Determinants of Voluntary Interim Reporting Frequency in the UK: Firm Characteristics, CEO Myopia, and Board Governance after Post-Deregulation.

by

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Abstract

This thesis examines the determinants of voluntary interim reporting frequency (IRF) among UK listed firms following the Financial Conduct Authority's (FCA) 2014 deregulation that removed mandatory quarterly reporting. This regulatory change transformed interim reporting from a compliance-driven requirement into a discretionary managerial choice, creating a distinctive institutional setting in which firms' reporting behaviour reflects strategic disclosure decisions rather than regulatory obligation.

Drawing on an integrated theoretical framework combining agency theory, signalling theory, upper echelons theory, and corporate governance perspectives, the study develops a multi-level approach to analyse how firm-level economic incentives, CEO behavioural characteristics particularly CEO myopia and board-level governance mechanisms jointly shape voluntary interim reporting frequency. The framework explicitly recognises that disclosure decisions are influenced not only by firm fundamentals, but also by managerial time horizons and the effectiveness of board oversight in a voluntary reporting environment.

The empirical analysis is based on an unbalanced panel of UK FTSE All-Share non-financial firms over the period 2015–2022. After excluding financial firms and observations with incomplete data, the final sample comprises 311 firms and 1,989 firm-year observations. Interim reporting frequency is manually collected from firms' disclosures and operationalised as an ordinal measure capturing the number of interim reports issued within a financial year. Ordered logistic regression is employed as the primary estimation technique, with year and industry fixed effects included to control for temporal and sectoral heterogeneity. The findings are supported by extensive robustness checks using alternative model specifications, including binary logit, ordinary least squares, and fixed-effects estimators.

The results show that firm-level incentives remain central in explaining voluntary interim reporting behaviour following deregulation. Larger firms and firms with higher leverage are significantly more likely to report more frequently, consistent with stronger information demand and monitoring pressures from investors and creditors. At the

managerial level, CEO myopia is negatively associated with interim reporting frequency, indicating that short-term oriented executives are less inclined to support frequent disclosure in a voluntary reporting regime.

Board governance mechanisms exhibit more nuanced effects. While several governance variables show limited direct associations with IRF, board composition plays an important moderating role. Higher board gender diversity and larger boards attenuate the negative relationship between CEO myopia and interim reporting frequency, suggesting that effective board oversight can constrain managerial short-termism in disclosure decisions.

Overall, this thesis contributes to the disclosure and corporate governance literature by providing comprehensive UK evidence on the determinants of voluntary interim reporting frequency in a post-deregulation setting. It demonstrates that interim reporting practices reflect the joint influence of firm-level economic incentives, managerial behavioural traits, and board-level governance mechanisms, offering important implications for regulators, investors, and corporate boards operating in voluntary disclosure environments

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Dedication

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List of abbreviations

IRF	Interim Reporting Frequency
FCA	Financial Conduct Authority
ICB	Industry Classification Benchmark
VIF	Variance Inflation Factor
AC	Audit commit
RBV	Resource-Based View
ASB	Accounting Standards Board
UK	United Kingdom
CEO	Chief Executive Officer
EU	European Union
US	United States
ASB	Accounting Standards Board
GAAP	Accepted Accounting Principles
FE	fixed-Effects

Chapter 1 : Introduction

1.1 Introduction

Financial reporting plays a fundamental role in capital markets by providing prompt and credible information that supports investment decisions, facilitates efficient capital allocation, and enhances corporate accountability (Bushman and Smith 2001). Through periodic disclosures, firms communicate information about their financial performance, position, and prospects, thereby reducing information asymmetry between corporate insiders and external stakeholders (Healy and Palepu 2001). High-quality financial reporting is widely regarded as a key mechanism for mitigating agency conflicts and promoting market confidence (Lambert et al. 2007).

Within this broader reporting framework, interim reporting serves as an important channel through which firms update investors between annual reporting cycles (Kajüter et al. 2022). Interim reports, typically issued on a semi-annual or quarterly basis, allow market participants to incorporate latest information more rapidly into security prices and to monitor firm performance on a more continuous basis (Kajüter et al. 2022). Prior research suggests that more frequent reporting can enhance market transparency, attract analyst attention, and improve the accuracy of earnings forecasts, particularly in markets characterised by dispersed ownership and active capital market monitoring (Kajüter et al. 2022; Bornemann et al. 2025).

Despite these informational benefits, interim reporting is also associated with significant costs and potential unintended consequences. Preparing frequent reports imposes administrative and compliance burdens on firms and may increase short-term performance pressure on managers (Kajüter et al. 2022). A growing body of academic and policy-oriented research raises concerns that frequent reporting can encourage managerial short-termism, whereby executives prioritise short-term earnings targets at the expense of long-term investment and value creation. These concerns have featured prominently in regulatory and policy debates, particularly in relation to mandatory quarterly reporting requirements (Gigler et al. 2014; Kajüter et al. 2022).

As a result, the frequency of interim financial reporting remains a contested issue. While more frequent disclosure may strengthen transparency and investor monitoring, it may also distort managerial incentives and impose unnecessary reporting costs. In settings where interim reporting is voluntary rather than mandatory, firms must balance these competing considerations when determining their reporting practices. Understanding how Interim Reporting Frequency (IRF) is shaped by firm-level economic incentives, managerial characteristics, and corporate governance structures is therefore central to contemporary discussions on disclosure regulation.

This thesis addresses this issue by examining the determinants of voluntary interim reporting frequency in the United Kingdom (UK) following the 2014 deregulation of mandatory quarterly reporting. By focusing on firm characteristics, Chief Executive Officer (CEO) behavioural traits, and board-level governance mechanisms, the study provides new understanding of how disclosure decisions are made in a deregulated reporting environment.

1.2 Background and context of the study

1.2.1 Interim reporting and capital market regulation

Interim reporting occupies a prominent position within the broader framework of financial market regulation (Kajüter et al. 2022). Regulators have traditionally viewed periodic financial disclosure as a mechanism to enhance transparency, reduce information asymmetry between corporate insiders and external stakeholders, and support confidence in capital markets (Healy and Palepu 2001; Bushman and Smith 2001). By providing timely updates on firms' financial performance and material developments between annual reporting periods, interim reports are intended to facilitate informed investment decisions and contribute to more efficient price formation (Kajüter et al. 2022).

From a regulatory perspective, interim reporting is also linked to market integrity and investor protection. Regular disclosure is expected to improve monitoring of managerial performance and limit opportunistic behaviour by ensuring that material information is disseminated in a timely manner (Bushman and Smith 2001). At the same time, regulators must balance these benefits against the costs associated with

more frequent reporting, including compliance burdens and the potential for short-term market pressure to influence managerial decision-making (Gigler et al. 2014; Kajüter et al. 2022). This trade-off has shaped both academic debate and regulatory policy concerning the right frequency of interim financial reporting.

1.2.2 Introduction of mandatory interim reporting in the UK

The introduction of mandatory interim reporting in the UK was driven primarily by developments at the European level. In the early 2000s, the European Union sought to strengthen transparency and investor confidence across increasingly integrated capital markets (European Parliament and Council 2004; Schleicher and Walker 2015). As part of this agenda, the Transparency Directive (Directive 2004/109/EC), adopted by the European Parliament and the Council, proved harmonised disclosure requirements for issuers whose securities were admitted to trading on regulated markets (European Parliament and Council 2004; Schleicher and Walker 2015).

A key element of this framework was the requirement for issuers to publish interim management statements for the first and third quarters. These statements were intended to provide prompt qualitative information on material events and business developments occurring between annual and half-yearly reports. The underlying regulatory rationale was that more frequent disclosure would reduce information asymmetry, enhance market efficiency, and promote investor protection.

In the UK, These European requirements were implemented in the UK through the Financial Services Authority's Disclosure and Transparency Rules (Schleicher and Walker 2015). For financial years beginning after 20 January 2007, UK issuers were required to publish Interim Management Statements (IMSs) for the first and third quarters, in addition to their annual and half-yearly reports. However, the UK adopted a relatively flexible approach to the content of these interim disclosures. Firms were required to provide information about material events and transactions and a general description of their financial position and performance, rather than the detailed quarterly financial statements required under the US Form 10-Q system (Nallareddy et al. 2017). This difference is important because the effects of interim reporting may depend not only on how often firms report, but also on the amount and type of information they are required to provide.

The UK provides an important setting for examining changes in interim reporting regulation because it experienced two major regulatory changes within a relatively short period. The 2007 reform introduced mandatory quarterly IMSs, while the Financial Conduct Authority removed this requirement with effect from 7 November 2014. After the 2014 reform, firms could continue to publish IMSs or quarterly financial reports voluntarily, but they were no longer required to provide routine quarterly reports. These regulatory changes provide a useful setting for examining how firms respond when reporting frequency changes from mandatory to voluntary. In particular, they allow differences to be observed between firms that continued quarterly reporting and those that reduced their reporting frequency after deregulation.

Importantly, the removal of mandatory quarterly reporting did not remove firms' broader disclosure responsibilities. UK-listed firms remained subject to requirements to disclose material and price-sensitive information to the market in a timely manner. Therefore, the reform gave firms greater discretion over routine reporting frequency while maintaining their wider disclosure obligations. This provides an appropriate setting for examining whether firm characteristics, managerial incentives, and corporate governance mechanisms influence firms' voluntary interim reporting decisions.

Recent evidence from another European market also examines firms' responses to the removal of mandatory quarterly reporting, showing the wider relevance of studying reporting behaviour when reporting frequency becomes voluntary (Bornemann et al., 2025). However, the UK provides a particularly useful setting because the FCA's 2014 reform gave individual firms discretion over routine reporting frequency while maintaining continuous-disclosure requirements. This makes it possible to examine how firms balance the potential information benefits of frequent reporting against its costs within the same regulatory and capital-market environment. It also allows voluntary periodic reporting to be distinguished from the mandatory disclosure of material information.

