence of the Moral perspective shows that many organizations' diversity management is still in the early stages. This statement is evidenced by the dominant position of the Moral perspective, which accounted for nearly an average of 80% of the total diversity communication across the four years relevant to this study. Investing in

the Moral perspective is not necessarily related to investing in actual diversity interventions. This raises the possible issue of "windowdressing". Organizations may communicate empty diversity statements to the public merely with the aim of building their reputation without any real contribution to society. In the long term, this could breed negative connotations for diversity management and an inauthentic reputation for the organizations (Dobbin & Kalev, 2018; Foreh & Grier, 2003). On the other hand, there is also a high possibility that some organizations genuinely want to do good for society. Those organizations believe investing in diversity is "the right thing to do" (Jansen et al., 2021, p. 747). Whether "windowdressing" or doing the right thing, organizations should consider creating more initiatives on diversity management, such as hiring a diverse workforce and diversity awareness training. In doing so, they can move beyond the Moral perspective toward the Market and Innovation perspectives to produce something meaningful for the society while reaping the rewards of diversity results.

#### 5.5 Conclusion

Despite the limitations explained above, this study has provided answers to the research gap concerning diversity communication trends across organizations globally preand during the Covid-19 pandemic. Moreover, it examined the effects of financial performance on diversity communication, offering insightful additions to the knowledge on the subject. Despite having to face the impact of the Covid-19 pandemic, the organizations did not cease communicating diversity to the public. Organizations still appear to prioritize and believe in diversity management regardless of financial performance differences. Additionally, this paper has recommended some pertinent guidelines for future research, such as the variation in the diversity management pattern and the examination of factors that are likely to shape trends in organizational diversity communication.

## 7. References

- Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. *Journal of Finance*, *58*(3), 1301–1327. https://doi.org/10.1111/1540-6261.00567
- Avery, D. R., & McKay, P. F. (2006). Target practice: An organizational impression management approach to attracting minority and female job applicants. *Personnel Psychology*, *59*(1), 157–187. https://doi.org/10.1111/j.1744-6570.2006.00807.x
- Bali, S., Dhatt, R., Lal, A., Jama, A., Van Daalen, K., & Sridhar, D. (2020). Off the back burner:

  Diverse and gender-inclusive decision-making for COVID-19 response and recovery.

  BMJ Global Health, 5(5), 4–6. https://doi.org/10.1136/bmjgh-2020-002595
- Barbosa, I., & Cabral-Cardoso, C. (2010). Equality and diversity rhetoric: One size fits all?

  Globalization and the Portuguese context. *Equality, Diversity and Inclusion: An International Journal*, 29(1), 97–112. https://doi.org/10.1108/02610151011019237
- Bear, S., Rahman, N., & Post, C. (2010). The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *Journal of Business Ethics*, *97*(2), 207–221. https://doi.org/10.1007/s10551-010-0505-2
- Bebbington, J., Larrinaga, C., & Moneva, J. M. (2008). Corporate social reporting and reputation risk management. *Accounting, Auditing & Accountability Journal*, *21*(3), 337–361. https://doi.org/10.1108/09513570810863932
- Beckwith, F., & Jones, T. E. (Eds.). (1997). Affirmative action: Social justice or reverse discrimination? Amherst, MA: Prometheus Books.
- Belanger, L. (2021, August 1). Methodology for Global 500. Fortune. https://fortune.com/franchise-list-page/global-500-methodology-2021/
- Bird, R., Hall, A. D., Momentè, F., & Reggiani, F. (2007). What corporate social responsibility activities are valued by the market? *Journal of Business Ethics*, *76*(2), 189–206. https://doi.org/10.1007/s10551-006-9268-1
- Boehm, S. A., Dwertmann, D. J., Kunze, F., Michaelis, B., Parks, K. M., & McDonald, D. P. (2014). Expanding insights on the diversity climate–performance link: The role of workgroup discrimination and group size. *Human Resource Management*, *53*(3), 379-402. https://doi.org/10.1002/hrm.21589
- Brahma, S., Nwafor, C., & Boateng, A. (2021). Board gender diversity and firm performance:

- The UK evidence. *International Journal of Finance and Economics*, *26*(4), 5704–5719. https://doi.org/10.1002/ijfe.2089
- Cannon, J. N., Ling, Z., Wang, Q., & Watanabe, O. V. (2020). 10-K disclosure of corporate social responsibility and firms' competitive advantages. *European Accounting Review*, 29(1), 85–113. https://doi.org/10.1080/09638180.2019.1670223
- Clayton, S. D., & Crosby, F. J. (1992). Justice, gender, and affirmative action. Ann Arbor: University of Michigan Press.
- Chaudhary, M., Sodani, P. R., & Das, S. (2020). Effect of COVID-19 on economy in India:

  Some reflections for policy and programme. *Journal of Health Management*, *22*(2), 169–180. https://doi.org/10.1177/0972063420935541
- Cho, J., Tadmor, C. T., & Morris, M. W. (2018). Are all diversity ideologies creatively equal?

