

# **The change agent that changes a lot: A study into the antecedents of short chief digital officer tenure**

Master thesis in strategic management

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## I. INTRODUCTION

Organizations large and small are facing problems regarding the rapidly evolving world and need to respond to potentially disruptive changes in the environment (Birkinshaw et al., 2018). Survival depends on this response (Lewis et al., 2014), and ensuring digital transformations is a key strategic aspect of today's and tomorrow's organization (Love et al., 2002; Verhoef et al., 2021; Zhan et al., 2022). Digital transformation is "a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies" (Vial, 2019, p. 118). In response, organizations are currently adopting new strategies based on digital resources (Lee et al., 2014; Mithas et al., 2013; Volberda et al., 2021). However, incumbent firms experience difficulties embracing digital innovations since dilemmas arise (Svahn et al., 2017). The role of the chief digital officer (CDO) has emerged as the new key leader in organizations to address digital transformations (Firk et al., 2021; Kunisch et al., 2022; Lee et al., 2014). The presence of CDOs in organizations is increasing every year (Kunisch et al., 2022; Péladeau & Acker, 2019; Statista, 2023), and their representation is growing across industries (Wavestone, 2024). As organizations seek to be data-driven, they expect CDOs to help integrate and exploit data, pursue and realize growth opportunities and thereby contribute to digital transformations (Nie et al., 2018; Zhan et al., 2022). The CDO role, which was first established in 2003 (Zhang et al., 2017), can be described as an "entrepreneur, digital evangelist and coordinator who acts as pioneer in the digital transformation of the organization" (Drechsler et al., 2018, p. 2). Nonetheless, the role of this newly recognized officer differs widely across organizations (Davenport et al., 2021; Wade & Obwegeser, 2019), and often, CDOs even help shape it (Seeher et al., 2020).

The role of the CDO is different from other C-suite officers in that its main concern is implementing organizational and digital transformations by acting as a change agent (Davenport et al., 2021; Kutnjak et al., 2019; Seeher et al., 2020). CDOs need to be able to perform change agent tasks for this, since cultural, people, process, and organizational changes are necessary for implementing digital transformations (Wavestone, 2024; Zhang et al., 2017). CDOs are the evangelists in organizations who communicate the need for digital innovation to people (Singh & Hess, 2017; Haffke et al., 2016). In the past, issues now managed by the CDO were managed by the C-level officer most similar to the CDO, the chief information officer (CIO) (Seeher et al., 2020). The task of the CIO is "to effectively manage the information technology (IT) department, create appropriate organizational structures and processes, and shape IT-enabled strategic business initiatives" (Dawson & Kauffman, 2010, p. 1). Due to unmanageable extra tasks for implementing change however, the CDO role was deemed necessary to be added to the top management team (TMT)

(Singh & Hess, 2017), even though it could increase a TMT's complexity and reduce its flexibility (Firk et al., 2021). Although the roles overlap (Tumbas et al., 2018), the role of CIO is more focused on managing and aligning the IT structure, while the supplementary CDO role is aimed at building digital capabilities and exploiting them to create new revenue streams (Tahvanainen & Luoma, 2018; Tumbas et al., 2018).

Studies have found positive effects on digital innovation and firm performance after appointing CDOs (e.g., Firk et al., 2022; Lee et al., 2014; Nie et al., 2018), and Hiller (2021) says that, although finding no effect on firm performance, CDOs do provide benefits to organizations, for example, for preventing to fall behind in technology and to be average within the sector. Still, their average tenure – the continuous number of years a person holds a position within a single organization – is the shortest of all C-suite officers (Davenport et al., 2021; SpencerStuart, 2023; Wade & Obwegeser, 2019). On average, the tenure of CDOs is 2.5 years (Davenport et al., 2021; Wade & Obwegeser, 2019), while the average tenure of officers in the Standard & Poor's (S&P) 500 index companies is 4.6 years (SpencerStuart, 2023). It is much shorter than that of chief executive officers (CEOs) (seven years), shorter than that of CIOs (4.7 years), and shorter than that of chief diversity and inclusion officers (CDIOs) (2.9 years), which had the shortest average tenure of any C-level officer in SpencerStuart's list that did not include CDOs (2023). Since CDOs show positive effects in organizations, short tenure for the CDO role could be necessary for performance and innovation because skills must be updated more often in dynamic environments (Park & Shaw, 2013; Zhang et al., 2017). Under certain circumstances, organizations do not experience any negative effect of extremely short tenure (Hausknecht & Holwerda, 2013), and short CDO tenure could indicate a problem that does not exist. However, organizations say that they struggle with CDO turnover (Wavestone, 2024). Furthermore, taking a resource-based view (RBV) perspective (Barney, 1991), organizations hire CDOs as a valuable resource (Kutnjak et al., 2019; Volberda et al., 2021) to enhance firm performance by forming new and inimitable capabilities (Firk et al., 2021; Kunisch et al., 2022; Lee et al., 2014). In addition, like in non-CDO studies, frequent turnover leads to a decrease in performance and innovation (Kim et al., 2021; Park & Shaw, 2013; Simsek, 2007; Wu et al., 2005). So, although shorter tenure for CDOs compared to other chiefs is expected, organizations do not desire this when entering a relationship.

The increasing need for good CDOs to implement vital digital transformations, combined with the inability to retain these CDOs (Wavestone, 2024), leaves organizations with a strategic imperative to solve the problem. Due to the lack of studies on the short and vague CDO role, this study seeks to answer the question, "What are the antecedents of short CDO tenure?" By taking a quantitative approach examining the antecedents of short CDO tenure based on person-job (P-J) fit and person-organization (P-O) fit theory (Kristof-Brown, 1996), the purpose of this study is to make the vague and short-tenured CDO role clearer.

This study provided nuanced findings regarding the antecedents of short CDO tenure. The key findings are that insider-ness and organizational prior experience with CDOs are predictors of short CDO tenure, contrary to what was predicted. This study recommends that managers use different retention strategies for insider and outsider CDOs and that managers should provide flexibility so that CDOs can implement their vision. In addition, contextual findings show that managers should use larger and more stable companies, as well as companies within the financial sector, as benchmarks to reflect on how to extend the tenure of CDOs. Furthermore, CDO tenure decreases for individuals who perform the CDO role subsequently, and with this, this study provided nuanced findings to existing research that discusses the temporality of the CDO role (Singh & Hess, 2017; Firk et al., 2021). Also, contributions to P-J fit and P-O fit theory are made, as these theories were used for predicting tenure in the context of a, relatively newly emerging, chief officer role, rather than the main body of fit literature focused on testing these theories on non-TMT members (see, e.g., Berisha & Lajci, 2020; Tang et al., 2013; Wang & Ma, 2013; Westerman & Cyr, 2004). This study also provided new gaps for future researchers.

This thesis proceeds as follows: Chapter II discusses the theoretical background and describes the underlying theory that helps determine the antecedents of short CDO tenure. Chapter III, the methodology, discusses the variables, how data were extracted and treated, the final sample, and what analysis will be performed. In addition, Chapter III also provides a descriptive overview of the variables. Chapter IV elaborates on the results of regression analysis and the post hoc tests and discusses the antecedents of short CDO tenure. Chapter V discusses the contributions to existing literature on CDOs and P-O fit and P-J fit theory and discusses the relevant implications for practice. In addition, Chapter V provides limitations and future research suggestions, a conclusion that provides a summary of the research findings, and at last, a reflection on the research process and design choices that were made.

## **II. THEORETICAL BACKGROUND**

The CDO role has emerged as the new key leader in organizations (Firk et al., 2021; Kunisch et al., 2022; Lee et al., 2014), and CDOs are becoming increasingly important in this era of Big Data and AI (Lee et al., 2014; Wade & Obwegeser, 2019). Although positive effects have been found on firm performance (Nie et al., 2018) and digital innovation (Firk et al., 2022), the average tenure of CDOs is only 2.5 years (Davenport et al., 2021; Wade & Obwegeser, 2019), and organizations are struggling with CDO turnover (Wavestone, 2024).