The findings may also be relevant to other countries that have introduced, or are considered, more flexible periodic-reporting requirements. The main policy question whether the benefits of more frequent reporting outweigh its costs and possible short-term pressures is not limited to the UK. Therefore, the UK experience can provide useful evidence on firms' voluntary reporting decisions following deregulation. However, the findings should not be directly generalised to all countries. Differences

in disclosure regulations, enforcement, investor protection, analyst coverage, investor characteristics, and capital-market structures may affect firms' reporting decisions. The UK should therefore be viewed as a specific institutional setting that can provide useful insights for other flexible reporting environments, rather than as a regulatory model that applies equally to all countries.

1.2.3 Experience with mandatory quarterly reporting

Despite its intended benefits, mandatory interim reporting soon became the subject of debate among policymakers, market participants, and academics. Critics argued that the requirement imposed additional compliance and administrative costs on firms, particularly where the informational value of quarterly updates was limited (Schleicher and Walker 2015). At the same time, concerns emerged that more frequent reporting could increase short-term performance pressure on managers, encouraging them to focus on meeting short-term earnings expectations rather than creating long-term shareholder value (Gigler et al. 2014; Kajüter et al. 2022).

Empirical evidence on the effects of mandatory quarterly reporting has been mixed. While some studies suggest that frequent reporting may improve transparency and monitoring, others find limited or inconclusive effects on firms' real economic decisions. This lack of consensus contributed to growing uncertainty regarding whether the benefits of mandatory interim reporting justified its costs, particularly considering broader concerns about short-termism in equity markets. These debates ultimately prompted regulators to reconsider the role of mandated quarterly disclosure within the reporting framework.

Empirical evidence on the effects of mandatory quarterly reporting has produced mixed findings. Some studies suggest that more frequent reporting improves market transparency, reduces information asymmetry, and enhances investor monitoring. In contrast, other studies find limited evidence that mandatory quarterly reporting improves firms' real economic performance or investment decisions, while highlighting concerns about increased reporting costs and managerial short-termism (Gigler et al. 2014; Schleicher and Walker 2015; Kajüter et al. 2022).

The mixed empirical evidence contributed to growing uncertainty over whether the benefits of mandatory quarterly reporting outweighed its costs. These debates became particularly important in Europe and eventually influenced regulatory reforms, including the removal of mandatory Interim Management Statements under the amended Transparency Directive and the subsequent FCA reforms in the UK (Nallareddy et al. 2017; Bornemann et al. 2025).

1.2.4 Deregulation of interim reporting and the role of the Financial Conduct Authority (FCA)

This reassessment culminated in significant regulatory change. Following amendments to the Transparency Directive, which removed the requirement for interim management statements, national regulators were granted discretion over whether to retain mandatory quarterly reporting obligations (European Parliament and Council 2004; Schleicher and Walker 2015).

In the UK, the FCA implemented this change in November 2014 by revising the Disclosure and Transparency Rules. The FCA removed the requirement for issuers to publish interim management statements while allowing firms to continue issuing interim updates on a voluntary basis (Financial Conduct Authority 2014; Nallareddy et al. 2017). Importantly, firms remained subject to continuous disclosure obligations and were still required to disclose material price-sensitive information to the market in a timely manner. As a result, the reform did not reduce firms' overall disclosure responsibilities but instead transferred the decision regarding routine quarterly reporting from regulation to managerial discretion.

The FCA’s decision reflected concerns that mandatory quarterly reporting could encourage short-term managerial behaviour and create reporting costs that may be greater than the benefits for some firms (Gigler et al. 2014; Kajüter et al. 2022). At the same time, continuous disclosure requirements remained in place to protect investors and maintain market transparency (Financial Conduct Authority 2014). The 2014 FCA reform therefore marked an important change in the UK reporting environment, as the frequency of routine interim reporting became a voluntary decision rather than a mandatory requirement. This change provides a useful setting for examining why some firms continue to report frequently while others choose to report less often. It

also provides the institutional setting for examining how firm characteristics, CEO behaviour, and corporate governance influence voluntary interim reporting decisions.

1.2.5 International context

Interim reporting practices vary considerably across jurisdictions. In the United States (US), quarterly reporting remains mandatory and deeply embedded in the regulatory framework, supporting continuous market monitoring but also attracting criticism for encouraging short-termism (Gigler et al. 2014). In contrast, many European countries rely primarily on annual and semi-annual reporting, with interim disclosures shaped by national choices and evolving EU policy (Schleicher and Walker 2015).

Against this background, the UK provides an important setting for this study. The change from mandatory to voluntary interim reporting represents a clear change in regulation rather than a gradual adjustment (Financial Conduct Authority 2014; Nallareddy et al. 2017). The UK post-2014 environment therefore provides a useful setting for examining how firms respond when mandatory requirements for reporting frequency are removed. Unlike many other countries, the UK allows firms greater discretion over their reporting frequency while maintaining continuous disclosure requirements. This combination of reporting flexibility and continuing disclosure obligations provides a useful setting for examining the determinants of voluntary interim reporting. The findings may also provide useful insights for other countries that have introduced, or are considered, more flexible reporting requirements.

1.2.6 Implications for the present study

The removal of mandatory interim reporting fundamentally altered the UK disclosure environment by transforming reporting frequency into a discretionary managerial choice (Financial Conduct Authority 2014; Nallareddy et al. 2017). Interim reporting frequency now reflects strategic decisions shaped by firm characteristics, managerial behaviour, and governance structures rather than uniform regulatory compliance. This institutional setting provides a valuable opportunity to investigate the determinants of voluntary interim reporting frequency and to assess the extent to which governance

mechanisms and managerial behaviour influence disclosure practices in a deregulated regime. By focusing on this context, the present study contributes to ongoing academic and policy debates concerning disclosure regulation, managerial short-termism, and the role of corporate governance in sustaining transparency and market efficiency (Kajüter et al. 2022; Bornemann et al. 2025).

1.3 Research motivation

The motivation for this study arises from a fundamental change in the UK financial reporting environment following the remove of mandatory quarterly reporting in 2014. Prior to this regulatory shift, interim reporting frequency was largely determined by statutory requirements rather than managerial discretion. The removal of mandatory quarterly reporting by the FCA transformed interim reporting into a voluntary practice, allowing firms to independently determine how frequently they disclose financial information to the market. This change has created substantial variation in interim reporting behaviour across UK-listed firms, raising important questions about the factors that drive these disclosure decisions.

From a regulatory perspective, the decision to abolish mandatory quarterly reporting was motivated by concerns that frequent reporting encouraged managerial short-termism and imposed unnecessary reporting burdens on firms, particularly smaller companies. Policymakers argued that reducing reporting frequency could allow managers to focus more on long-term value creation rather than short-term earnings targets (Kay 2012; Financial Conduct Authority 2014). These concerns were also consistent with academic evidence suggesting that frequent reporting can increase short-term market pressure and distort managerial investment incentives (Kraft et al. 2018). However, the persistence of voluntary quarterly reporting among a substantial proportion of UK firms suggests that interim reporting continues to serve a significant role in corporate communication and investor relations. Understanding why firms continue to report often despite deregulation is therefore of direct relevance to regulators evaluating the effectiveness of disclosure policy reforms.

From an investor perspective, interim reporting remains a critical source of timely information. Investors and financial analysts rely on interim disclosures to monitor firm performance, assess risk, and update valuation models between annual reporting

periods (Healy and Palepu 2001; Dechow et al. 2010). In a voluntary disclosure regime, differences in reporting frequency may materially affect information asymmetry, market transparency, and investor confidence, as firms vary in the quantity and timeliness of information they provide to the market (Brown and Hillegeist 2007; Leuz and Wysocki 2016). Firms that report more frequently may use interim disclosures as a signalling mechanism to convey transparency and credibility to capital market participants, thereby reducing information risk (Diamond and Verrecchia 1991; Healy and Palepu 2001). Conversely, firms that reduce reporting frequency may face heightened investor scrutiny, increased uncertainty, or a deterioration in the information environment, particularly when disclosure reductions are perceived as strategic or opportunistic (Gigler et al. 2014). Consequently, voluntary interim reporting frequency has important implications for capital market efficiency, information processing, and investor decision-making.

At the firm level, reporting frequency reflects a trade-off between the benefits of transparency and the costs of disclosure. Larger firms, firms with greater external financing needs, or firms subject to higher monitoring pressures may have stronger incentives to provide frequent interim reports. Conversely, firms facing higher reporting costs or lower demand for information may prefer less frequent disclosure. These economic considerations suggest that voluntary interim reporting frequency is likely to vary systematically with firm characteristics.

Beyond firm-level incentives, managerial behaviour and corporate governance structures may also play a central role in shaping reporting decisions. Interim reporting is ultimately a managerial choice, influenced by executives' preferences, risk attitudes, and time horizons. In particular, managerial short-term orientation, often described as CEO myopia, may affect attitudes toward frequent reporting and market scrutiny. At the same time, board governance mechanisms may either constrain or reinforce managerial reporting behaviour by shaping oversight quality and monitoring effectiveness. In particular, the study considers whether board governance mechanisms shape the relationship between CEO behavioural traits, such as managerial myopia, and interim reporting frequency.

Taken together, these considerations highlight the need for a comprehensive examination of voluntary interim reporting frequency in the UK's post-2014 regulatory

environment. By analysing firm-level, CEO-level, and board-level determinants at the same time, this study seeks to provide a deeper understanding of the economic, behavioural, and governance factors that influence firms' disclosure strategies in a voluntary reporting regime. Building on this motivation, the following section identifies the key gaps in the existing literature that this study seeks to address.

1.4 Research gap

Despite extensive research on corporate disclosure and interim reporting, several important gaps remain in the existing literature. First, much of the prior research on interim reporting has focused on mandatory reporting regimes, particularly in the United States, where quarterly reporting has long been required and reporting frequency is largely uniform across firms (Healy and Palepu 2001; Brown and Hillegeist 2007). Consequently, relatively little is known about disclosure behaviour in voluntary reporting environments, where firms have greater discretion over whether and how frequently they provide interim financial information (Leuz and Wysocki 2016). Studies examining the costs and benefits of frequent reporting also tend to rely on institutional settings in which reporting frequency is imposed by regulation, limiting insights into strategic variation across firms (Gigler et al. 2014). The UK's post-2014 voluntary interim reporting regime therefore provides a rare and valuable opportunity to examine interim reporting frequency as a strategic managerial choice rather than a regulatory obligation (Pozen et al. 2017).