  The diverging consequences of colorblindness, multiculturalism, and polyculturalism. *Journal of Cross-Cultural Psychology*, 49(9), 1376–1401.

  https://doi.org/10.1177/0022022118793528
- Cox, T. H., & Blake, S. (1991). Managing cultural diversity: Implications for organizational competitiveness. *Academy of Management Perspectives*, *5*(3), 45–56. https://doi.org/10.5465/ame.1991.4274465
- De Dreu, C. K. W., & West, M. A. (2001). Minority dissent and team innovation: The importance of participation in decision-making. *Journal of Applied Psychology*, 86(6), 1191–1201. https://doi.org/10.1037/0021-9010.86.6.1191
- Dobbin, F., & Kalev, A. (2018). Why doesn't diversity training work? The challenge for industry and academia. *Anthropology Now*, *10*(2), 48–55. https://doi.org/10.1080/19428200.2018.1493182
- Dwertmann, D. J., Nishii, L. H., & van Knippenberg, D. (2016). Disentangling the fairness & discrimination and synergy perspectives on diversity climate: Moving the field forward. *Journal of Management*, 42(5), 1136–1168.

  https://doi.org/10.1177/0149206316630380
- Edelman, L. B., Riggs Fuller, S., Mara-Drita, I. (2001). Diversity rhetoric and the managerialization of law. *American Journal of Sociology*, *106(6)*, 1589-1641
- Edwards, M. R., & Kelan, E. K. (2011). Employer branding and diversity: Foes or friends? In M. J. Brannan, E. Parsons, & V. Priola (Eds.), *Branded Lives: The Production and Consumption of Meaning at Work* (pp. 168-180). Edward Elgar Publishing.

- https://doi.org/10.4337/ 9780857938145.00016
- Eikhof, D. R. (2020). COVID-19, inclusion and workforce diversity in the cultural economy: What now, what next? *Cultural Trends*, *29*(3), 234–250. https://doi.org/10.1080/09548963.2020.1802202
- Ely, R. J., & Thomas, D. A. (2001). Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, 46(2), 229–273. https://doi.org/10.2307/2667087

  Foreh, M. R., & Grier, S. (2003). When is honesty the best policy? The effect of stated company intent on consumer skepticism. Journal of Consumer Psy- chology, 13(3), 349–356. https://doi.org/10.1207/S15327663JCP1303\_15
- Franczak, J., & Margolis, J. (2022). Women and great places to work: Gender diversity in leadership and how to get there. *Organizational Dynamics*, 100913. https://doi.org/10.1016/j.orgdyn.2022.100913
- Garrison, W. A., & Modigliani, A. (1994). The changing culture of affirmative action. In P.

  Burstein (Ed.), *Equal Employment Opportunity: Labor Market Discrimination and Public Policy* (pp. 373-394). New York, NY: Aldine de Gruyter.
- Gilbert, J. A., Stead, B. A., & Ivancevich, J. M. (1999). Diversity management: A new organizational paradigm. *Journal of Business Ethics*, *21*, 61–76.
- Gomez, L. E., & Bernet, P. (2019). Diversity improves performance and outcomes. *Journal of the National Medical Association*, *111*(4), 383–392. https://doi.org/10.1016/j.jnma.2019.01.006
- Guerrier, Y., & Wilson, C. (2011). Representing diversity on UK company websites. *Equality, Diversity and Inclusion*, *30*(3), 183–195. https://doi.org/10.1108/02610151111124932
- Hackston, D., & Milne, M. J. (1996). Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1), 77–77.
- Hofhuis, J., Schafraad, P., Trilling, D., Luca, N., & van Manen, B. (2021). Automated content analysis of cultural diversity perspectives in annual reports (DivPAR): Development, validation, and future research agenda. *Cultural Diversity and Ethnic Minority Psychology*. https://doi.org/10.1037/cdp0000413
- Hofhuis, J., van der Zee, K. I., & Otten, S. (2012). Social identity patterns in culturally diverse organizations: The role of diversity climate. *Journal of Applied Social Psychology*, 42(4),