Individuals stepping out of a CDO role may do so voluntarily or involuntarily. Knowing what is happening is valuable because different effects occur (Messersmith et al., 2014; Park & Shaw, 2013), and different reasons and solutions arise (Gentry et al., 2021; Rubenstein et al., 2018). For example, Park and Shaw (2013) found that voluntary turnover events have a greater negative impact on workforce productivity and financial performance than involuntary events since they are more surprising and unmanageable. Further enhancing this unmanageability, research shows that almost half of companies are struggling to recruit people for roles that require data skills (GOV.UK, 2021; Wade & Obwegeser, 2019). Regarding CEOs for example, Gentry et al. (2021) found, among other things, that 3 percent of the turnovers happened because a new opportunity arose, 25 percent because of job performance, and 64 percent because of retirement. This is expected to be different for CDOs. Firstly, this is because not many CDOs retire in the first place (Eastwood, 2022). Not surprising since CDOs are relatively young (McKenna, 2021). Secondly, as argued by Davenport et al. (2021) and Wade and Obwegeser (2019), poor job descriptions lead to stress and incentives for CDOs to leave as well. Thirdly, CDOs get more attractive job opportunities because the demand for CDOs is high and increasing (Dawson and Knauffman, 2010; Kunisch et al., 2022), and it is a challenge to retain highly skilled employees (Park & Shaw, 2013; Zaza et al., 2023). External organizations appear to proactively seek external CDOs, as seventy percent of CDOs are recruited from outside the organization (Wade & Obwegeser, 2019), which is high compared to other C-level officers, like CIOs (57 percent) and CEOs (29 percent) (SpencerStuart, 2023). In total, more voluntary turnover is expected for CDOs, and it is valuable to know the ratio of this. However, this requires consulting and interpreting media documents, and there is a risk that organizations intentionally send opposite signals to the media (Kaplan & Minton, 2012), and approaching this in general is a time-consuming and difficult research in itself (Gentry et al., 2021). For the remainder of this study, it is assumed that CDO turnover happens more voluntarily.

### ***Theory and hypotheses***

Extending the tenure of CDOs is a strategic imperative for organizations, and this is especially true given the rate of voluntary turnover and its greater negative effects on productivity and performance. Davenport et al. (2021) and Wade and Obwegeser (2019) are the first to point out that the average tenure of CDOs is problematically short. Since previous research on CDOs emphasizes tenure as the main issue (Davenport et al., 2021; Wade & Obwegeser, 2019), this research uses tenure as the dependent variable instead of turnover or turnover intention. This is done while recognizing that research using tenure as the dependent variable lacks.

There is no general theory for describing antecedents of short tenure (Nath & Mahajan, 2017). However, as predictors of turnover lie in the realm of person-job (P-J) fit and person-organization (P-O) fit (Berisha

& Lajci, 2020; Cable & Judge, 1996; Jin et al., 2020; Kakar et al., 2023; Kristof-Brown et al., 2005), this study can draw upon fit theory. Fit perspectives originated from Kurt Lewin's equation in that behavior is a result of a person and his environment (Caplan & Harrison, 1993). P-J fit is "the fit between the abilities of a person and the demands of a job (i.e., demands-abilities) or the desires of a person and the attributes of a job (needs-supplies)" (Kristof-Brown, 1996, p. 8). On the other hand, P-O fit is the supplementary or complementary compatibility between a person and an organization based on values, goals, and personality (Kakar et al., 2023; Kristof-Brown, 1996). During job applications, P-J fit is usually assessed on the knowledge, skills, and abilities (KSAs) of a person (Kristof-Brown, 2000; Sekiguchi & Huber, 2011), and P-O fit is based on the correspondence of values and goals (Jin et al., 2020; Kakar et al., 2023; Kristof-Brown, 2000). In line with this, Wade and Obwegeser (2019) state that CDO success is dependent on the KSAs (i.e., P-J fit) and on the credibility of the CDO (i.e., P-O fit), which shows that P-J and P-O fit applies to CDO tenure. In addition, improving P-J fit and P-O fit is important for organizations, since these indirectly influence innovative behavior as well (Tang et al., 2021), which in turn influences digital transformation outcomes (Drechsler et al., 2018; Trenerry et al., 2021; Zhang et al., 2021; Zhang et al., 2023). For demarcation purposes, this study solely focuses on the fit between the CDO and the job and between the CDO and the focal organization, and not on person-vocation (P-V) fit or person-group (P-G) fit (see, Kristof-Brown, 1996).

P-J and P-O fit theory argue that a well-matched environment between a person and an organization decreases turnover intention and therefore increases tenure (Kakar et al., 2023; Tang et al., 2021; Westerman & Cyr, 2004). However, the main body of fit literature is focused on testing P-J fit and P-O fit on non-TMT members (see, e.g., Berisha & Lajci, 2020; Tang et al., 2013; Wang & Ma, 2013; Westerman & Cyr, 2004). Instead, this study uses the P-O and P-J fit rationale – that short CDO tenure is the result of a person and his environment (Caplan & Harrison, 1993) – to search for possible misfits that can cause short CDO tenure. Removing the misfit between CDOs and their environment would reduce turnover behavior and increase tenure. Contextual factors are also taken into as research has shown that contextual factors, such as firm size, organizational performance measures, industry, and the appointment of a CEO, also affect tenure (see, e.g., Aldunate, 2018; Gentry et al., 2021; Nath & Mahajan, 2017; Park & Shaw, 2013). These particularly help with understanding turnover, such that turnover may be necessary for acquiring new and specific knowledge that is more often needed in turbulent industries (Aldunate, 2018; Park & Shaw, 2013; Wiersema & Bantel, 1993, Zhang et al., 2017). Using P-J fit and P-O fit theory and the current body of research on CDOs, the following sections discuss the antecedents of short CDO tenure. Specifically, this study focused on finding specific factors that cause short CDO tenure since specific factors influence tenure for different occupations (Zaza et al., 2023). In total, three direct effects and two moderating effects are proposed.

### ***CDO insider-ness***

A CDO can be an insider with organizational experience and firm-specific knowledge or be an outsider with less firm-specific knowledge (Zhang et al., 2017). On the other hand, outsiders are believed to bring new experiences and insights into managing and exploiting digital strategies that involve big data, thereby challenging the status quo (Zhan et al., 2022), and are employed to improve human capital resources (Hiller, 2021). At the moment, approximately seventy percent of CDOs are outsiders (Wade & Obwegeser, 2019). However, although outsiders may bring the necessary competencies to perform digital transformations, which is P-J fit, they lack the credibility for implementing the change, thus lacking P-O fit (Wade & Obwegeser, 2019). On top of that, because insider CDOs have a better P-O fit, they tend to succeed more often in leading digital initiatives than outsiders (Furr et al., 2019; Hiller, 2021; Wade & Obwegeser, 2019), reducing organizational incentives for turnover. Furthermore, research on chief marketing officers (CMOs) shows that insider CMOs have longer tenure in the CMO role than outsider CMOs (Nath & Mahajan, 2017). In total, insider CDOs are expected to have more P-J fit and P-O fit, and thus have a longer tenure. The first hypothesis states that:

*Hypothesis 1 (H1): “CDOs who have been employed by the focal organization in the past (insider CDOs) have longer tenure than CDOs who have not been employed by the focal organization in the past (outsider CDOs).”*

### ***Organizational prior experience with CDOs***

Before employing a CDO, organizations need to reflect on what type of CDO is needed since different roles within organizations require different types and different configurations of relevant skills (Firk et al., 2021; Seeher et al., 2020; Wade & Obwegeser, 2019). However, many organizations do not know exactly what they desire from CDOs (Davenport et al., 2021). Determining what is required from CDOs can be difficult for organizations that do not have experience with CDOs yet, and the poor job descriptions as a result lead to stress and incentives for CDOs to leave (Davenport et al., 2021; Wade & Obwegeser, 2019). This prior experience with CDOs is lacking, as indicated by the sheer amount of CDOs (84 percent) who are the first in organizations to fulfill this role (Kunisch et al., 2022). Previous organizational experience with the CDO role is expected to lead an organization to better understand the type and configuration of skills needed in a CDO. With prior experience, organizations can better assess and ensure the P-O and P-J fit, as well as formulate less vague job descriptions and decrease job strain, resulting in longer tenure for their CDOs. I therefore hypothesize that:

*Hypothesis 2 (H2): “CDOs employed by an organization that has employed a CDO in the past will have longer tenure than CDOs employed by an organization that has not employed a CDO in the past.”*

***Organizational prior experience with CDOs and the moderation with CDO insider-ness***

Lack of prior experience with CDOs is expected to result in shorter CDO tenure. However, when an organization lacks prior experience, it is expected that organizations could better opt for an insider rather than an outsider candidate first. Thus, the relationship between organizational prior experience with CDOs and CDO tenure is expected to be moderated by CDO insider-ness, such that being an insider makes up for the effect of an organization lacking prior CDO experience. This is because P-O fit is already established for insiders (Wade & Obwegeser, 2019). I therefore hypothesize the moderating effect:

*Hypothesis 3 (H3): “CDOs employed by an organization that has employed a CDO in the past will have longer tenure than CDOs employed by an organization that has not employed a CDO in the past, however, this effect diminishes when an insider CDO is employed by the focal organization.”*

***CDO’s background in general management***

Next to skills in IT, CDOs require business knowledge, leadership and change agency skills to be able to bring about digital transformations (Davenport et al., 2021; Singh & Hess, 2017). This is not surprising since successful change projects are related to skills in management and leadership (Mosadeghrad & Ansarian, 2014; Parry et al., 2014). Organizations are proactively seeking CDOs with backgrounds in both technology and strategy (Péladeau & Acker, 2019). However, CDOs tend to lack the necessary KSAs in the latter (Davenport et al., 2021). Furthermore, in 2018, only 28 percent of CDOs had a consulting, strategy, and or business development background (Strategy&, 2019). Although organizations require different skills from their CDO (Kunisch et al., 2022; Tumbas et al., 2018), skills in general management stand out from other skills because it lacks among CDOs and focuses on what CDOs tend to be bad at, which is implementing changes within an organization (Seeher et al., 2020). Furthermore, CDOs can have all the IT knowledge in the world, but if they cannot transform companies and the people within them, it will not be of any use (Arrkgroup, 2018). Therefore, P-J fit is expected to be better when someone with a background in general management is appointed. Also, since the CDO reports to other C-suite officers (Lee et al., 2014; Wavestone, 2024), they will share more fundamental characteristics with other chiefs, also improving P-O fit (Kristof-Brown, 1996). I propose that CDOs with a background in general management will experience longer tenures, and hypothesize that:

*Hypothesis 4 (H4): “CDOs with a background in general management have longer tenure than CDOs without a background in general management.”*

### ***CDO’s background in general management and the moderation with CDO insider-ness***

A background in general management is expected to result in longer CDO tenure. However, when this is missing, it is expected that organizations could better opt for an insider candidate than an outsider candidate in terms of tenure. This is because a certain level of P-O fit is already established for insiders, and they will have more organizational support when implementing changes (Wade & Obwegeser, 2019). Thus, the relationship between a CDO’s background in general management and CDO tenure is expected to be moderated by CDO insider-ness, such that being an insider diminishes the effect of a CDO having no background in general management on tenure. I therefore hypothesize the moderating effect:

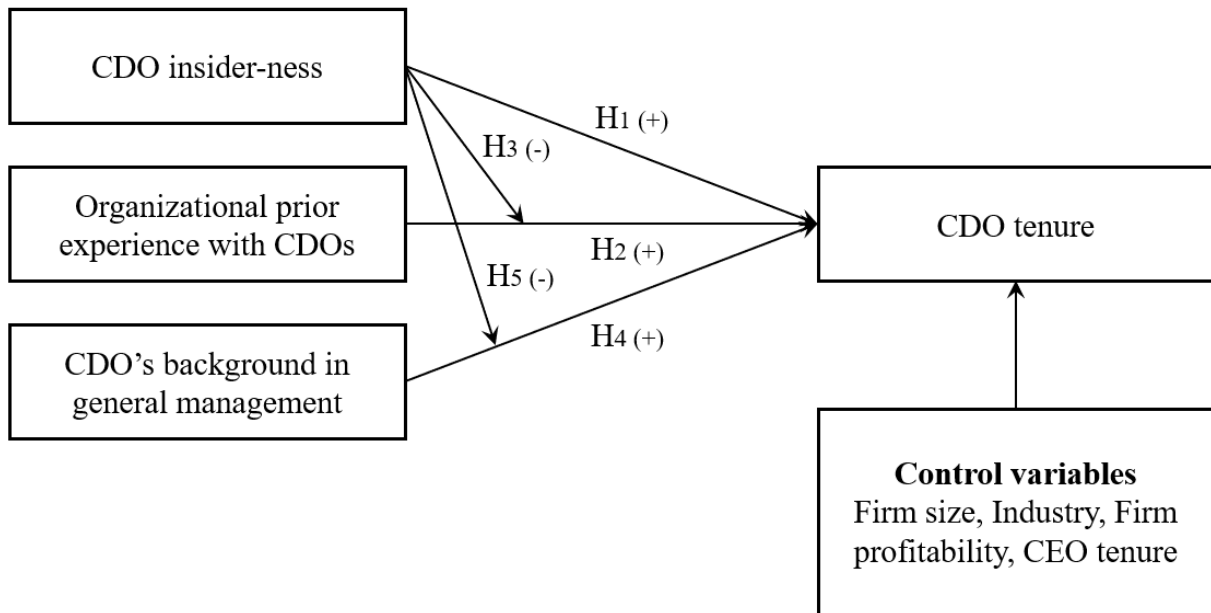
*Hypothesis 5 (H5): “CDOs with a background in general management have longer tenure than CDOs without a background in general management, however, this effect diminishes when an insider CDO is employed by the focal organization.”*

### ***Conceptual model***

The total set of hypotheses is put into the conceptual model shown in Figure 1.

**Figure 1**

*Antecedents of CDO tenure: conceptual model*



### III. METHODOLOGY

#### *Dependent variable*

*CDO tenure* is defined as the continuous number of years a person holds a Chief Data Officer (CDO) position within a single organization, calculated from the start date of their appointment to the end date. Voluntary and involuntary internal rotation (to other positions within the organization) and external departures (to other organizations) were considered as turnover events, and the sample did not include events without an end date and where death caused the end of role tenure. The CDO or CDO-like positions included ‘chief digital officer’, ‘chief data officer’, ‘chief digital and analytics officer’, ‘chief artificial intelligence’, and matching abbreviations and other configurations (Firk et al., 2022; Wavestone, 2024; Zhan et al., 2022). However, ‘CDO’ was not added since this could also indicate a chief diversity officer function.

#### *Independent variables*

A binary variable is used for measuring *Insider-ness* (H1) to indicate a person's insider-ness within the organization before the CDO role. A value of 0 signifies no prior employment with the organization before their CDO appointment (no insider-ness). This suggests a lack of firm-specific knowledge. A value of 1 signifies any prior employment with the organization, regardless of how far back it was, indicating some level of insider-ness. *Organizational prior experience with CDOs* (H2) will also be measured as a binary variable ranging from no prior experience (=0) to prior experience (=1). Also, *CDO's background in general management* (H4) will be measured as a binary variable ranging from no background in general management (=0) to having that background (=1). A background in general management is considered to be a background in business administration, leadership, or management before the start date of appointment. The moderating effects (H3 and H5) will be calculated by multiplying the specific variables by each other (see Equations 1 and 2).

$$\text{Hypothesis 3} = \text{CDO insider-ness} \times \text{Organizational prior experience with CDOs} \quad (1)$$

$$\text{Hypothesis 5} = \text{CDO insider-ness} \times \text{CDO's background in general management} \quad (2)$$

#### *Control variables*

Firstly, this study controls for *CEO tenure*, because CEO succession results in a reassessment of fit and replacement of TMT members (Kesner & Dalton, 1994; Nath & Mahajan, 2017). *CEO tenure* is measured as the continuous number of years that the focal CEO held the CEO position at the time the CDO exited their role. Secondly, this study controls for *Firm size*, which, to meet the assumption of normality, is measured as the log number of employees within a company in the year the CDO exited their role. Thirdly,

this study controls for *Firm performance* as the return on assets (ROA) in the year the CDO exited their role and is calculated as the net income divided by the total assets. Finally, there is account for the *Industry* the firm is in to control for turbulence and other industry-related effects that might occur. The Global Industry Classification Standard (GICS) was used for this, and the financial industry was set as the reference category. I did this because the CDO role was adopted here first, and has the strongest representation (Davenport, 2021; Wavestone, 2024). The 11 GICS sectors were narrowed down to 7 sectors to have big enough sample sizes. These are industrials (GIC 20), consumer discretionary (GIC 25), health care (GIC 35), financials (GIC 40), information technology (GIC 45), communication services (GIC 50), and all other industries, which are energy, materials, consumer staples, utilities, and real estate (respectively GIC 10, 15, 30, 55, and 60).