Second, existing studies have predominantly examined firm-level determinants of disclosure behaviour, such as size, profitability, leverage, and ownership structure. While these factors are important, they provide only a partial explanation of interim reporting decisions. Disclosure policies are shaped not only by economic incentives but also by managerial behaviour and governance structures. However, empirical evidence on the role of CEO characteristics in determining voluntary interim reporting frequency remains limited, particularly in the UK context.

Third, although corporate governance mechanisms are widely recognised as key determinants of disclosure quality, their influence on reporting frequency has received comparatively little attention. Prior studies have largely focused on the content or quality of disclosures rather than the decision of how often information is disclosed.

Moreover, the potential interaction between managerial characteristics such as CEO myopia and board governance mechanisms has not been adequately explored. This limits our understanding of how governance structures may mitigate or amplify managerial tendencies toward short-termism in disclosure decisions.

Fourth, the existing literature provides mixed and inconclusive evidence regarding to consequences of interim reporting frequency, making it difficult to draw clear policy implications. While some studies suggest that frequent reporting improves transparency and monitoring, others argue that it may encourage short-term managerial behaviour. These conflicting findings highlight the importance of examining the determinants of reporting frequency within specific institutional contexts rather than drawing general conclusions across different regulatory regimes.

Accordingly, this study addresses these gaps by focusing on voluntary interim reporting frequency among UK FTSE All-Share non-financial firms in the post-2014 deregulation period. By adopting a multi-level analytical framework that incorporates firm characteristics, CEO attributes, and board governance mechanisms, this research provides novel empirical evidence on the drivers of voluntary reporting behaviour. In doing so, the study contributes to the disclosure literature by offering a more comprehensive understanding of interim reporting decisions in a discretionary regulatory environment.

1.5 Research questions

Building on the background, motivation, and identified gaps discussed in the previous sections, this study seeks to address the following research questions:

- **RQ1:** What firm-level characteristics influence voluntary interim reporting frequency among UK FTSE All-Share non-financial firms in the post-2014 deregulation period?
- **RQ2:** To what extent do CEO characteristics affect voluntary interim reporting frequency in UK listed firms following the removal of mandatory quarterly reporting?
- **RQ3:** How do board governance mechanisms influence voluntary interim reporting frequency in the UK's post-deregulation reporting environment?

- **RQ4:** Do corporate governance mechanisms moderate the relationship between CEO myopia and voluntary interim reporting frequency in UK listed firms?

1.6 Research aim and objectives

1.6.1 Research aim

The motivation for this study arises from the regulatory change introduced in the UK in 2014, which removed the mandatory requirement for quarterly reporting. Following this change, some UK-listed firms continued to issue interim management statements and other interim reports on a voluntary basis, while others chose to reduce or discontinue such disclosures, despite no longer being required to do so by regulators (Pozen et al. 2017). This divergence in reporting behaviour indicates that interim reporting frequency has become a strategic managerial choice rather than a regulatory obligation, creating an important opportunity to examine the determinants of reporting frequency within a voluntary interim disclosure setting.

From a capital market perspective, voluntary interim reporting may offer several benefits, including reducing information asymmetry between corporate insiders and external stakeholders and enhancing the usefulness of financial information for investors, analysts, and other decision-makers. Consequently, understanding why some firms choose to report more frequently than others in a voluntary disclosure environment is of both academic and practical importance.

However, existing research on corporate disclosure and interim reporting exhibits several important limitations. Much of the prior literature has examined voluntary disclosure through the lens of annual reports, earnings guidance, analyst following, and forecast properties, with particular emphasis on the role of board monitoring and governance mechanisms (e.g. Barako 2007; Sehar et al. 2013; Rakiv 2019; Thinh 2021; Nallareddy et al. 2017). Surprisingly little attention has been paid to interim reports as a distinct and informative disclosure channel, despite their potential relevance for timely decision-making.

In the context of quarterly reporting, much of the empirical evidence is concentrated in mandatory reporting regimes, particularly in the United States. For example, Nallareddy et al. (2017) examine the implications of mandatory quarterly reporting

using data on earnings guidance, analyst forecasts, and corporate investment decisions. Similarly, Arif and De George (2015) focus on US firms to explore the consequences of quarterly disclosure practices. While these studies provide valuable insights, their findings may not generalise to voluntary reporting environments where firms have discretion over reporting frequency.

European evidence remains limited and fragmented. Cuijpers and Peek (2010) examined quarterly reporting practices in three Western European countries, including the UK, focusing on firms that reported quarterly before such reporting became mandatory in 2007. Ernstberger et al. (2017) showed that interim management statements and quarterly earnings announcements in European countries may be associated with increased earnings management and adverse long-term performance effects. However, these studies do not explicitly examine the determinants of voluntary interim reporting frequency, nor do they focus on the UK's post-2014 deregulation period.

As a result, there remains a clear gap in the literature regarding the factors that influence firms' decisions to issue interim reports on a voluntary basis, particularly in the UK context. Existing studies have largely overlooked how firm-level characteristics, managerial behaviour, and corporate governance mechanisms jointly shape voluntary interim reporting frequency in a discretionary disclosure regime. This study seeks to address this gap by examining the determinants of voluntary interim reporting frequency among UK FTSE All-Share non-financial firms in the post-2014 period, as well as the interaction between CEO myopia and board governance mechanisms.

1.6.2 Research objectives

To achieve the above aim, the study pursues the following specific research objectives:

1. To identify the firm-level characteristics that influence voluntary interim reporting frequency among UK FTSE All-Share non-financial firms in the post-2014 deregulation period.

2. To examine the effect of CEO characteristics, with particular focus on CEO myopia, on voluntary interim reporting frequency in UK listed firms operating under a voluntary reporting regime.
3. To assess the role of board governance mechanisms in shaping voluntary interim reporting frequency.
4. To investigate whether board governance mechanisms moderate the relationship between CEO myopia and voluntary interim reporting frequency, thereby evaluating the extent to which governance structures constrain or amplify managerial short-term orientation in interim disclosure decisions.

1.7 Overview of research methodology

This study uses a quantitative research design to examine the factors that influence voluntary interim reporting frequency among UK non-financial firms after the removal of mandatory quarterly reporting in 2014. In line with the objectives of the study, a positivist research philosophy is adopted, and a deductive approach is used to test hypotheses derived from established theories in accounting and corporate governance, including agency theory and upper echelons theory.

The empirical analysis focuses on non-financial firms listed on the UK FTSE All-Share index in the period following the 2014 regulatory change introduced by the financial conduct authority. Financial firms are excluded from the sample because they operate under different regulatory requirements and disclosure rules, which may affect their interim reporting behaviour. The chosen sample and time-period provide a suitable setting for analysing interim reporting decisions in a voluntary disclosure environment.

Data for the study are obtained from several secondary sources, including firms' interim and annual reports and recognised financial and corporate governance databases. The dependent variable is voluntary interim reporting frequency, which measures how frequently each firm in the FTSE All-Share non-financial sample issues periodic financial reports during a financial year. This measure reflects firms' voluntary reporting behaviour in the UK post-2014 regulatory environment, where routine

quarterly reporting became discretionary following the removal of the mandatory Interim Management Statement requirement (FCA PS14/15). Consistent with previous studies examining reporting frequency (e.g., Butler et al. 2007; Fu et al. 2012; Kraft et al. 2018; Fu et al. 2020; Kajüter et al. 2022), IRF is measured as an ordinal variable:

1= Firms that issuing annual reporting

2 = Firms that issuing semi-annual reporting

4 = Firms that issuing quarterly reporting

Higher values indicate more frequent reporting. This ordinal measure is used in the main empirical analysis because it preserves the ordering of reporting frequency across firms. Therefore, ordered logistic regression is used as the main estimation method. In this study, the term “voluntary” refers specifically to firms’ discretion over the frequency of routine interim reporting following the removal of mandatory quarterly reporting in 2014. It does not mean that firms are free from all disclosure requirements. UK-listed firms remain subject to disclosure requirements for material and price-sensitive information. Their reporting decisions may also be influenced by investor expectations, analyst monitoring, established reporting practices, and other market pressures. Therefore, voluntary IRF refers to firms’ discretion over how frequently they provide routine interim reports within the existing regulatory and market environment. As an additional robustness test, IRF is also measured as a binary variable (IRF_Dummy), which distinguishes firms that report quarterly or more frequently from firms that report less frequently. This alternative measure is used to examine whether the main findings are sensitive to how reporting frequency is measured. The main independent variables include firm-level characteristics, CEO attributes particularly CEO myopia and board governance mechanisms, with a specific focus on board gender diversity and board size. A set of control variables is also included to capture other firm-specific and market-related factors that may influence reporting decisions.

To answer the research questions, the study applies multivariate regression techniques that are appropriate for analysing reporting frequency data. Separate empirical models are used to examine firm-level, CEO-level, and board-level determinants, as well as to test interaction effects between CEO myopia and board

governance mechanisms. In addition, a range of diagnostic tests and robustness checks are conducted to ensure that the empirical results are reliable and valid.

Overall, this methodological approach allows for a systematic and structured examination of how economic incentives, managerial behaviour, and governance structures jointly influence voluntary interim reporting frequency in the UK. A detailed explanation of the research design, data sources, variable measurement, and econometric methods is provided in chapter three.

1.8 Significance and contribution of the study

This study makes several contributions to the accounting and financial reporting literature by providing evidence on the determinants of voluntary interim reporting frequency in the UK following the removal of mandatory quarterly reporting in 2014. Previous research has mainly focused on mandatory reporting environments, particularly in the United States, while less attention has been given to reporting frequency in a voluntary setting. The UK post-2014 environment therefore provides an important setting for examining why firms operating under the same general regulatory framework make different decisions about how frequently they provide voluntary interim reports.