- 964-989. https://doi.org/10.1111/j.1559-1816.2011.00848.x
- Homan, A. C. (2019). Dealing with diversity in workgroups: Preventing problems and promoting potential. *Social and Personality Psychology Compass*, *13*(5). Article e12465. https://doi.org/10.1111/spc3.12465
- Hossain, M. (2021). The effect of the Covid-19 on sharing economy activities. *Journal of Cleaner Production*, *280*, 124782. https://doi.org/10.1016/j.jclepro.2020.124782
- Investopedia. (2021, May 4). *Annual report vs. 10-K: What's the difference?*https://www.investopedia.com/ask/answers/102714/what-are-differences-between-10k-report-and-firms-own-annual
  report.asp#:%7E:text=The%2010%2DK%20is%20generally,available%20on%20the%20company's%20website.
- Jabbour, C. J. C., Gordono, F. S., Oliveira, J. H. C., De Martinez, J. C., & Battistelle, R. A. G. (2011). Diversity management: Challenges, benefits, and the role of human resource management in Brazilian organizations. *Equality, Diversity and Inclusion*, *30*(1), 58–74. https://doi.org/10.1108/026101511111110072
- Jansen, W. S., Kröger, C., van der Toorn, J., & Ellemers, N. (2021). The right thing to do or the smart thing to do? How communicating moral or business motives for diversity affects the employment image of Dutch public and private sector organizations. *Journal of Applied Social Psychology*, *51*(7), 746–759. https://doi.org/10.1111/jasp.12783
- Jayne, M. E. A., & Dipboye, R. L. (2004). Leveraging diversity to improve business performance: Research findings and recommendations for organizations. *Human Resource Management*, *43*(4), 409–424. https://doi.org/10.1002/hrm.20033
- Joniaková, Z., Jankelová, N., Blštáková, J., & Némethová, I. (2021). Cognitive diversity as the quality of leadership in crisis: Team performance in health service during the Covid-19 pandemic. *Healthcare (Switzerland)*, *9*(3). https://doi.org/10.3390/healthcare9030313
- Jonsen, K., Point, S., Kelan, E. K., & Grieble, A. (2019). Diversity and inclusion branding: A five-country comparison of corporate websites. *International Journal of Human Resource Management*, 32(3), 616–649.
  - https://doi.org/10.1080/09585192.2018.1496125
- Joshi, A., & Roh, H. (2009). The role of context in work team diversity research: A metaanalytic review. *Academy of Management Journal*, *52*(3), 599–627. https://doi.org/10.5465/AMJ.2009.41331491

- Kalev, A. (2020, April). *U.S. unemployment rising faster for women and people of color*.

  Harvard Business Review. https://hbr. org/2020/04/research-u-s-unemployment-rising-faster-for-women-and-people-of-color
- Kalev, A., Dobbin, F., & Kelly, E. (2006). Best practices or best guesses? Assessing the efficacy of corporate affirmative action and diversity policies. *American Sociological Review*, 71(4), 589–617. https://doi.org/10.1177/000312240607100404
- Karaibrahimo, Y. (2010). Corporate social responsibility in times of financial crisis. *African Journal of Business Management*, *4*(4), 382–389.
- Kelly, E., & Dobbin, F. (1998). How affirmative action became diversity management: Employer response to antidiscrimination law, 1961 to 1996. *American Behavioral Scientist*, *41*(7), 960–984.
- Köllen, T. (2021). Diversity management: A critical review and agenda for the future. *Journal of Management Inquiry*, *30*(3), 259–272. https://doi.org/10.1177/1056492619868025
- Konrad, A. M., & Linnehan, F. (1995). Race and Sex Differences in Line Managers' Reactions to Equal Employment Opportunity and Affirmative Action Interventions (pp. 409–439).