### ***Data extraction and treatment***

The sample of CDO turnover events was drawn from the ‘Individual Employment Profile’ dataset within the BoardEx North American database. The data necessary for the independent variables and for the control variable ‘*CEO tenure*’ were also retrieved from the ‘Individual Employment Profile’ dataset within the BoardEx North American database. The control variables *firm size*, *ROA*, and *industry* were retrieved from Datastream (which are datatypes WC07011, WC08326, and MSCISIN respectively). The datasets were linked via International Securities Identification Numbers (ISINs) in Excel, where the data were also stored, and variables were calculated. For ethical considerations, names of CDOs and organizations are not shown in this report, this report shows real results regardless of importance or direction, and explains limitations in detail (Rosnow & Rosenthal, 2011).

### ***Missing data***

In total, 2433 CDO role turnover events were extracted from the BoardEx North American database, but information on other variables was largely missing (9.5% for *H3*, 34.6% for *CEO tenure*, 72.7% for *ROA*, 73.1% for *Firm size*, and 79.0% for *Industry*). Little’s MCAR test shows significance ( $p < .001$ ), indicating that the data are missing at random (MAR) (Little, 1988). Multiple imputation as a technique to deal with missing values was used as multiple imputation is considered to provide “unbiased estimates and correct standard errors” (Hair et al., 2019, p. 72). The multiple imputation method also ensures generalizability (Stuart et al., 2009). Five imputations, as this is considered sufficient (Rubin, 1996), were performed via the SPSS algorithm “Impute Missing Data Values”. This method was used for the variables: *Industry*, *Firm size*, *ROA*, and *CEO tenure*. When using multiple imputation on dummy variables, however, multiple dummies could be attributed a ‘1’. To clarify, for the *industry* dummies, the multiple imputation method was used by choosing the most frequent imputation output as the industry. Out of the 2433 CDO role

turnover events, 1847 cases delivered a single and clear mode (for example, when the financial industry was attributed a ‘1’ three times out of the five imputation outputs). For the other 586 events, two or more modes were found (for example, the industrials and the financial industry both got attributed a ‘1’ two times) and are still considered missing. For *firm size*, a notable difference from the original data was found after imputing. Although the mean, standard deviation, quartiles, and minimum value were similar, the maximum value increased from log 6.36 to log 9.44 (which, converted back, is 2.079.138.080 employees). The SPSS algorithm does not generate results otherwise, so to make the sample representative, the turnover events were deleted where one of the imputations was above log 6.36 employees. No problems were found afterward nor for the variables *ROA* and *CEO tenure*. At last, I used the complete case imputation method to be able to compare the results to a generalized linear model with robust standard errors, discussed in Chapter IV.

### ***Final sample description***

Applying the imputations, the final sample included a total of 1603 CDO role turnover events that happened from 2003 through 2023. The sample included 1357 distinct individuals and 1337 organizations in North America. Of the CDOs, 206 were present more than once in the sample. 82% of the CDOs in the sample are male and the average age is 49 years at the time the CDO exited their role. This is similar to the average age of chief financial officers (CFOs) (Statista, 2022). By applying the multiple imputation method, the sample is generalizable to CDOs in organizations that have their headquarters office in North America and are listed on the stock exchange.

Table 1 provides a descriptive overview and the correlations between the variables in this study, and shows that the CDO tenure in the sample is 2.25 years on average. This is lower but comparable to the 2.50 years found in other studies (Davenport et al., 2021; Wade & Obwegeser, 2019). Furthermore, 38% of the CDOs were required from the insider, comparable to the 30% in other research (Wade & Obwegeser, 2019), and additional descriptive analysis shows that this rate differs across industries. In GICs, 20 (41%), 25 (42%), 40 (44%), and 45 (49%) organizations prefer requiring insiders, while organizations in GIC 35 (25%), GIC 50 (26%), and the other industries (GIC 10, 15, 30, 55, and 60) (21%) prefer outsiders. 48% of the CDOs have a background in general management, and 80% are the first to fulfill the CDO role in an organization, similar to the 84% argued by Kunisch et al. (2022). The interaction effect between *CDO insider-ness* and *organizational prior experience with CDOs* shows that if organizations have had prior CDO experience, they appoint insiders more often (60% of the time), while organizations without prior CDO experience tend to appoint outsiders more often (67.5% of the time). 28% of CDOs are represented in GIC 25 (consumer discretionary), 21% in GIC 40 (financials), 10% in GIC 20 (industrials), 11% in GIC 45

(information technology), 9% in GIC 50 (communication services), 8% in GIC 35 (health care), and the rest (13%) in GICs 10, 15, 30, 55, and 60 (energy, materials, consumer staples, utilities, and real estate). At last, the firms the CDOs work at have an average of log 4.18 employees, an average ROA of 1.41%, and a CEO with a current tenure of 5.20 years.

### ***Analysis***

An ordinary least square (OLS) regression analysis is performed as an adequate technique for answering the research question as one dependent variable is to be predicted by multiple metric dependent variables (Hair et al., 2019). Research similar to this study (like, Gentry et al., 2021; Nath and Mahajan, 2017) approached predicting turnover in the same way. This research estimates how CDO tenure is predicted as shown in Equation 3. As standardly done, I evaluated whether regression coefficients differ statistically from zero in both directions (two-tailed). The variance inflation factor (VIF) statistic showed that no variable exceeds 2.719 (interaction between *CDO insider-ness* and *organizational prior experience with CDOs*), meaning that multicollinearity is not present (Robinson & Schumacker, 2009). Also including polynomial terms showed no presence of curvilinear relationships. However, two tests for homoskedasticity (Breusch & Pagan, 1979; White, 1980) delivered significant results ( $p > .001$ ) meaning that the variance of the regression errors is not constant (Hayes & Cai, 2007). This study covers how is accounted for heteroskedasticity in Chapter IV.

$$\begin{aligned}
 \text{CDO tenure} = & \beta_0 + \beta_1 \text{CDO insider-ness} + \beta_2 \text{Organizational prior experience with CDOs} + \beta_3 \text{CDO's} \\
 & \text{background in general management} + (\beta_4 \text{CDO insider-ness} \times \text{Organizational prior experience with} \\
 & \text{CDOs}) + (\beta_4 \text{CDO insider-ness} \times \text{CDO's background in general management}) + \beta_j \text{Controls} + e \quad (3)
 \end{aligned}$$