From a theoretical perspective, the study brings together agency theory, signalling theory, upper echelons theory, resource dependence theory, and critical mass theory to explain firms' interim reporting decisions. While previous research has mainly focused on firm-level economic factors, this study extends the analysis by considering CEO characteristics, particularly CEO myopia, and board governance mechanisms. Upper echelons theory is used to explain how CEOs' short-term orientation may influence reporting frequency, while agency theory helps explain how governance mechanisms may monitor and constrain managerial discretion. The study therefore provides a multi-level theoretical framework in which voluntary reporting frequency is influenced by firm-level incentives, CEO characteristics, and board governance rather than by any single group of factors.

From an empirical perspective, the study provides evidence on voluntary IRF using a large sample of UK FTSE All-Share non-financial firms during the post-2014 period. The UK provides a distinctive setting because firms have discretion over routine

interim reporting frequency while remaining subject to continuing disclosure requirements. By examining firm-level, CEO-level, and board-level determinants within the same study, the research provides a broader understanding of the factors associated with voluntary interim reporting decisions. This approach extends previous research that has focused mainly on firm-level determinants or on the consequences of reporting frequency.

The study also contributes to the corporate governance literature by examining the role of board gender diversity and board size in voluntary interim reporting. Previous studies have often examined these governance characteristics in relation to disclosure quality, financial reporting quality, or firm performance rather than reporting frequency. This study goes beyond examining only their direct relationships with IRF by considering whether board governance moderates the relationship between CEO myopia and reporting frequency. In particular, the analysis of board gender diversity uses a critical mass perspective to examine whether the influence of female directors depends on their level of representation on the board. This provides a more detailed understanding of how board composition may influence the relationship between CEO behaviour and voluntary reporting decisions.

The study also makes a methodological contribution by measuring voluntary IRF as an ordinal variable. This approach preserves the ordered differences between firms with different reporting frequencies rather than reducing reporting behaviour to only two categories. Ordered logistic regression is therefore used as the main estimation method. Alternative specifications, including a binary measure of reporting frequency and additional robustness tests, are also used to assess the stability of the findings. Furthermore, interaction models are used to examine whether the relationship between CEO myopia and IRF depends on board governance characteristics. This allows managerial characteristics and governance mechanisms to be examined jointly rather than assuming that they influence reporting decisions independently.

From a practical and policy perspective, the study has implications for regulators, investors, analysts, and corporate boards. For regulators, the study provides evidence that may contribute to discussions about voluntary reporting regimes and whether greater flexibility in periodic reporting can operate alongside adequate market transparency. For investors and analysts, the study highlights the importance of

considering managerial characteristics and governance structures when evaluating firms' reporting practices. For corporate boards, the study highlights the importance of board oversight and composition in shaping voluntary reporting decisions and limiting the possible influence of managerial short-termism.

Overall, the main contribution of this study is that it brings together the regulatory, economic, managerial, and governance aspects of voluntary interim reporting within one empirical framework. Rather than viewing reporting frequency only as a response to firm characteristics or regulatory requirements, the study examines it as a voluntary reporting decision shaped by firm-level incentives, CEO characteristics, and board governance. In doing so, the study extends understanding of voluntary interim reporting in the UK post-2014 environment and provides insights that may also be relevant to other countries with flexible periodic reporting requirements.

1.9 Chapter Summary and Organisation of the Thesis

This chapter has introduced the background and context of the study, highlighting the regulatory change that transformed interim reporting frequency into a voluntary managerial decision for UK listed firms following the removal of mandatory quarterly reporting in 2014. It has discussed the research motivation and identified key gaps in the existing literature, particularly the limited evidence on how firm characteristics, CEO behaviour especially CEO myopia and board governance mechanisms influence voluntary interim reporting frequency. Based on these gaps, the chapter presented the research questions, research aim, and specific objectives of the study. An overview of the research methodology has also been provided, together with a discussion of the theoretical, empirical, and practical significance of the research.

This thesis is organised into five chapters, each of which addresses a specific component of the research and collectively contributes to achieving the overall research objectives.

Chapter One introduces the background and context of the study, with particular emphasis on the regulatory change that transformed interim reporting frequency into a voluntary managerial decision for UK-listed firms following the removal of the

mandatory requirement for quarterly reporting in 2014. This chapter outlines the research motivation, identifies key gaps in the existing literature, and presents the research aim, research questions, and objectives. It also provides an overview of the research methodology and highlights the theoretical, empirical, and practical significance of the study.

Chapter Two reviews the relevant literature on interim reporting, voluntary disclosure, CEO characteristics, and corporate governance mechanisms. This chapter discusses prior studies on the determinants and consequences of interim reporting frequency and situates the study within the broader disclosure literature. It further develops the theoretical framework underpinning the research, drawing on agency theory and upper echelons theory, and formulates the hypotheses to be tested.

Chapter Three outlines the research design and methodology adopted in this study. It presents the research philosophy and approach, describes the data sources and sample selection procedures, and explains the measurement of the dependent, independent, and control variables. In addition, the chapter details the empirical models employed to examine firm-level, CEO-level, and board-level determinants of voluntary interim reporting frequency, as well as the diagnostic tests and robustness checks used to assess the validity and reliability of the empirical results.

Chapter Four presents the empirical analysis and discusses the main findings of the study. This chapter reports the results of the multivariate regression analyses examining the determinants of voluntary interim reporting frequency at the firm, CEO, and board levels. It also analyses interaction effects between CEO myopia and board governance mechanisms and interprets the findings in relation to the research questions, hypotheses, and existing literature.

Chapter Five concludes the thesis by summarising the main findings and highlighting the theoretical, empirical, and practical contributions of the study. This chapter also discusses the limitations of the research and provides suggestions for future research on voluntary disclosure and interim reporting practices.

Chapter 2 : Literature review and hypothesis development

2.1 Introduction

Interim reporting, typically conducted on a quarterly or semi-annual basis, has attracted considerable attention from academics, policymakers, and practitioners due to its implications for financial transparency, market efficiency, and managerial decision-making. By providing timely information on a firm's operational and financial performance, interim reports help reduce information asymmetry and support more informed decision-making by investors, creditors, and regulatory bodies.

This chapter reviews the existing literature on interim financial reporting, with a particular focus on theoretical and empirical studies related to voluntary interim reporting. The first part of the chapter develops the theoretical framework underpinning voluntary interim reporting decisions. It reviews agency theory, signalling theory, legitimacy theory, institutional theory, upper echelons theory, resource dependence theory, and critical mass theory. Together, these theories provide complementary explanations for how economic incentives, external pressures, managerial characteristics, and corporate governance mechanisms may influence firms' voluntary interim reporting decisions.

The second part of the chapter reviews empirical studies on interim reporting, drawing on evidence from the UK and other international contexts. It identifies the key determinants that may influence firms' decisions to report more or less frequently on a voluntary basis. These determinants are grouped into three broad categories: (1) firm-level characteristics, including firm size, profitability, leverage, liquidity, analyst following, ownership concentration, and assets in place; (2) CEO characteristics, including gender, age, tenure, duality, education, and myopia; and (3) corporate governance mechanisms, including board size, board independence, board gender diversity, and audit committee independence.

Particular attention is given to the UK following the removal of mandatory quarterly reporting requirements in 2014, which provided firms with greater discretion over their interim reporting frequency. Although previous research has examined the consequences of interim reporting and voluntary corporate disclosure more broadly,

relatively limited evidence explains the determinants of voluntary interim reporting frequency in a post-deregulation environment. Accordingly, this chapter establishes the theoretical and empirical foundations for examining the firm-level, CEO-level, and board-level factors associated with voluntary interim reporting frequency and for developing the hypotheses tested in this study.

2.2 Theoretical framework

This section discusses the theoretical foundations that explain firms' voluntary disclosure behaviour. The voluntary disclosure literature draws on several complementary theories to explain why firms provide information beyond mandatory requirements and how these decisions are influenced by firm characteristics, managerial behaviour, governance structures, and the wider institutional environment. This study draws on agency theory, signalling theory, legitimacy theory, institutional theory, upper echelons theory, resource dependence theory, and critical mass theory. Together, these theories provide different but complementary explanations for voluntary interim reporting. Agency and signalling theories mainly explain firms' economic and disclosure incentives, legitimacy and institutional theories consider the wider social and regulatory environment, upper echelons theory explains the influence of CEO characteristics, and resource dependence and critical mass theories help explain the role of board governance and diversity. Together, these perspectives provide the theoretical framework for examining the determinants of voluntary interim reporting frequency in this study.

2.2.1 Agency theory

Agency theory is one of the main theoretical frameworks used in accounting and corporate governance research (Jensen and Meckling 1976). It is based on the separation between ownership and control, where shareholders (principals) delegate decision-making authority to managers (agents). Jensen and Meckling (1976) describe an agency relationship as a contractual arrangement in which one party appoints another to perform services on its behalf and delegates decision-making

authority. Similarly, Baiman (1990) explains that managers act with a degree of autonomy when carrying out responsibilities on behalf of shareholders.

A central assumption of agency theory is that managers and shareholders may have different interests (Jensen and Meckling 1976). Managers may therefore make decisions that benefit themselves rather than shareholders, particularly when their actions are difficult to monitor. These differences can create agency problems and information asymmetry because managers generally have more information about the firm's financial position, performance, and future prospects than external stakeholders (Jensen and Meckling 1976; Healy and Palepu 2001). Managers may also have discretion over the information they disclose, which can increase uncertainty for investors and other stakeholders.

The extent of agency problems may differ across firms. For example, large firms often have a greater separation between ownership and control and may face stronger external monitoring demands (Crutchley and Hansen 1989; Watts 1990). Highly leveraged firms may also experience greater agency conflicts between shareholders, managers, and creditors, creating stronger demand for information and monitoring (Jensen and Meckling 1979). In contrast, firms with concentrated ownership may have less need for public disclosure because major shareholders may obtain information directly from management (Shleifer and Vishny 1997).

Agency theory suggests that monitoring and disclosure can help reduce these problems (Jensen and Meckling 1976; Healy and Palepu 2001). Voluntary disclosure can reduce information asymmetry by providing shareholders, creditors, and other stakeholders with additional information about firm performance and managerial decisions (Hossain et al. 1994; Healy and Palepu 2001). More frequent disclosure may therefore reduce monitoring costs and improve managerial accountability. However, voluntary disclosure also involves managerial discretion. Managers may be less willing to provide information frequently when greater transparency increases external scrutiny or limits their discretion.