  SAGE.
- Lebar, M. (1982). A general semantics analysis of selected sections of the 10-K, the annual report to shareholders, and the financial press release. *The Accounting Review*, *57*(1), 176–189. https://www.jstor.org/stable/246748
- Lee, S., Singal, M., & Kang, K. H. (2013). The corporate social responsibility-financial performance link in the U.S. restaurant industry: Do economic conditions matter? *International Journal of Hospitality Management*, 32(1), 2–10. https://doi.org/10.1016/j.ijhm.2012.03.007
- Leslie, L. M. (2019). Diversity initiative effectiveness: A typological the- ory of unintended consequences. Academy of Management Review, 44(3), 538–563. https://doi.org/10.5465/amr.2017.0087
- Litvin, D. R. (2006). Making space for a better case. Handbook of Workplace Diversity, 75-94.
- Lo, F. Y., & Liao, P. C. (2021). Rethinking financial performance and corporate sustainability:

  Perspectives on resources and strategies. *Technological Forecasting and Social Change*,

  162(September 2020), 120346. https://doi.org/10.1016/j.techfore.2020.120346
- Lord, H. L. (2002). Annual reports: A literature review (1989-2001). *Journal of Technical Writing and Communication*, *32*(4), 367–389. https://doi.org/10.2190/28LM-3HQR-

#### R5QM-FCAU

- Magoshi, E., & Chang, E. (2009). Diversity management and the effects on employees' organizational commitment: Evidence from Japan and Korea. *Journal of World Business*, *44*(1), 31–40. https://doi.org/10.1016/j.jwb.2008.03.018
- Marino Jr, A. J. (1995). Separating your annual report from the herd. *Public Relations Quarterly*, 40(2), 44.
- McGahan, A. M. (1999). The performance of US corporations: 1981-1994. *Journal of Industrial Economics*, 47(4), 373–398. https://doi.org/10.1111/1467-6451.00105
- McKay, P. F., Avery, D. R., Tonidandel, S., Morris, M. A., Hernandez, M., & Hebl, M. R. (2007).

  Racial differences in employee retention: Are diversity climate perceptions the key?

  Personnel Psychology, 60(1), 35–62. https://doi.org/10.1111/j.1744-6570.2007.00064.x
- Milliken, F. J., & Martins, L. L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, 21(2), 402–433. https://doi.org/10.5465/AMR.1996.9605060217
- Nkomo, S. M., du Plessis, Y., Haq, R., & du Plessis, F. (2015). Diversity, employment equity policy and practice in emerging markets. *Handbook of Human Resource Management in Emerging Markets*, 195–224. https://doi.org/10.4337/9781781955017.00018
- Oppenheimer, D. B. (2016). The disappearance of voluntary affirmative action from the US workplace. Journal of Poverty and Social Justice, 24(1), 37-50.
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance:

  A meta-analysis. *Organization Studies*, *24*(3), 403–441.

  https://doi.org/10.1177/0170840603024003910
- Patrick, H. A., & Kumar, V. R. (2012). Managing workplace diversity: Issues and challenges. SAGE Open, 2(2), 1–15. https://doi.org/10.1177/2158244012444615
- Pelled, L. H., Eisenhardt, K. M., & Xin, K. R. (1999). Exploring the black box: An analysis of work group diversity, conflict, and performance. *Administrative Science Quarterly*, 44(1), 1–28. https://doi.org/10.2307/2667029
- Plaut, V. C. (2010). Diversity science: Why and how difference makes a difference.

  \*Psychological Inquiry, 21(2), 77–99. https://doi.org/10.1080/ 10478401003676501
- Podsiadlowski, A., Gröschke, D., Kogler, M., Springer, C., & van der Zee, K. (2013). Managing a culturally diverse workforce: Diversity perspectives in organizations. *International Journal of Intercultural Relations*, *37*(2), 159–175.