**Table 1***Descriptive statistics (mean, standard deviation (S.D.), and bivariate correlations)*

Variable name	Mean <sup>A</sup>	S.D. <sup>A</sup>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 CDO tenure (in years)	2.25	1.67															
2 Firm size (log employees)	4.18	.85	.23														
3 Return on assets (%)	1.41	21.24	.20	.40													
4 Industrials dummy	.10	.29	.02	.05	.01												
5 Consumer discretionary dummy	.28	.45	-.23	-.06	-.06	-.20											
6 Health care dummy	.08	.28	-.04	-.04	-.05	-.10	-.19										
7 Financials dummy (ref. cat.)	.21	.41	.24	.06	.08	-.17	-.32	-.16									
8 Information technology dummy	.11	.31	.01	.04	.02	-.11	-.22	-.11	-.18								
9 Communication services dummy	.09	.28	-.05	-.08	-.03	-.10	-.19	-.09	-.16	-.11							
10 Other industries dummy	.13	.34	.05	.03	.03	-.13	-.24	-.12	-.20	-.14	-.12						
11 CEO tenure (in years)	5.64	4.86	.11	.06	.10	-.08	.05	.00	.07	.00	-.06	-.04					
12 CDO insider-ness (yes/no)	.38	.48	-.10	.04	.06	.02	.06	-.07	.07	.08	-.07	-.14	.07				
13 Organizational prior experience with CDOs (yes/no)	.20	.40	-.07	.22	.02	.00	.02	-.06	.06	.10	-.08	-.08	.04	.21			
14 CDO's background in general management (yes/no)	.48	.50	-.01	-.02	.01	.04	.12	-.15	.04	-.09	.05	-.09	-.02	.02	.06		
15 Interaction CDO insider-ness and organizational prior experience with CDOs	.12	.32	-.09	.15	.03	-.01	.05	-.06	.04	.07	-.06	-.07	.03	.47	.72	.06	
16 Interaction CDO insider-ness and CDO's background in general management	.19	.39	-.07	.03	.04	.06	.07	-.11	.07	-.02	-.02	-.10	.03	.62	.18	.50	.35

*Note.* \*p < 0.1. \*\*p < 0.05. \*\*\*p < 0.01.

N = 1603.

Correlations  $\geq |0.02|$  are statistically significant at  $p < .05$ .

<sup>A</sup> The descriptives reported are the pooled averages of the five imputations.

## IV. RESULTS

### *OLS regression: main results*

Table 2 reports the stepwise approach (Models 1-3) of the OLS regression analysis. Model 1 presents the control model and includes the control variables firm size, ROA, industry, and CEO tenure. Model 2 adds the direct effects of CDO insider-ness (H1), organizational prior experience with CDOs (H2), and CDO's background in general management (H4) to Model 1 to examine the predictability without the moderating effects. Model 3 presents the full model by adding the moderating effects of CDO insider-ness on organizational prior experience with CDOs (H3), and CDO insider-ness on CDO's background in general management (H5). Model 1 shows that 14.4% of the variance is significantly explained. Model 2 was able to explain 16.9% of the variance, and provided significant improvements to Model 1 ( $p < .001$ ). However, Model 3 did not make any improvements to Model 2 ( $p = .830$ ), and worsened the model fit by 0.1% to 16.8%. Furthermore, the lack of significance for H3 and H5 means that Model 2 is consulted for the interpretation of the direct effects and the control variables.

H1 (CDO insider-ness) proposed that CDOs with prior experience within the focal organization experience longer role tenures than outsider CDOs. This is because P-O and P-J fit are better established when the person and the organization already know each other (Wade & Obwegeser, 2019). However, a significant negative relationship has been found ( $-0.374, p < .01$ ), meaning that H1 is not supported. Instead, the result indicates that insider CDOs tend to have shorter tenure than CDOs being hired from outside the organization. This also means that CDOs exhibit different characteristics from other C-suite officers, as research on CMOs shows that insiders stay longer in their CMO role (Nath & Mahajan, 2017). The finding could indicate that insider CDOs experience more resistance within the organization, contrary to current statements in research (Furr et al., 2019; Hiller, 2021; Wade & Obwegeser, 2019). Furthermore, since it is a challenge to retain highly skilled IT talent within an organization (Zaza et al., 2023), a CDO's previous insider tenure may affect later tenure in the CDO role. However, future qualitative research is needed to explain why insider-ness does not result in longer tenure for CDOs, while it does for CMOs. In Chapter II, I argued that increasing CDO tenure is a strategic imperative for organizations since short CDO tenure negatively affects productivity and performance. The finding that insider CDOs have shorter tenure questions this argument, as other researchers state that insider CDOs show greater performance effects than outsiders (Furr et al., 2019; Hiller, 2021; Wade & Obwegeser, 2019). This adds to statements that turnover may be necessary for acquiring new and specific knowledge that is more often needed in turbulent environments (Aldunate, 2018; Park & Shaw, 2013; Wiersema & Bantel, 1993; Zhang et al., 2017).

**Table 2***OLS regression results*

Variables	Model 1	Model 2	Model 3
Firm size (log)	.32*** (.089)	.378*** (0.086)	.379*** (.086)
Return on assets	.008** (.003)	.008* (0.004)	.008* (.004)
Industrials dummy	-.593*** (.153)	-.626*** (0.151)	-.624*** (.151)
Consumer discretionary dummy	-1.266*** (.116)	-1.282*** (.115)	-1.284*** (.115)
Health care dummy	-.836*** (.165)	-.941*** (.166)	-.94*** (.166)
Information technology dummy	-.675*** (.146)	-.621*** (.145)	-.624*** (.146)
Communication services dummy	-.858*** (.16)	-.976*** (.158)	-.976*** (0.159)
Other industries dummy	-.495*** (.138)	-.636*** (.119)	-.634*** (0.139)
CEO tenure	.03*** (.009)	.033*** (.009)	.033*** (0.009)
(H1) CDO insider-ness		-.374*** (.101)	-.331** (.139)
(H2) Organizational prior experience with CDOs		-.468*** (.104)	-.463*** (.15)
(H4) CDO's background in general management		.032 (.079)	.064 (.101)
(H3) Interaction CDO insider-ness and organizational prior experience with CDOs			-.005 (.201)
(H5) Interaction CDO insider-ness and CDO's background in general management			-.084 (.165)
Observations	1603	1603	1603
Adjusted R-squared <sup>A</sup>	14.4%	16.9%	16.8%

Note. \*p < 0.1. \*\*p < 0.05. \*\*\*p < 0.01.

Dependent variable = CDO tenure.

Standard errors are in parentheses.

<sup>A</sup> The reported R-squared resulted from averaging the R-squared statistics of the five imputations.

Furthermore, it shows that CDO tenure is not a good measure of CDO performance, opening the door for future research investigating the effect of CDO tenure on digital transformation outcomes and firm performance.

H2 (organizational prior experience with CDOs) proposed that CDOs have longer average tenure if they are employed by an organization that has employed a CDO in the past. It was argued that, with prior CDO experience, organizations can better assess and ensure the P-J and P-O fit, as well as formulate less vague job descriptions and decrease job strain, resulting in longer tenure for their CDOs. Results however, showed that CDO tenure is significantly lower in organizations that have had prior experience with CDOs (-0.468,  $p < .01$ ). Thus, CDO tenure is shorter in organizations that have had a CDO in the past, indicating that P-J fit and P-O fit are more established in organizations with no history of employing CDOs. Considering CDO tenure, this means that organizations should treat CDOs like they are the first to come. Thus, it is plausible that an organization's efforts to create a position in which a CDO fits is more likely to encourage CDOs to step out of a CDO role, and CDOs who have more freedom to create their jobs stay in their CDO role longer. However, future research is needed to find out whether organizations experience positive effects when they restrict a CDO's freedom in shaping the CDO's role. Also, future research could look for moderating effects that diminish the effects of organizational prior experience with CDOs on CDO tenure. Furthermore, apart from rejecting H2, also H3 is rejected (-0.005,  $p > .1$ ), which proposed that insider CDOs do not experience the expected negative effects on tenure it brings when organizations have not employed a CDO in the past. Against what was expected, this means that the negative effect of organizational prior experience with CDOs on CDO tenure is the same for outsiders and insiders. It also means that, when organizations have had prior CDO experience and employ an insider CDO, they suffer from both negative effects they have on CDO tenure. Since CDO insider-ness does not seem to moderate the relationship, future research can look for other possible sources that moderate the relationship between organizational prior experience with CDOs and CDO tenure.