Corporate governance mechanisms can also reduce agency problems by strengthening the monitoring of management. Boards of directors oversee managerial decisions and may limit opportunistic behaviour. Independent directors can strengthen monitoring and managerial accountability, although previous evidence suggests that

the relationship between board independence and disclosure may differ across firms and institutional settings (Donnelly and Mulcahy 2008; Adams and Ferreira 2009). CEO duality may have the opposite effect because combining the CEO and chair roles can concentrate managerial power and weaken independent board oversight (Khlif et al. 2020).

In the context of this study, agency theory provides several explanations for differences in voluntary interim reporting frequency. Larger firms may report more frequently because they face greater external monitoring and information demands (Crutchley and Hansen 1989; Lang and Lundholm 1993). Highly leveraged firms may also provide more frequent interim information to reduce information asymmetry and respond to creditor monitoring (Jensen and Meckling 1976; Barako 2006). In contrast, concentrated ownership may reduce the need for frequent public reporting when major shareholders have direct access to management information (Shleifer and Vishny 1997). Agency theory also suggests that CEO power and board governance can influence reporting decisions because they affect managerial discretion and the strength of monitoring.

Overall, agency theory provides an important foundation for explaining how information asymmetry, managerial discretion, and monitoring influence voluntary IRF. The theory is particularly relevant to the UK post-2014 setting because firms have greater discretion over routine reporting frequency following the removal of mandatory quarterly reporting. In this environment, differences in agency conflicts and monitoring pressures may help explain why some firms choose to provide interim information more frequently than others (Pozen et al. 2017; Kajüter et al. 2022). Agency theory therefore provides the main monitoring perspective in this study, while the other theories discussed in the following sections provide complementary explanations for firms' disclosure incentives, managerial characteristics, and governance structures.

2.2.2 Signalling theory

Signalling theory provides an important explanation for why firms voluntarily disclose information beyond regulatory requirements (Spence 1973; Morris 1987). It complements agency theory by focusing on how firms use disclosure to communicate private information to external market participants and reduce information asymmetry

(Raffournier 1995; Haniffa and Cooke 2002; Watson et al. 2002; Akhtaruddin and Hossain 2008).

Signalling is particularly relevant when managers have more information about the firm's performance and future prospects than investors and other market participants (Morris 1987). In such situations, voluntary disclosure allows managers to communicate information about the quality and performance of the firm. Firms with strong performance or favourable prospects may therefore have greater incentives to disclose additional information when the benefits of signalling are greater than the associated costs. In contrast, poorly performing firms may have weaker incentives to disclose because additional information could reveal weaknesses or increase market scrutiny (Nagar and Schoenfeld 2025).

Voluntary disclosure can help firms distinguish themselves from lower-quality firms and reduce the risk that investors undervalue them (Inchausti 1997; Kanagaretnam et al. 2007). Timely and credible information can also improve investor confidence and perceptions of firm quality (Healy and Palepu 2001; Clarkson et al. 2013). However, signalling does not always lead to greater disclosure. Firms with unfavourable information may delay or withhold voluntary disclosure (Verrecchia 1983; Dye 1985). Kothari et al. (2009), for example, find that managers may delay the release of bad news. On the other hand, managers may sometimes disclose unfavourable information earlier to reduce potential litigation or reputational costs (Skinner 1994; Healy and Palepu 2001). These different incentives show that the relationship between firm performance and voluntary disclosure is not always straightforward.

The effectiveness of signalling also depends on the credibility and cost of disclosure. For a signal to be useful, it should provide credible information about the firm and should not be easily imitated by lower-quality firms (Morris 1987; Kirmani and Rao 2000). At the same time, disclosure can create proprietary costs if competitors are able to use the information for their own benefit (Darrough 1993). Firms may therefore choose not to disclose some information even when disclosure could reduce information asymmetry (Elliott and Jacobson 1994; Inchausti 1997). Voluntary disclosure decisions therefore involve a balance between the potential benefits of signalling and the costs of providing additional information.

In the context of this study, signalling theory suggests that firms with stronger performance and favourable prospects may have greater incentives to report more frequently in order to communicate their performance and maintain investor confidence. More frequent interim reporting provides firms with repeated opportunities to communicate timely information to the market. In contrast, firms with weaker performance or higher disclosure costs may have less incentive to increase their reporting frequency. Signalling theory therefore helps explain why profitability and other indicators of firm quality may be associated with voluntary IRF in the UK post-2014 environment.

Signalling theory complements agency theory but provides a different explanation for voluntary reporting. Agency theory focuses mainly on reducing conflicts of interest and monitoring managers, whereas signalling theory focuses on firms' incentives to communicate private information and distinguish themselves in the market. Together, the two theories suggest that firms may report more frequently both to reduce information asymmetry and monitoring costs and to communicate favourable information to investors. These perspectives therefore provide complementary explanations for differences in voluntary interim reporting frequency.

2.2.3 Legitimacy theory

Legitimacy theory provides an important perspective for understanding why firms voluntarily disclose information beyond mandatory reporting requirements. Originally developed by Dowling and Pfeffer (1975) and further refined by Suchman (1995), the theory argues that organisations operate under an implicit social contract with society. According to this perspective, firms depend on society's approval for their continued existence and access to critical resources. Firms therefore seek to ensure that their activities are perceived as consistent with prevailing social norms, values, and expectations. When stakeholders perceive a firm's actions as legitimate, the organisation is more likely to maintain investor confidence, preserve its reputation, and sustain access to financial and non-financial resources.

According to legitimacy theory, corporate disclosure represents an important mechanism through which firms demonstrate accountability and maintain their social

licence to operate. Voluntary disclosures allow managers to communicate not only financial performance but also broader organisational activities that reassure investors, regulators, customers, and other stakeholders that the firm operates responsibly (Deegan 2002; Deegan 2019). Consequently, disclosure is viewed as a strategic response to legitimacy pressures rather than solely as a means of satisfying mandatory reporting requirements.

Because legitimacy cannot be observed directly, researchers typically infer legitimacy pressures from observable organisational characteristics such as firm visibility, industry sensitivity, media exposure, environmental performance, and stakeholder scrutiny (Deegan 2002; Suchman 1995). These characteristics help explain why some firms voluntarily disclose more information than others, particularly in environments where maintaining stakeholder confidence is essential.

Legitimacy concerns become particularly important when firms experience significant environmental changes, regulatory reforms, or events that increase public scrutiny (Suchman 1995). Under such circumstances, managers may voluntarily increase disclosure to demonstrate transparency, reduce uncertainty, and restore stakeholder confidence. Conversely, firms facing fewer legitimacy pressures may perceive fewer benefits from providing additional voluntary information, particularly when disclosure imposes preparation costs or reveals commercially sensitive information.

More recent empirical studies provide further evidence supporting legitimacy theory by demonstrating that firms use voluntary disclosure strategically to strengthen stakeholder confidence and protect organisational reputation. Research shows that firms operating in highly visible industries or those exposed to greater stakeholder scrutiny generally provide more extensive voluntary disclosures to preserve their reputation and maintain legitimacy (Michelon et al. 2015; Helfaya and Moussa 2017). Similarly, firms facing greater public attention often increase the frequency and quality of corporate reporting to demonstrate accountability and reinforce stakeholder trust (Cho et al. 2015). Recent studies further show that firms facing greater reputational risks or stakeholder expectations tend to expand voluntary sustainability, environmental, and governance disclosures as a means of reinforcing legitimacy and maintaining public confidence (Zouari and Dhifi 2021; Bassyouny et al. 2022; Velte 2023).

Despite its considerable explanatory power, legitimacy theory has been criticised for providing a broad explanation of voluntary disclosure without clearly identifying the specific organisational mechanisms through which legitimacy pressures influence managerial decisions (Gray et al. 1995; Deegan 2002). Moreover, firms operating under similar legitimacy pressures may nevertheless adopt different disclosure strategies because managerial characteristics, governance structures, and economic incentives also shape disclosure decisions. Consequently, legitimacy theory is generally viewed as complementary to other theoretical perspectives rather than as a complete explanation of corporate disclosure behaviour.

Legitimacy theory is particularly relevant to the present study because the removal of mandatory quarterly reporting by the Financial Conduct Authority (FCA) in 2014 substantially increased managerial discretion over interim reporting frequency. In this voluntary reporting environment, firms must decide whether continuing frequent interim reporting provides reputational benefits that outweigh its associated costs. Firms facing greater public visibility, stronger investor expectations, or higher reputational concerns may voluntarily maintain more frequent reporting to demonstrate transparency, reinforce stakeholder confidence, and preserve legitimacy despite the absence of a regulatory requirement.

Although legitimacy theory provides valuable insights into firms' external motivations for voluntary disclosure, it is not sufficient on its own to explain differences in reporting behaviour across firms. Firms operating under similar legitimacy pressures may nevertheless adopt different reporting strategies because disclosure decisions are also influenced by managerial characteristics, governance structures, and economic incentives. Accordingly, legitimacy theory complements agency theory, signalling theory, upper echelons theory, resource dependence theory, institutional theory, and critical mass theory by explaining the broader social and reputational motivations underlying voluntary interim reporting decisions in the UK following the 2014 deregulation.

2.2.4 Institutional theory

Institutional theory provides an additional explanation for voluntary corporate disclosure by focusing on how the external institutional environment influences organisational behaviour. Unlike agency theory, which focuses on conflicts between managers and shareholders, and signalling theory, which explains disclosure as a way of communicating firm quality, institutional theory suggests that firms may adopt particular practices because they are considered appropriate and widely accepted within their environment (DiMaggio and Powell 1983; Scott 2014). Firms therefore respond not only to economic incentives but also to regulations, professional norms, and expectations from investors, regulators, and other stakeholders.

Institutional theory identifies three main pressures that can influence organisational behaviour: coercive, normative, and mimetic pressures (DiMaggio and Powell 1983). Coercive pressures arise from laws, regulations, and formal governance requirements. Normative pressures come from professional standards, accounting practices, corporate governance expectations, and the expectations of investors and financial intermediaries. Mimetic pressures occur when firms follow the practices of other successful or respected firms, particularly when there is uncertainty.