- https://doi.org/10.1016/j.ijintrel.2012.09.001
- Podsiadlowski, A., & Reichel, A. (2014). Action programs for ethnic minorities: A question of corporate social responsibility? *Business and Society*, *53*(5), 684–713. https://doi.org/10.1177/0007650313476665
- Point, S., & Singh, V. (2003). Defining and dimensionalising diversity: Evidence from corporate websites across Europe. *European Management Journal*, *21*(6), 750–761. https://doi.org/10.1016/j.emj.2003.09.015
- Porcena, Y. R., Parboteeah, K. P., & Mero, N. P. (2020). Diversity and firm performance: Role of corporate ethics. *Management Decision*, *59*(11), 2620–2644. https://doi.org/10.1108/MD-01-2019-0142
- Raineri, A. (2018). Diversity management in three Latin American countries: An institutional theory perspective. *Academia Revista Latinoamericana de Administracion*, *31*(2), 426–447. https://doi.org/10.1108/ARLA-08-2016-0220
- Richard, O. C. (2000). Racial diversity, business strategy, and firm performance: A resource-based View. *The Academy of Management Journal*, *43*(2), 164–177. https://www.jstor.org/stable/1556374
- Riffe, D., Lacy, S., Fico, F., & Watson, B. (2019). Analyzing media messages: Using quantitative content analysis in research (4th edition). New York: Routledge.
- Roberts, C. B. (1991). Environmental disclosures: A note on reporting practices in mainland Europe. *Accounting, Auditing & Accountability Journal, 4*(3). https://doi.org/10.1108/09513579110005536
- Shena, J., D'Netto, B., & Tang, J. (2010). Effects of human resource diversity management on organizational citizen behaviour in the Chinese context. *International Journal of Human Resource Management*, *21*(12), 2156–2172. https://doi.org/10.1080/09585192.2010.509622
- Shen, J., Chanda, A., D'Netto, B., & Monga, M. (2009). Managing diversity through human resource management: An international perspective and conceptual framework. *The International Journal of Human Resource Management*, *20*(2), 235–251. https://doi.org/10.1080/09585190802670516
- Shipton, H., Fay, D., West, M., Patterson, M., & Birdi, K. (2005). Managing people to promote innovation. *Creativity and Innovation Management*, *14*(2), 118–128. https://doi.org/10.1111/j.1467-8691.2005.00332.x

- Singal, M. (2014). The business case for diversity management in the hospitality industry.

  \*International Journal of Hospitality Management, 40, 10–19.

  https://doi.org/10.1016/j.ijhm.2014.02.009
- Singal, M., & Gerde, V. W. (2015). Is diversity management related to financial performance in family firms? *Family Business Review*, *28*(3), 243–259. https://doi.org/10.1177/0894486514566012
- Singh, V., & Point, S. (2004). Strategic responses by European companies to the diversity challenge: An online comparison. *Long Range Planning*, *37*(4), 295–318. https://doi.org/10.1016/j.lrp.2004.05.009
- Singh, V., & Point, S. (2006). (Re)presentations of gender and ethnicity in diversity statements on European company websites. *Journal of Business Ethics*, *68*(4), 363–379. https://doi.org/10.1007/s10551-006-9028-2
- Stanton, P., & Stanton, J. (2002). Corporate annual reports: Research perspectives used.

  \*\*Accounting, Auditing & Accountability Journal, 15(4), 478–500.

  https://doi.org/10.1108/09513570210440568
- Swan, E. (2010). Commodity diversity: Smiling faces as a strategy of containment.

  Organization, 17(1), 77–100. https://doi.org/10.1177/1350508409350043
- Sweeney, L., & Coughlan, J. (2008). Do different industries report corporate social responsibility differently? An investigation through the lens of stakeholder theory.

  \*\*Journal of Marketing Communications, 14(2), 113–124.\*\*

  https://doi.org/10.1080/13527260701856657
- Syed, J., & Özbilgin, M. (2009). A relational framework for international transfer of diversity management practices. *International Journal of Human Resource Management*, *20*(12), 2435–2453. https://doi.org/10.1080/09585190903363755
- Taylor, D. B. (2021, March 17). *The Coronavirus pandemic: A timeline*. The New York Times. https://www.nytimes.com/article/coronavirus-timeline.html
- Thomas, D., & Ely, R. (1996). Making differences matter: A new paradigm for managing diversity. *Harvard Business Review*, *74*(5), 79–90. https://doi.org/10.1225/96510
- Tsui, A. S., Egan, T. D., & O'Reilly, C. A. O. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, *37*(4), 549–579.
- Uysal, N. (2013). Shifting the paradigm: Diversity communication on corporate websites. *Public Relations Journal*, 7(2), 8–36.