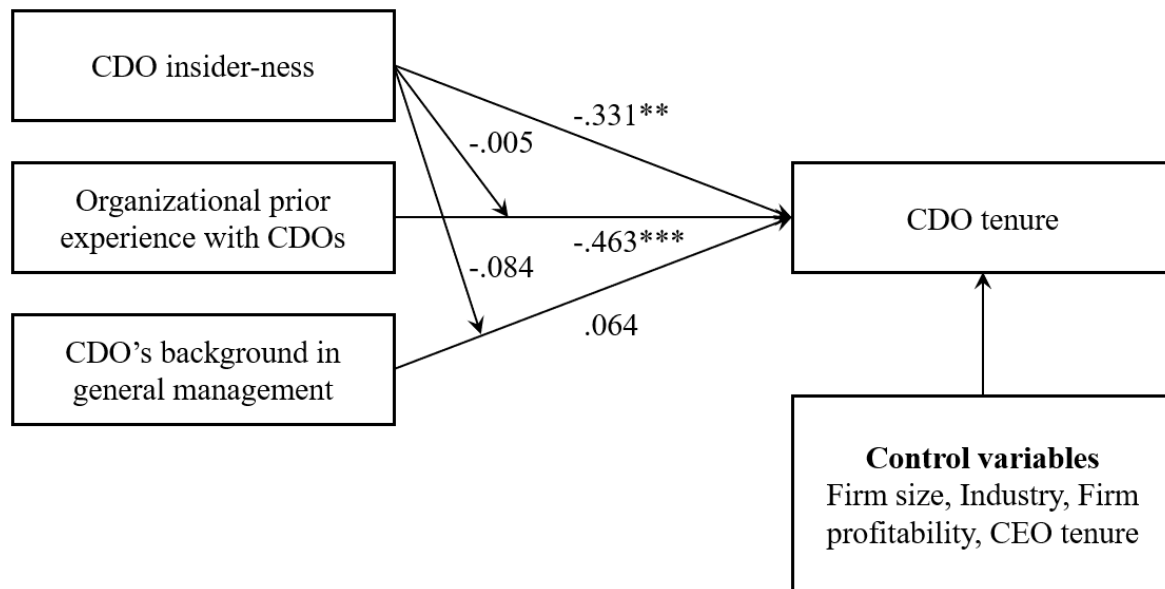
H4 (CDO's background in general management) proposed that CDOs with a background in general management will have longer tenure than CDOs without a background in general management. It was believed that, with a background in general management, CDOs will have more P-J fit and P-O fit because they will have more expertise in executing change projects and share more fundamental characteristics with other C-suite officers. Furthermore, an interaction effect was expected with insider-ness (H5), so that insider CDOs do not experience the expected negative effects on tenure it brings when having no background in general management. Contrary to what was expected, the lack of significance for H4 (0.032,  $p > .1$ ) indicates that CDOs that have a background in general management do not experience longer tenure. Thus, H4 is not

supported. This also means that, from a CDO's perspective, better P-J fit and P-O fit due to a background in general management does not affect a CDO's decision to quit the CDO role sooner. However, organizations do experience benefits of the improved P-J fit and P-O fit, since organizations reap the benefits of CDOs with a background in management (Davenport et al., 2021; Singh & Hess, 2017; Haffke et al., 2016). This shows that fit from the organizational perspective matters less than from a CDO's perspective, and that the increase in P-J fit and P-O fit did not increase tenure. This indicates that the perceptions of P-J fit and P-O fit by the CDO are important in predicting tenure, arguably because it is the CDO that tends to step out of the role voluntarily. This finding supports research on fit perception, in that P-J and P-O fit are mediated by the perception of the fit (Cable & Judge, 1996; Cable & DeRue, 2002; Edwards et al., 2016). Since the results show that the CDO's fit perception is important in predicting CDO tenure, future research should be conducted qualitatively to better understand what CDOs perceive and why this leads to short CDO tenure. Furthermore, Model 3 in Table 2 shows that the interaction effect with CDO insider-ness (H5) is also not supported ( $-0.084, p > .1$ ). Against what was expected, this means that the non-existing relationship between a CDO's background in general management and CDO tenure is present for insider and outsider CDOs.

In sum, the results of the hypothesized effects (Hypotheses 1-5) are shown in Figure 2 and illustrates that evidence was only found for H1 and H2, but in the opposite direction as was hypothesized.

**Figure 2**

*Antecedents of CDO tenure: results of OLS regression Model 3*



### ***OLS regression: results of the control variables***

Next to the hypotheses, also interesting contextual findings were gathered via the control variables firm size, ROA, industry, and CEO tenure. The control variables firm size, ROA, industry, and CEO tenure are significant predictors of CDO tenure in Model 1, and stay significant in Model 2, whereas only ROA decreases in significance level (from  $p < .05$  to  $P < .1$ ). Other control variables (CDO age, CDO gender, CEO age, board compensation, board size, and the average ROA over the last 5 years at the CDO role end date) were also tested, but were left out of the analysis since these were insignificant predictors of CDO tenure ( $P > .10$ ). Model 2 shows that CDO tenure increases with the increase in the log number of employees within a firm (0.378,  $p < 0.01$ ). This shows that CDOs tend to fit more within larger companies than in smaller companies. Secondly, the control variable ROA also predicted CDO tenure (0.008,  $P < .1$ ), showing that CDOs fit better in more successful companies. Thirdly, an increase in CEO tenure results in longer CDO tenure (0.033,  $p < .01$ ). This means that in the early years of CEO tenure, CDO tenure tends to be shorter, which confirms that CEO succession results in replacement of CDOs, just like for other TMT members (Kesner & Dalton, 1994; Nath & Mahajan, 2017). Finally, the results show that organizations in the financial industry enjoy significantly longer tenures for their CDOs than in all other industries ( $p < .001$  across all industries). For example, the average tenure in the financial industry is 1.282 years longer than in the consumer discretionary industry ( $P > 0.01$ ), 0.976 years longer than in the communication services industry ( $P > 0.01$ ), and 0.941 years longer than in the health care industry ( $P > 0.01$ ). I controlled for the financial industry because the CDO role was adopted here first, and has the strongest representation (Davenport, 2021; Wavestone, 2024), but why CDO tenure is significantly longer in this industry is not clear. The differences between industries are not due to CDOs being new to certain industries, as more CDOs are represented in the consumer discretionary sector (28% versus 21%), which suffers 1.28 years less CDO tenure on average. In addition and quite interestingly, larger beta coefficients for the industry context were found ( $-0.621 < \beta < -0.621$ ) than for the hypothesized effects in H1 (-0.374) and H2 (-0.468), indicating that industry context predicts CDO tenure better than CDO insider-ness and organizational prior experience with CDOs. This opens the door for future research on why CDO tenure is longer in the financial industry and among relatively large and successful companies. In addition, further research can identify best practices and focus on variables that moderate the industry's effect on CDO tenure.

### ***Post hoc tests***

Since the output shows that CDO tenure is longer in the financial industry and among relatively large and successful firms, I examined if CDOs actively seek to execute their subsequent CDO role in those types of firms. I conducted post-hoc tests based on the subsample of 206 CDOs that were present more than once in the final sample. I measured this by using a binary variable ranging from the first time a CDO performs

a CDO role (=0) to all subsequent times (=1). This variable thus indicates whether a CDO has prior CDO experience or not.