Because institutional pressures cannot always be observed directly, researchers often consider characteristics such as the regulatory environment, governance arrangements, ownership structures, industry practices, and stakeholder expectations when examining their influence (Scott 2014). These factors can help explain why firms operating in similar environments may adopt similar disclosure practices even when particular disclosures are no longer legally required.

In financial reporting, institutional pressures can influence both mandatory and voluntary disclosure. Even when firms are no longer required to provide particular reports, they may continue to do so because investors, analysts, and other market participants expect a certain level of transparency. Voluntary disclosure may therefore reflect established market practices and expectations as well as managers' economic decisions. Previous research suggests that governance traditions, institutional investors, and developed capital markets can influence firms' disclosure practices even in more flexible regulatory environments (Christensen et al. 2017; Kajüter et al.

2022). More recent research also suggests that stakeholder expectations, governance norms, and institutional environments can influence corporate reporting beyond formal regulatory requirements (Bassyouny et al. 2022; Velte 2023).

However, institutional theory has some limitations. It places greater emphasis on organisational conformity and gives less attention to managerial discretion and firm-specific economic incentives (Oliver 1991; Scott 2014). Firms operating under similar institutional pressures may still make different reporting decisions because managers can interpret and respond to these pressures differently. Institutional theory therefore provides only part of the explanation for voluntary disclosure behaviour.

Institutional theory is particularly relevant to this study because the FCA's removal of mandatory quarterly reporting in 2014 did not remove the wider institutional pressures surrounding corporate disclosure. Although UK firms gained greater discretion over interim reporting frequency, they continued to operate within an environment influenced by corporate governance expectations, financial reporting standards, institutional investors, financial analysts, and market expectations. Some firms may therefore continue to report frequently because expectations for transparency remain even after the formal reporting requirement has been removed. Other firms may reduce their reporting frequency when they face weaker external pressures or when the costs of frequent reporting are greater than its perceived benefits.

Institutional theory therefore complements the other theories used in this study. Agency theory explains how monitoring and information asymmetry can influence reporting decisions, while signalling theory explains firms' incentives to communicate information about their performance and quality. Institutional theory adds an external perspective by explaining how regulatory, professional, and market expectations can influence reporting practices even when reporting frequency is voluntary. Legitimacy theory further considers firms' need to maintain acceptance among stakeholders, while upper echelons theory focuses on managerial characteristics and discretion. Resource dependence and critical mass theories provide additional explanations for the role of board composition and governance. Together, these theories provide a broader framework for explaining why firms may make different voluntary interim reporting decisions following the 2014 UK deregulation.

2.2.5 Upper echelons theory

Upper echelons theory, developed by Hambrick and Mason (1984), proposed that organisational outcomes and strategic decisions are strongly influenced by the characteristics of top executives. From this perspective, organisations do not act independently; rather, they reflect the values, experiences, and cognitive frames of their senior leaders. Executives interpret information and environmental conditions differently based on their personal backgrounds, which in turn shapes strategic choices and subsequent firm performance (Hambrick and Mason 1984; Hambrick 2007). This perspective departs from the assumption of fully rational decision-making and highlights the human and behavioural foundations underlying corporate strategies.

Because internal attributes such as cognition, values, and personality are difficult to observe directly, researchers commonly use demographic characteristics including age, education, gender, and tenure as observable proxies for deeper cognitive and psychological traits (Carpenter et al. 2004). Empirical research provides substantial evidence that these characteristics influence managerial behaviour. For example, older CEOs tend to exhibit greater risk aversion and pursue more conservative strategies, whereas younger CEOs are often more willing to undertake risky investments, leading to both higher growth opportunities and increased volatility (Serfling 2014; Carpenter et al. 2004). CEOs with higher levels of education, particularly those with business or finance qualifications, are also associated with stronger governance awareness and a longer-term strategic orientation (Ghardallou et al. 2020; Suherman et al. 2023). Gender differences have likewise been shown to matter, as female CEOs may bring more diverse perspectives, enhance stakeholder communication, and promote ethical decision-making (Suherman et al. 2023; Zhang et al. 2023).

More recent empirical studies extend upper echelons theory to the context of corporate disclosure, demonstrating that managerial characteristics significantly influence both the quantity and quality of information firms provide to the market. This literature shows that executives' personal traits, experiences, and cognitive orientations shape disclosure decisions beyond firm-level economic factors. For example, older CEOs

tend to adopt more conservative disclosure practices (Bamber et al. 2010), while newly appointed or MBA-trained CEOs are more inclined to voluntarily disclose strategic and environmental information (Lewis et al. 2014; Chithambo et al. 2020). More recent evidence further suggests that CEO age, gender, tenure, education, and career background influence a wide range of voluntary disclosure outcomes, including sustainability reporting, environmental disclosure, and the tone of financial narratives (Zouari and Dhifi 2021; Bassyouny et al. 2022; Nurakhmet and Park 2024).

Despite its explanatory power, upper echelons theory has been criticised for placing excessive emphasis on top executives while giving limited attention to other organisational and environmental influences, such as firm culture, industry dynamics, and regulatory constraints (Hitt and Tyler 1991). Subsequent research has addressed these concerns by recognising that although CEOs remain influential decision-makers, their behaviour is shaped by the broader organisational and institutional context in which they operate (Carpenter et al. 2004).

In the context of voluntary interim reporting frequency, upper echelons theory suggests that CEO characteristics play a central role in shaping managerial attitudes towards transparency and communication with capital markets. More experienced or older CEOs may favour stable and predictable reporting patterns to maintain credibility, whereas younger or newly appointed CEOs may adopt more flexible reporting strategies to manage market pressures. Similarly, highly educated CEOs particularly those with business or finance backgrounds may be more aware of the signalling benefits associated with frequent disclosure. Gender-related differences in risk preferences and stakeholder engagement may also influence reporting decisions. Overall, upper echelons theory provides a strong theoretical foundation for examining how CEO characteristics shape voluntary interim reporting behaviour in the UK, particularly following the increased managerial discretion introduced by the 2014 deregulation.

2.2.6 Resource dependence theory

Resource dependence theory, originally developed by Pfeffer (1987), explained how organisations rely on external resources and must strategically manage relationships with their environment to survive and grow. No firm can generate all the resources it

requires internally such as capital, expertise, or legitimacy and therefore depends on external stakeholders, including investors, regulators, suppliers, and strategic partners. This external dependence encourages firms to build board connections, form partnerships, and, in some cases, engage in mergers or acquisitions to secure critical resources and reduce uncertainty (Hillman et al. 2009). Through these interactions, firms gain access to financial capital, strategic information, and social legitimacy, which together enhance organisational stability and performance (Drees and Heugens 2013).

Resource dependence theory also recognises that not all resource relationships are equal. Casciaro and Piskorski (2005) demonstrated that when dependence is relatively balanced between two parties, cooperation tends to be more stable. However, when one organisation holds greater power, the weaker party may experience a loss of autonomy or face constraints on its strategic decisions. As a result, resource dependence can both empower and restrict firms, depending on the distribution of influence within external relationships (Pfeffer and Salancik 2015; Casciaro and Piskorski 2005).

A central insight of resource dependence theory concerns the role of corporate leaders and boards as “boundary spanners” who link the firm to its external environment (Daily and Schwenk 1996). Top executives and directors bring networks, expertise, and legitimacy that facilitate access to external resources and strengthen stakeholder relationships. Empirical evidence supports this role. For example, Wang et al. (2017) stated that CEOs’ education, experience, and social networks significantly influence strategic decisions and firm outcomes. Similarly, Lewis et al. (2014) fund that CEOs with advanced education particularly MBA qualifications are more likely to promote transparency and sustainability reporting, reflecting greater awareness of stakeholder expectations. Carpenter et al. (2004) further demonstrated that internationally experienced CEOs contribute positively to innovation and external collaboration.

At the board level, diversity and expertise amplify these effects. Boards with diverse members, particularly those including female directors, are better positioned to access external resources and enhance disclosure quality (Hillman et al. 2009). Studies by Nadeem (2020) and Ntim et al. (2017) showed that gender-diverse boards are associated with higher levels of transparency and voluntary disclosure, consistent with

resource dependence theory's prediction that diverse external linkages enhance access to knowledge, legitimacy, and trust. However, Yarram and Adapa (2021) stated that the benefits of board diversity and expanded resource access may diminish beyond a certain point, suggesting that the positive impact of board resources on disclosure quality is subject to limits.

Over time, resource dependence theory has evolved to recognise that dependence is not necessarily a weakness but can be transformed into a strategic asset. Strong partnerships can facilitate information exchange, reputation building, and access to innovation opportunities (Coşkun and Öztürk 2024). This development has led to the integration of resource dependence theory with the resource-based view, which argues that competitive advantage arises when firms effectively combine internal capabilities with external relationships (Öztürk and Bağış 2025).

In the context of corporate disclosure, resource dependence theory provides a valuable explanation for voluntary reporting practices. Firms disclose information not only to inform markets but also to attract investors, reduce uncertainty, and maintain legitimacy. Early evidence from Leftwich et al. (1981), together with later work by Hillman et al. (2009), suggested that firms voluntarily release information to signal strength, credibility, and openness to external stakeholders. More recent evidence supports this view. For instance, Nadeem (2020) and Ntim et al. (2017) reported that boards with broader expertise and diverse backgrounds particularly those with women directors tend to adopt more transparent and frequent disclosure practices.

The regulatory environment further shapes how firms apply resource dependence principles to disclosure strategies. When reporting requirements are relaxed, firms often rely more heavily on voluntary reporting to maintain investor trust and market visibility. For example, Link (2012) observed that following changes in European interim reporting regulations, companies increasingly used voluntary reporting to sustain market confidence. This behaviour aligns closely with the core logic of resource dependence theory, which views disclosure as a strategic tool for managing external dependencies, securing stakeholder support, and preserving legitimacy in competitive markets.

In summary, resource dependence theory helps explain why firms engage in voluntary disclosure beyond regulatory requirements. By maintaining transparent

communication through practices such as frequent interim reporting, firms strengthen relationships with key stakeholders, enhance access to critical resources, and signal stability and credibility to the market.