- Williamson, I., Slay, H., Shapiro, D., & Shivers-Blackwell, S. (2008). The effect of explanations on prospective applicants' reactions to firm diversity practices. *Human Resource Management*, 47(2), 311–330. https://doi.org/10.1002/hrm
- Windscheid, L., Bowes-Sperry, L., Kidder, D. L., Cheung, H. K., Morner, M., & Lievens, F. (2016). Actions speak louder than words: Outsiders' perceptions of diversity mixed messages. *Journal of Applied Psychology*, 101(9), 1329–1341. https://doi.org/10.1037/apl0000107
- Yadav, S., & Lenka, U. (2020). Diversity management: A systematic review. *Equality, Diversity and Inclusion*, *39*(8), 901–929. https://doi.org/10.1108/EDI-07-2019-0197

# 8. Appendix

## Appendix A

Company	Country	Industry
Microsoft	US	Computer Software
Phillips 66	US	Petroleum Refining
Anheuser-Busch InBev	Belgium	Beverages
Accenture	US	Information Technology Services
Alphabet	US	Internet Services and Retailing
JD.com	China	Internet Services and Retailing
Costco	US	General Merchandisers
Allstate	US	Insurance: Property and Casualty
Abbott Laboratories	US	manufacture
Home Depot	US	Specialty Retailers
Procter & Gamble	US	Soaps and Cosmetics
Nestlé	Swiss	Consumer Food Products
Schneider Electric	France	Electronics
UnitedHealth Group	US	Health Care: Insurance and Managed Care
Cisco Systems	US	Network and Other Communications Equipment
Oracle	US	Computer Software
Midea Group	China	Electronics, Electrical Equip.
Meta platfroms	US	Internet Services and Retailing
Amazon	US	Internet Services and Retailing
John Deere	US	Construction and Farm Machinery
Fujitsu	Japan	Information Technology Services
Samsung Electronics	South Korea	Electronics
ABB	Swiss	Industrial Machinery
Honeywell International	US	Electronics
ВНР	Australia	Mining, Crude-Oil Production
PepsiCo	US	Consumer Food Products
Mitsubishi	Japan	Trading
Caterpillar	US	Construction and Farm Machinery
Denso	Japan	Motor Vehicles & Parts
Deutsche Post DHL Group	German	Delivery
Philip Morris International	US	Tobacco
Pfizer	US	Pharmaceuticals
Charter Communications	US	Telecommunications

Coca-Cola	US	Beverages
Volvo	Sweden	Construction and Farm Machinery
Johnson & Johnson	US	Pharmaceuticals
Magna International	Canada	Motor Vehicles & Parts
BMW	German	Motor Vehicles
AEON	Japan	Food & Drug Stores
JPMorgan Chase	US	Megabanks
Unilever	UK	Soaps and Cosmetics
Royal Dutch Shell	UK	Petroleum Refining
AbbVie	US	Pharmaceuticals
Bayer	German	Pharmaceuticals
KDDI	Japan	telecommunications
Marathon Petroleum	US	Petroleum Refining
Compass Group	UK	Diversified Outsourcing Services
China Mobile Communications	China	telecommunications
Cigna		Health Care: Pharmacy and Other
Cigita	US	Services
Walgreens Boots Alliance	US	Health Care: Pharmacy and Other Services
Intel	US	Semiconductors and Other Electronic Components
GlaxoSmithKline	UK	Pharmaceuticals
CRRC	China	Industrial Machinery
Tencent Holdings	China	Internet Services and Retailing
Walt Disney	US	Entertainment
3M	US	Chemicals
Boeing	US	Aerospace & Defense
Alibaba Group Holding	China	Internet Services and Retailing
TJX	US	Specialty Retailers
Raytheon	US	Aerospace and Defense

## Appendix B

## **Descriptive Statistics**

	Mean	Std. Deviation	N
PrePerspectives	6.5273	8.94604	55
DuringPerspectives	10.7818	11.66141	55

#### Mauchly's Test of Sphericity<sup>a</sup>

Measure: Perspectives

					Epsilon <sup>b</sup>		
Within Subjects Effect	Mauchly's W	Approx. Chi- Square	df	Sig.	Greenhouse- Geisser	Huynh-Feldt	Lower- bound
Time	1.000	.000	0		1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept Within Subjects Design: Time

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

#### Mauchly's Test of Sphericity<sup>a</sup>

Measure: Perspectives

						Epsilon <sup>b</sup>	
Within Subjects Effect	Mauchly's W	Approx. Chi- Square	df	Sig.	Greenhouse- Geisser	Huynh-Feldt	Lower- bound
Time	1 000	000	0		1 000	1 000	1 000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept Within Subjects Design: Time

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

## **Appendix C**

#### **Descriptive Statistics**

	Mean	Std. Deviation	N
PreMoral	2.6000	3.89373	55
DuringMoral	4.2182	4.86842	55

#### Mauchly's Test of Sphericity<sup>a</sup>

Measure: Moral

							Epsilon <sup>b</sup>	
	Within Subjects Effect	Mauchly's W	Approx. Chi- Square	df	Sig.	Greenhouse- Geisser	Huynh-Feldt	Lower- bound
i	Time	1.000	.000	0		1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept Within Subjects Design: Time