A chi-squared test ( $X^2(6) = 1.61, p = .95$ ) indicates that movement across industries happens equally, and not significantly to the financial industry only. Also, the one-way between subjects ANOVA for firm size ( $F(1, 449) = [0.275], p = .42$ ) and ROA ( $F(1, 449) = [0.25], p = .62$ ) show no significant effects, meaning that CDOs do not significantly move to other type of firms. Furthermore, I conducted a post-hoc test to see if CDO tenure increases or decreases for individuals over time. A one-way between subjects ANOVA shows that CDO tenure decreases significantly from 2.24 years when they first fulfill a CDO role, to an average of 1.89 years for all subsequent times a person fulfills a CDO role ( $F(1, 449) = [6.30], p < .05$ ). As does for organizations (tested with H2), prior experience shows to be decreasing tenure. This time, one might assume that CDO tenure declines because CDOs have already experienced stress in their previous jobs, causing them to seek sooner for a less stressful job. Importantly, I can cautiously state that this adds to research that discusses the temporality of the CDO role (Singh & Hess, 2017; Firk et al., 2021), in that the CDO role is a role that individuals are likely to perform only temporarily. However, it could also indicate that, as those individuals gain more experience, they are offered more attractive job opportunities, making them switch to other jobs more frequently. Further research could shed light on why this arguably important effect was found and provide conclusive evidence. A last post-hoc analysis was conducted to see if the effect of prior CDO experience is present in all industries and to what extent. The industry does not seem to moderate the relationship between prior CDO experience and CDO tenure ( $F(6, 437) = [1.268], p = .271$ ). Interestingly however, the effect that prior CDO experience has on CDO tenure is only significant in the financial industry ( $F(1, 437) = [11.208], p < .001$ ), as shown in Figure 3. This, while the financial industry was significantly different from all other industries in the OLS regression (reported in Table 2). Based solely on this study, no conclusive statements can be made about why this happens, and it is therefore beyond the scope of this study. Future research can search for reasons why CDO tenure for individuals with prior CDO experience is only significantly lower in the financial industry.

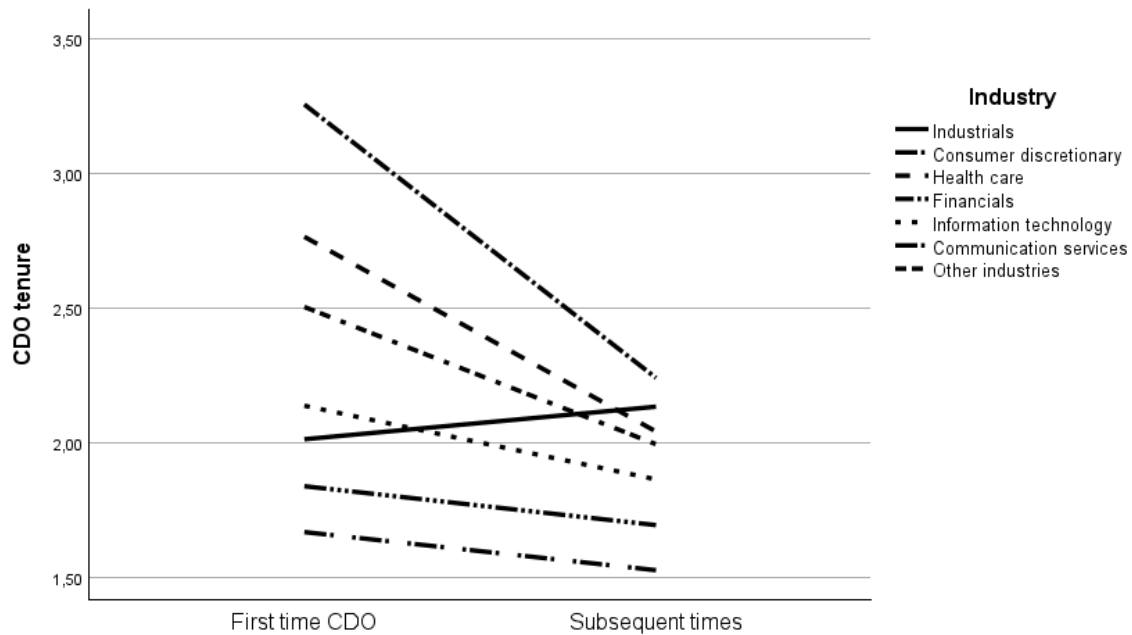
### ***Robustness check***

To test the reliability of the OLS regression results, to increase validity, and to account for heteroskedasticity (Hayes & Cai, 2007), a test with heteroskedasticity-consistent standard errors (HC3) was performed in SPSS to double-check with the initial outcomes. The results of the generalized linear model with robust standard errors are presented in Table 3, and no differences in significance levels compared to the OLS regression results in Table 2 were found. Furthermore, other analyses that are not reported here (like using the all-available and complete data method on the original data set, and the all-available method

on the imputed data), delivered substantively the same results, indicating consistent and thus reliable coefficients of the OLS regression. This study thus considers the results of the first regression analysis in Table 2 robust.

### Figure 3

*The relationship between CDO tenure and whether a person is executing a CDO role for the first time or subsequent times, moderated by industry*



*Note.* The industry does not moderate the relationship between prior CDO experience and CDO tenure ( $F(6, 437) = [1.268]$ ,  $p = .271$ ), and the effect of prior CDO experience on CDO tenure is only significant in the financial industry ( $F(1, 437) = [11.208]$ ,  $p < .001$ ).

**Table 3***Robust regression results*

Variables	Model 1	Model 2	Model 3
Firm size (log)	.32*** (.088)	.378*** (.086)	.379*** (.086)
Return on assets	.008*** (.003)	.008* (.004)	.008* (.004)
Industrials dummy	-.593*** (.175)	-.626*** (.173)	-.624*** (.173)
Consumer discretionary dummy	-1.266*** (.122)	-1.282*** (.12)	-1.284*** (.122)
Health care dummy	-.836*** (.167)	-.941*** (.167)	-.94*** (.168)
Information technology dummy	-.675*** (.164)	-.621*** (.161)	-.624*** (.161)
Communication services dummy	-.858*** (.157)	-.976*** (.157)	-.976*** (.157)
Other industries dummy	-.495*** (.151)	-.636*** (.152)	-.634*** (.153)
CEO tenure	.03*** (.011)	.033*** (.011)	.033*** (.011)
(H1) CDO insider-ness		-.374*** (.101)	-.331** (.138)
(H2) Organizational prior experience with CDOs		-.468*** (.104)	-.463*** (.148)
(H4) CDO's background in general management		.032 (.08)	.064 (.107)
(H3) Interaction CDO insider-ness and organizational prior experience with CDOs			-.005 (.193)
(H5) Interaction CDO insider-ness and CDO's background in general management			-.084 (.163)
Observations	1603	1603	1603

*Note.* \*p < 0.1. \*\*p < 0.05. \*\*\*p < 0.01.

Dependent variable = CDO tenure.

Robust standard errors are in parentheses.

## V. DISCUSSION AND CONCLUSION

### *Theoretical contributions*

Firstly, this study provided a first step in addressing short CDO tenure quantitatively, and the antecedents found in this study and the post-hoc analysis results provide the field that seeks to increase the problematic CDO tenure with new knowledge and future research suggestions. Firstly, this study adds to research on individual TMT member turnover (Kesner & Dalton, 1994; Nath & Mahajan, 2017; Mian, 2001). Specifically, it adds to the research on short CDO tenure (Davenport et al., 2021; Wade & Obwegeser, 2019). This study argues that CDO insider-ness and organizational prior experience with CDOs are predictors of short CDO tenure, and that several contextual conditions are important in explaining CDO tenure like industry, firm size, ROA, and CEO tenure. Furthermore, this study shows that CDO tenure decreases for individuals who perform the CDO role subsequently. With this, this study provided nuanced findings to research that discusses the temporality of the CDO role (Singh & Hess, 2017; Firk et al., 2021), in that the CDO role is a role that individuals are likely to perform only temporarily. The findings also contradict the argument that the vagueness of the CDO role is the primary force of short tenure (Davenport et al., 2021; Wade & Obwegeser, 2019). This is because, while organizations with prior CDO experience are expected to create less vague job descriptions, their CDOs tend to stay shorter in their role.