2.2.7 Critical mass theory

Critical mass theory, originally developed by Kanter (1987), provides an important perspective for understanding the influence of minority representation within decision-making groups. Kanter (1987) argued that when minority members are very few, they may be perceived as token representatives rather than full contributors, limiting their ability to challenge majority views and influence group decisions. However, as minority representation increases and reaches a critical mass, minority members may gain greater confidence, support, and influence within the group.

This perspective has become particularly relevant to corporate governance research examining female representation on boards. Critical mass theory suggests that appointing one or two female directors may not be sufficient to generate meaningful changes in board decision-making because they may remain isolated or have limited influence. When female representation reaches a meaningful level, often identified in the literature as at least three female directors, women may participate more actively in board discussions and exert greater influence over decision-making (Konrad et al. 2008; Torchia et al. 2011; Joecks et al. 2013). The effect of board gender diversity may therefore depend not only on the presence or proportion of female directors but also on whether their representation is sufficient to influence board processes.

Critical mass theory is also relevant to corporate financial reporting and disclosure. Previous studies associate board gender diversity with greater transparency, improved reporting quality, and lower levels of earnings management (Gul et al. 2011; Garcia-Sanchez et al. 2017; Zalata et al. 2022). However, these benefits may be more evident when female directors are present in meaningful numbers rather than as isolated representatives. A critical mass may enable female directors to participate more effectively in monitoring management, challenging reporting decisions, and promoting accountability and transparent communication (Ntim et al. 2017). Empirical

evidence similarly suggests that boards achieving a critical mass of female directors can experience improvements in board decision-making and organisational outcomes (Torchia et al. 2011; Alves 2023).

This argument is particularly relevant to voluntary disclosure because disclosure decisions involve managerial judgement regarding the amount and timing of information provided to the market. Strong board monitoring can influence these decisions by encouraging timely and transparent communication and reducing information asymmetry between managers and investors (Taylor et al. 2010; Wang and Hussainey 2013). Critical mass theory therefore suggests that the influence of female directors on voluntary disclosure may become stronger when their representation reaches a level that enables them to participate meaningfully in board decision-making.

The UK provides a particularly relevant setting in which to examine this relationship. Following the FCA's removal of mandatory quarterly reporting requirements in 2014, UK firms gained greater discretion over the frequency of interim reporting. This change increased the potential importance of internal governance mechanisms in influencing whether firms continued to report frequently or reduced their reporting frequency (Pozen et al. 2017; Kajüter et al. 2022). In this voluntary environment, achieving a critical mass of female directors may strengthen the board's ability to influence reporting decisions and encourage greater transparency.

Critical mass theory also complements agency theory and resource dependence theory in explaining the potential role of board gender diversity. From an agency perspective, meaningful female representation may strengthen board monitoring and accountability, thereby constraining managerial opportunism (Jensen and Meckling 1976; Adams and Ferreira 2009). From a resource dependence perspective, gender-diverse boards may provide a broader range of knowledge, experience, and stakeholder perspectives, improving the board's capacity to respond to external information demands (Hillman et al. 2007; Pfeffer and Salancik 2015). Critical mass theory extends these perspectives by suggesting that the governance benefits associated with female directors may depend on whether their representation is sufficient to exert meaningful influence.

Accordingly, this study applies critical mass theory to examine voluntary interim reporting frequency in the UK following the 2014 deregulation. By considering both board gender diversity and whether boards achieve different levels of female representation, the study examines whether the influence of female directors on reporting behaviour depends on reaching a meaningful level of representation. This approach recognises that the governance effects of gender diversity may depend not simply on the presence of female directors but on their ability to participate meaningfully in board decision-making (Kanter 1987; Torchia et al. 2011).

2.2.8 Integration of the theoretical framework

No single theory can fully explain firms' voluntary interim reporting frequency. The decision to provide interim information beyond mandatory requirements may be influenced by economic incentives, external pressures, managerial characteristics, and corporate governance mechanisms. Therefore, this study adopts an integrated theoretical framework that combines agency theory, signalling theory, legitimacy theory, institutional theory, upper echelons theory, resource dependence theory, and critical mass theory. Each theory explains a different but complementary aspect of voluntary reporting behaviour.

Agency theory and signalling theory provide the main economic explanations for voluntary disclosure. Agency theory suggests that more frequent reporting can reduce information asymmetry and improve the monitoring of managers by shareholders and creditors (Jensen and Meckling 1976; Healy and Palepu 2001). Signalling theory complements this perspective by suggesting that firms may voluntarily provide information to communicate favourable performance and distinguish themselves from other firms (Spence 1973; Verrecchia 1983). Although both theories are related to information asymmetry, they focus on different mechanisms. Agency theory focuses mainly on monitoring and conflicts of interest, while signalling theory focuses on communicating information about firm quality to the market.

Legitimacy theory and institutional theory extend these economic explanations by considering the wider environment in which firms operate. Legitimacy theory suggests that firms may use disclosure to demonstrate accountability and maintain acceptance among stakeholders. Institutional theory explains how regulatory, professional, and

market pressures can encourage firms to follow established reporting practices. These theories are particularly relevant to the UK post-2014 environment because the removal of mandatory quarterly reporting did not remove investor expectations, professional norms, reputational pressures, or established reporting practices. Therefore, some firms may continue to report frequently even when they are no longer formally required to do so.

Upper echelons theory adds the managerial perspective to the framework. Firms facing similar economic and institutional conditions may still make different reporting decisions because CEOs may interpret and respond to these conditions differently. CEO characteristics, including gender, age, tenure, duality, education, and myopia, may therefore influence voluntary reporting decisions. In particular, CEO myopia is relevant because a short-term managerial orientation may affect a CEO's willingness to support frequent voluntary reporting.

Resource dependence theory and critical mass theory provide further explanations for the role of board governance. Resource dependence theory suggests that boards provide firms with expertise, knowledge, external connections, legitimacy, and access to important resources. These characteristics may influence the board's ability to support effective monitoring and transparent reporting. Critical mass theory focuses more specifically on board gender diversity and suggests that female directors may have greater influence on board decisions when their representation reaches a meaningful level rather than remaining limited or tokenistic. These perspectives therefore help explain why board characteristics may influence reporting decisions directly or may affect how CEO characteristics influence those decisions.

The theories are therefore complementary rather than competing explanations. Agency and signalling theories explain the economic incentives for voluntary reporting. Legitimacy and institutional theories explain the wider external pressures that may influence firms' reporting practices. Upper echelons theory explains how CEO characteristics may lead firms facing similar conditions to make different reporting decisions. Resource dependence and critical mass theories explain how board characteristics and composition may influence governance and constrain or modify managerial reporting choices. Together, these theories provide a broader explanation of voluntary IRF than any single theory could provide on its own.

This integrated framework is particularly relevant to the UK post-2014 environment because firms have greater discretion over routine interim reporting frequency following the removal of mandatory quarterly reporting. As a result, reporting decisions may reflect the combined influence of firm-level economic incentives, managerial characteristics, board governance, and wider institutional expectations. The integrated theoretical framework therefore provides the foundation for the firm-level, CEO-level, board-level, and moderating hypotheses developed in the remainder of this chapter.

Building on this theoretical discussion, Figures 2.1 and 2.2 present the conceptual structure of the study. Figure 2.1 brings together the economic, institutional, managerial, and governance perspectives used to explain voluntary IRF. It shows how the UK post-2014 reporting environment provides the institutional context within which firm-level incentives, CEO characteristics, and board governance mechanisms may influence reporting frequency. Figure 2.2 focuses on the moderating framework and shows how board gender diversity and board size may influence the relationship between CEO myopia and voluntary IRF.

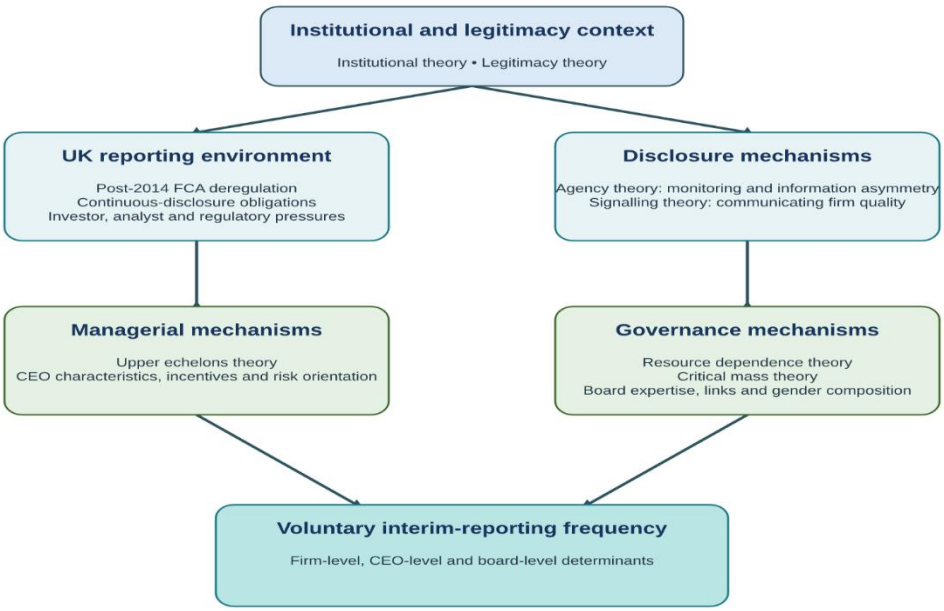


Figure 2.1: Theoretical framework of the study

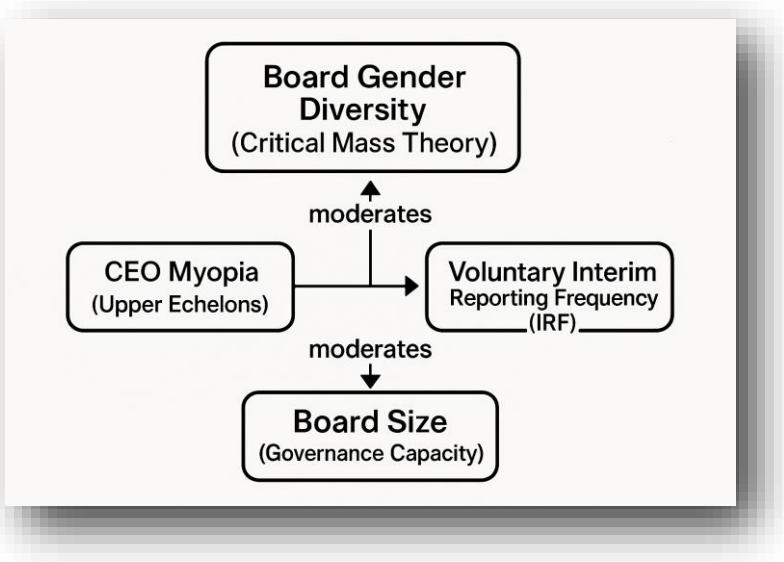


Figure 2.2: Moderating role of board governance in the relationship between CEO myopia and voluntary IRF