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

#### Tests of Within-Subjects Effects

Measure: Moral

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Sphericity Assumed	72.009	1	72.009	16.743	<.001
	Greenhouse-Geisser	72.009	1.000	72.009	16.743	<.001
	Huynh-Feldt	72.009	1.000	72.009	16.743	<.001
	Lower-bound	72.009	1.000	72.009	16.743	<.001
Error(Time)	Sphericity Assumed	232.241	54	4.301		
	Greenhouse-Geisser	232.241	54.000	4.301		
	Huynh-Feldt	232.241	54.000	4.301		
	Lower-bound	232.241	54.000	4.301		

## Appendix D

#### **Descriptive Statistics**

	Mean	Std. Deviation	N
PreMarket	.2909	.55018	55
DuringMarket	.6000	.80162	55

### Mauchly's Test of Sphericity<sup>a</sup>

Measure: Market

						Epsilon <sup>b</sup>	
Within Subjects Effect	Mauchly's W	Approx. Chi- Square	df	Sig.	Greenhouse- Geisser	Huynh-Feldt	Lower- bound
Time	1.000	.000	0		1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept Within Subjects Design: Time

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

#### Tests of Within-Subjects Effects

Measure: Market

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Sphericity Assumed	2.627	1	2.627	9.081	.004
	Greenhouse-Geisser	2.627	1.000	2.627	9.081	.004
	Huynh-Feldt	2.627	1.000	2.627	9.081	.004
	Lower-bound	2.627	1.000	2.627	9.081	.004
Error(Time)	Sphericity Assumed	15.623	54	.289		
	Greenhouse-Geisser	15.623	54.000	.289		
	Huynh-Feldt	15.623	54.000	.289		
	Lower-bound	15.623	54.000	.289		

## **Appendix E**

#### **Descriptive Statistics**

	Mean	Std. Deviation	N
PreInnovation	.3727	.72148	55
DuringInnovation	.5727	.78421	55

### Mauchly's Test of Sphericity<sup>a</sup>

Measure: Innovation

						Epsilon <sup>b</sup>	
Within Subjects Effect	Mauchly's W	Approx. Chi- Square	df	Sig.	Greenhouse- Geisser	Huynh-Feldt	Lower– bound
Time	1.000	.000	0		1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept Within Subjects Design: Time

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

#### **Tests of Within-Subjects Contrasts**

Measure: Innovation

Source	Time	Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Linear	1.100	1	1.100	3.736	.059
Error(Time)	Linear	15 900	5.4	294		

## Appendix F

#### **Descriptive Statistics**

	Mean	Std. Deviation	N
PreMoral	2.6000	3.89373	55
DuringMoral	4.2182	4.86842	55

#### Multivariate Testsa

Effect		Value	F	Hypothesis df	Error df	Sig.
Time	Pillai's Trace	.254	18.033 <sup>b</sup>	1.000	53.000	<.001
	Wilks' Lambda	.746	18.033 <sup>b</sup>	1.000	53.000	<.001
	Hotelling's Trace	.340	18.033 <sup>b</sup>	1.000	53.000	<.001
	Roy's Largest Root	.340	18.033 <sup>b</sup>	1.000	53.000	<.001
Time * FinancialPerformanceDi	Pillai's Trace	.023	1.221 <sup>b</sup>	1.000	53.000	.274
fference	Wilks' Lambda	.977	1.221 <sup>b</sup>	1.000	53.000	.274
	Hotelling's Trace	.023	1.221 <sup>b</sup>	1.000	53.000	.274
	Roy's Largest Root	.023	1.221 <sup>b</sup>	1.000	53.000	.274

a. Design: Intercept + FinancialPerformanceDifference Within Subjects Design: Time