Secondly, contributions to P-J fit and P-O fit theory are made as these theories were used for predicting tenure in the context of a, relatively new, chief officer role, rather than the main body of fit literature focusing on non TMT members and groups of employees (see, e.g., Berisha & Lajci, 2020; Tang et al., 2013; Wang & Ma, 2013; Westerman & Cyr, 2004). In addition, this study shows that fit theory can be used for describing and understanding antecedents of short tenure, opening the door for researchers to produce a general theory to describe antecedents of chief officers' turnover or tenure. Still, the unpredicted findings that contradicted assumed directions and significances showed that the CDO role is hard to understand with the help of fit theory. The results at least point out that CDOs and organizations could view P-J and P-O fit differently, in that fit could be increased for the organization but not for the CDO, resulting in no significant change in tenure. Thereby this research complements other research on perceptions of fit (Cable & Judge, 1996; Cable & DeRue, 2002; Edwards et al., 2016), and supports the notion that needs-supply fit (as part of P-J fit) mediates the relationship between P-O fit and turnover intention (Kakar et al., 2023).

### *Practical implications*

There are important implications for organizations besides the discussed theoretical contributions. In general, the short average tenure of 2.25 years found in this study shows that organizations need to put more

effort and resources into retaining CDOs compared to what they do now, and more compared to other C-suite executives. In addition, improving P-J fit and P-O fit is important for organizations, since these indirectly influence innovative behavior as well (Tang et al., 2021), which in turn influences digital transformation outcomes (Drechsler et al., 2018; Trenerry et al., 2021; Zhang et al., 2021; Zhang et al., 2023). Furthermore, managers need to take into account the conditions the focal organization and the candidate CDO are in and put aside assumptions on CDOs they might have based on other chief officers.

More specifically, organizations must recognize that the choice between an insider and an outsider CDO is a complex balancing act, with different advantages and disadvantages for each scenario. This is because outsider CDOs tend to stay in their role 0.374 years longer on average, and other research points out that insider CDOs tend to outperform outsiders (Furr et al., 2019; Hiller, 2021; Wade & Obwegeser, 2019). As 72% of CDOs are outsiders, this research shows that organizations desire to bring in expertise that is not yet available in the organization. Whatever reason organizations have for hiring an insider or an outsider, managers must use different retention strategies for insider and outsider CDOs. Furthermore, organizations that have had prior CDO experience currently endure shorter average tenure for their CDOs. This indicates that organizations should treat succeeding CDOs as they treat their first CDO. I have argued that organizations with prior CDO experience are likely to shape the CDO role for future CDOs to come, and I recommend that organizations seeking to shape the CDO role consider the negative effects this will have on CDOs, and thus on CDO tenure. In addition, this means that managers should not just rely on predetermined role descriptions, but also actively seek input from the new CDO in filling the position. Managers should set clear and achievable goals, but also provide flexibility so that the CDO can implement his or her vision. At last, contextual findings show that managers should use larger and more stable companies, as well as companies within the financial sector, as benchmarks to reflect on how to extend the tenure of CDOs. In addition, managers should analyze and implement best practices from these organizations. Furthermore, organizations need to critically reflect on how to prevent short CDO tenure under certain circumstances (for example 1.53 years in the consumer discretionary industry when a CDO has had prior CDO experience), as too short a tenure could be causing more harm than good.

### ***Limitations and future research***

Every research comes with limitations. The first limitation is that there are unidentified antecedents of short CDO tenure left, as 83.1% is unexplained by the multiple regression analysis. This is because information on CDOs specifically was difficult to collect through this quantitative design. For example, compensation, which was not present in the databases, is found to be highly effective in reducing turnover intention (Griffeth et al., 2020; Kakar et al., 2023; Kumar, 2022; Mudor, 2021). However, as compensation

might not be so valuable in understanding and improving CDO tenure specifically (since compensation is a well-known way to increase tenure), I suggest that future research should focus on the specific factors that influence tenure (see, e.g., Kumar, 2022; Nath & Mahajan, 2017; Zaza et al., 2023). Furthermore, since the goal was to predict short CDO tenure, and not to explain it, excluding omitted variables matters less (Hair et al., 2019). Qualitative research could complement this research to better understand CDOs and their incentives to voluntarily abandon their role. Also, future research should question why industry and firm characteristics matter so much, and why CDO tenure decreases if either the CDO or the organization has had prior CDO experience. The second limitation involves the assumption that increasing tenure is a strategic imperative for organizations. This was assumed because, like in non-CDO studies, frequent turnover leads to a decrease in performance and innovation (see, e.g., Kim et al., 2021; Park & Shaw, 2013; Simsek, 2007; Wu et al., 2005). However, this study shows that insider CDOs show shorter role tenure, while insider CDOs tend to deliver greater performance effects (Furr et al., 2019; Hiller, 2021; Wade & Obwegeser, 2019). So, although an average CDO tenure of 2.25 years is undesirable, it still needs to be proven scientifically that increasing CDO tenure increases performance and innovation. In addition, short CDO role tenure could be desirable for performance and innovation because skills need to be updated more often in dynamic environments (Aldunate, 2018; Park & Shaw, 2013), like in the financial industry (Zhang et al., 2017). However, on the contrary, the financial industry shows the highest CDO tenures. In conclusion, this means that there is a gap for researchers to find out what the advantages and disadvantages of short CDO tenure are on performance and innovation.

### ***Conclusion***

CDOs are valuable resources to firms to gain a competitive advantage or to maintain the current position in the market (Firk et al., 2022; Hiller, 2021; Lee et al., 2014; Nie et al., 2018; Wade & Obwegeser, 2019). However, the short CDO tenure of 2.25 years hinders this process (Park & Shaw, 2013; Wavestone, 2024), leaving firms with an imperative to elongate CDO tenure. Gathering knowledge about the antecedents of short CDO tenure is important because still not much is known about this upcoming, non-institutionalized, and vague job (Davenport et al., 2021; Wade & Obwegeser, 2019). In an attempt to make the CDO role clearer by examining the antecedents of short CDO tenure, new relationships, and counterintuitive effects were found, underscoring that the CDO role is indeed vague. The P-J fit and P-O fit rationale were used to look for possible misfits and to suggest effects that may cause short CDO tenure. While controlling for variables such as firm size, firm profitability, industry, and CEO tenure, none of the five hypotheses were supported, but evidence was found in the opposite direction. Contrary to what was expected, CDOs that first worked in another position in the same organization (insider CDOs) tend to have shorter tenure than CDOs being hired from outside the organization (outsider CDOs). Furthermore, CDOs have longer average tenure

in organizations that employ a CDO for the first time than in organizations that have not. This effect is not moderated by whether a CDO is an insider or an outsider. Moreover, it appears that CDOs with a background in general management do not have longer tenure compared to CDOs without a background in general management. This relationship is also not moderated by whether a CDO is an insider or an outsider. Interestingly, the control variables in the analysis predict CDO tenure similarly (in the case of firm size, ROA, and CEO tenure) or more (in the case of industry) than the hypothesized effects. Nevertheless, the results allowed to describe under what circumstances CDO tenure is expected to be longer, and thereby adds to the research on short CDO tenure. This study also complements other research on perceptions of fit and contributed to P-J fit and P-O fit theory as these theories were used for predicting tenure in the context of a, relatively new, chief officer role. To managers, it is suggested to put more effort and resources into retaining CDOs, to use different retention strategies for insider and outsider CDOs, and to provide CDOs with more flexibility in job crafting so that they can implement their vision. Contextual findings show that managers should analyze and implement best practices from rather large and stable companies, and use the financial industry as a benchmark. At last, this study provided incentives for future research on the still vague, difficult-to-understand, and short-tenured CDO role.

### ***Reflection***

While conducting my research, I faced several challenges and learning moments. Data collection and processing took longer than expected. This unexpected delay prevented me from adjusting the ideas formed in Chapter II and Chapter IIV. Although it made sense to include CIO presence and CIO tenure and to include some form of CDO performance measurement as a dependent variable to contribute more to strategic management literature, the time investment I expected this to require would be too great within the time available. This would have enriched the results and perhaps made them more relevant for practical applications. Overall, it was difficult to find specific factors that influence CDO tenure with quantitative data, and with a qualitative research design, this research could have possibly been better. While I am satisfied with the technical aspect of my work, the results appear to be more valuable for further academic research than for direct implementation within organizations. Overall, this thesis has contributed to a more nuanced understanding of the role of the CDO, and provides valuable insights and food for thought for future researchers.

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