## Tests of Within-Subjects Effects

Measure: Moral

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Sphericity Assumed	77.238	1	77.238	18.033	<.001
	Greenhouse-Geisser	77.238	1.000	77.238	18.033	<.001
	Huynh-Feldt	77.238	1.000	77.238	18.033	<.001
	Lower-bound	77.238	1.000	77.238	18.033	<.001
Time *	Sphericity Assumed	5.229	1	5.229	1.221	.274
FinancialPerformanceDi fference	Greenhouse-Geisser	5.229	1.000	5.229	1.221	.274
	Huynh-Feldt	5.229	1.000	5.229	1.221	.274
	Lower-bound	5.229	1.000	5.229	1.221	.274
Error(Time)	Sphericity Assumed	227.012	53	4.283		
	Greenhouse-Geisser	227.012	53.000	4.283		
	Huynh-Feldt	227.012	53.000	4.283		
	Lower-bound	227.012	53.000	4.283		

## Appendix G

## Multivariate Testsa

Effect		Value	F	Hypothesis df	Error df	Sig.
Time	Pillai's Trace	.137	8.406 <sup>b</sup>	1.000	53.000	.005
	Wilks' Lambda	.863	8.406 <sup>b</sup>	1.000	53.000	.005
	Hotelling's Trace	.159	8.406 <sup>b</sup>	1.000	53.000	.005
	Roy's Largest Root	.159	8.406 <sup>b</sup>	1.000	53.000	.005
Time * FinancialPerformanceDi	Pillai's Trace	.000	.004 <sup>b</sup>	1.000	53.000	.951
fference	Wilks' Lambda	1.000	.004 <sup>b</sup>	1.000	53.000	.951
	Hotelling's Trace	.000	.004 <sup>b</sup>	1.000	53.000	.951
	Roy's Largest Root	.000	.004 <sup>b</sup>	1.000	53.000	.951

a. Design: Intercept + FinancialPerformanceDifference Within Subjects Design: Time

b. Exact statistic

b. Exact statistic

### Tests of Within-Subjects Effects

Measure: Market

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Sphericity Assumed	2.478	1	2.478	8.406	.005
	Greenhouse-Geisser	2.478	1.000	2.478	8.406	.005
	Huynh-Feldt	2.478	1.000	2.478	8.406	.005
	Lower-bound	2.478	1.000	2.478	8.406	.005
Time *	Sphericity Assumed	.001	1	.001	.004	.951
FinancialPerformanceDi fference	Greenhouse-Geisser	.001	1.000	.001	.004	.951
	Huynh-Feldt	.001	1.000	.001	.004	.951
	Lower-bound	.001	1.000	.001	.004	.951
Error(Time)	Sphericity Assumed	15.622	53	.295		
	Greenhouse-Geisser	15.622	53.000	.295		
	Huynh-Feldt	15.622	53.000	.295		
	Lower-bound	15.622	53.000	.295		

## Appendix H

### Multivariate Testsa

Effect		Value	F	Hypothesis df	Error df	Sig.
Time	Pillai's Trace	.068	3.852 <sup>b</sup>	1.000	53.000	.055
	Wilks' Lambda	.932	3.852 <sup>b</sup>	1.000	53.000	.055
	Hotelling's Trace	.073	3.852 <sup>b</sup>	1.000	53.000	.055
	Roy's Largest Root	.073	3.852 <sup>b</sup>	1.000	53.000	.055
Time * FinancialPerformanceDi	Pillai's Trace	.003	.181 <sup>b</sup>	1.000	53.000	.673
fference	Wilks' Lambda	.997	.181 <sup>b</sup>	1.000	53.000	.673
	Hotelling's Trace	.003	.181 <sup>b</sup>	1.000	53.000	.673
	Roy's Largest Root	.003	.181 <sup>b</sup>	1.000	53.000	.673

a. Design: Intercept + FinancialPerformanceDifference Within Subjects Design: Time

### Tests of Within-Subjects Effects

Measure: Innovation

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Sphericity Assumed	1.152	1	1.152	3.852	.055
	Greenhouse-Geisser	1.152	1.000	1.152	3.852	.055
	Huynh-Feldt	1.152	1.000	1.152	3.852	.055
	Lower-bound	1.152	1.000	1.152	3.852	.055
Time *	Sphericity Assumed	.054	1	.054	.181	.673
FinancialPerformanceDi fference	Greenhouse-Geisser	.054	1.000	.054	.181	.673
	Huynh-Feldt	.054	1.000	.054	.181	.673
	Lower-bound	.054	1.000	.054	.181	.673
Error(Time)	Sphericity Assumed	15.846	53	.299		
	Greenhouse-Geisser	15.846	53.000	.299		
	Huynh-Feldt	15.846	53.000	.299		
	Lower-bound	15.846	53.000	.299		

b. Exact statistic