2.3 Empirical evidence and hypotheses development

2.3.1 Interim reporting frequency across countries

There is a long history of research into interim reporting (Yee 2004). For instance, Oberholster and Nieuwoudt (2001) studied South African data to help establish the degree of compliance with the country's compulsory interim reporting requirements. Data for a sample of 50 listed companies spanning the period 1997-1999 indicate that compliance with interim reporting accounting standards is low (South African Accounting Statement 127 and IAS 34). Indeed, as of 1997, just 24% of companies disclosed their approach to computation as well as their accounting policies and this fell to 16% in the following year before rising to 52% at the end of the study period. The same firms were found to have a much higher level of compliance with interim reporting requirements under the Stock Exchange Listing Rules and the Companies Act. Oberholster and Nieuwoudt (2001) attempted to explain the low level of compliance and suggested that it may be because of an unusually large number of regulations referring to interim reporting, the failure of the stock exchange to monitor interim reporting, the difficulty experienced when extracting interim information from

financial accounts, directors failing to pay due care when preparing interim reports, and a general perception that interim reports are of little practical use. In addition, they suggest that if regulators are intent on delivering improvements in interim reporting, they should make the prevailing interim reporting regulations better aligned and ensure that disclosure requirements are not duplicated.

Bradbury (1991) considered the experience of New Zealand between 1973 and 1976, reporting a positive relationship between voluntary earnings announcements and the paying of interim dividends, access to external capital, and earnings forecast errors, but voluntary disclosures were negatively related to seasonal volatility. Bradbury (1992) utilised the same data to report on a positive relationship between unanticipated earnings and non-quantified voluntary interim disclosures.

Schadewitz et al. (2002) investigated the determinants of interim reporting disclosure using data from 256 listed non-financial Finnish companies between 1985 and 1993. The level of disclosure was measured using a disclosure index that captured the number and detail of items reported in interim statements. Their results showed a significant positive association between company size and business risk with the level of interim reporting disclosure. In contrast, there was a significant negative association between the growth potential of a company and interim reporting disclosure.

Ku Ismail and Chandler (2004) investigated the timeliness of quarterly reports issued by companies listed in Malaysia, focusing on the timing of these reports rather than the underlying reporting motives. Analyzing data from 117 quarterly reports published in 2001, they found that all but one company met the requirement to publish within two months. This high level of compliance suggests a strong adherence to regulatory standards among Malaysian firms. Their findings indicate a positive association between the timeliness of reporting and factors such as profitability, company size, and growth rate. This implies that more profitable, larger, and faster-growing companies are better equipped to meet reporting deadlines, likely due to more robust financial and administrative resources. Conversely, the negative correlation with leverage suggests that highly leveraged companies may face challenges in timely reporting, possibly due to more complex financial structures or higher scrutiny from creditors. These insights underscore the importance of considering both company characteristics and financial health in understanding reporting practices.

Ku Ismail and Chandler (2005) utilised the same dataset in a subsequent study and employed content analysis to examine the use of narrative disclosures in quarterly interim reports. The degree of disclosure gauged in terms of the number of words included in the explanatory notes (performance review, the comment on the prospects for the current year, and the material changes to the quarterly results) relative to the firm's total assets. The findings revealed that firms in the sample complied only with the minimum disclosure requirements. It was also observed that there was considerable variation in disclosure practices across firms. Moreover, although neither the firm's growth nor its profitability was significantly associated with the degree of disclosure, there was a significant positive association between leverage and disclosure.

Alias et al. (2009) studied quarterly reports for sixty firms covering the period between 2005 and 2007, noting that not a single company was fully compliant with Bursa Malaysia's disclosure requirements. They also observed that despite most companies filing their reports within the time-period, several firms were late reporting with the only exception being in the second quarter when all firms reported within the time limits specified. Alias et al. (2009) offer evidence of limited compliance with interim reporting requirements as well as delays in reporting, but no attempt was made to explain why this is the case.

D'Arcy and Grabensberger (2003) utilised German data and Pairwise correlation analysis to examine the degree of compliance with interim reporting requirements for 47 companies listed on the Neuer Markt between 1999 and 2001. They constructed a compliance index based on the disclosure requirements of IAS 34, Neuer Markt regulations, and US Generally Accepted Accounting Principles (GAAP). Their results showed that overall compliance improved over time, particularly after the introduction of an incremental enforcement mechanism in 2000, which required companies to present interim reports in a standardised format. This regulatory change significantly enhanced the comparability and completeness of disclosures. However, descriptive statistics also indicated that firms choosing to publish full accounts especially those applying US GAAP demonstrated higher levels of compliance than those using the condensed format. Thus, while the 2000 standardisation improved baseline compliance through regulation, voluntary adoption of fuller reporting formats further strengthened disclosure quality.

Saxena et al. (2012) investigated the degree of interim reporting compliance in India, studying data for the quarterly reports of five public sector banks for the 2009-2010 financial year. Compliance was gauged in terms of how complete the disclosures were and also their context (a combination of the method of announcement, audit, timeliness, and approval by the board of directors). In terms of both content and context compliance, the degree of compliance was found to be in the region of 65%. Based on these findings, the authors advocated that regulators should perform their own checks and act where necessary to enhance compliance.

Studying compliance with reporting frequency regulations across a total of 15 EU countries against the backdrop of the Transparency Directive, Link (2012) explored the factors associated with voluntary quarterly reports. At the time of study, not all EU countries required listed companies to report on an interim basis and in 2011, compulsory interim reporting was scrapped to ensure that regulations were harmonised throughout the block. The results confirmed that a company's willingness to report on a voluntary basis is associated with a combination of national-level factors (legal enforcement and the significance of equity markets) and firm-level factors (profitability, proprietary cost, size, information asymmetry, and earnings' informativeness). Although Link's (2012) research provided insight into the state of interim reporting in the EU and the contribution that Transparency Directive made to the frequency of reporting, there was no indication of companies' degree of compliance nor their degree of disclosure. Link recognised these shortcomings and suggested that additional research was required to perform a cost-benefit analysis of reporting on a quarterly basis.

Another European study by Ernstberger et al. (2017), which examines a large cross-country sample of firms, provided important insights into the behavioural consequences of mandatory interim reporting. The authors find that, following the introduction of requirements to publish interim management statements for the first and third quarters, firms increasingly engaged in earnings management to meet short-term earnings benchmarks. This evidence suggests that mandatory interim reporting can unintentionally intensify short-term performance pressure on managers, encouraging opportunistic reporting behaviour rather than enhancing transparency.

Importantly, these findings raise concerns about the effectiveness of mandatory interim reporting regimes and support the argument that frequent reporting requirements may exacerbate managerial short-termism. In this sense, the results of Ernstberger et al. (2017) provided an important motivation for examining voluntary interim reporting decisions in a post-deregulation environment, where firms have greater discretion over reporting frequency. By allowing managers and boards to determine reporting practices voluntarily, such environments may mitigate some of the adverse behavioural effects associated with rigid reporting mandates, while still enabling firms to disclose information when it is economically and strategically justified.

Data for a total of 262 non-financial companies listed in the UK covering the period from 2001 until 2002 were utilised in three separate studies of interim reporting practices. This time-period enabled interim reporting practices to be examined prior to the adoption of IFRS, with particular attention paid to the influence of external auditors and the structure of audit committees. More specifically, Mangena and Pike (2005) examined the relationship between interim reporting and audit committee size, financial expertise, and shareholdings. The opinions of seventy-nine analysts regarding the importance of the various disclosure items formed the basis of the weighted scoring scheme. This entailed allocating a mean rating to items that were disclosed and assigning a value of zero otherwise. Mangena and Pike found considerable variation in interim reporting disclosure. Moreover, a significant correlation was identified between the weighted and unweighted scores. Share ownership among audit committee members was significantly and negatively related to the level of interim reporting disclosure, whereas a significant positive relationship was observed with audit committee financial expertise. In contrast, the relationship between audit committee size and interim reporting disclosure was found to be insignificant. Finally, the involvement of the auditors (whether they reviewed the interim reports), the size of the company and the number of listings were all significantly positively related to the level of interim reporting disclosure.

Mangena and Tauringana (2007) employed the same UK dataset to identify the factors associated with the degree of compliance with the interim reporting disclosure requirements of the UK Accounting Standards Board (ASB). Although the statement does not constitute an accounting standard, it is widely recognised as an indication of

best practice. The degree of voluntary compliance is measured using a self-constructed index that excludes all compulsory disclosure items specified in the listing rules. This revealed a significant positive association between compliance with the statement of the ASB and various company-specific variables such as firm size, the payment of interim dividends, having more than one listing, and the issuance of new equity. Regarding auditor-related factors, it was established that audit committee independence, financial expertise, and auditor involvement were all significantly and positively associated with interim reporting compliance.

Again, Mangena and Tauringana (2008) utilised the same set of data, this time to clarify the relationship between the features of the audit committee and the willingness voluntarily to review interim reporting among companies listed in the UK. A positive relationship is observed between auditors' involvement in interim reporting and their financial expertise and independence. There is a negative relationship between the involvement of auditors in interim reporting and the shareholdings of the audit committee. These findings support those of Mangena and Pike (2005) because the audit review of interim reports is associated with the quality of those reports. Mangena and Pike (2005) observed that audit committees demonstrating financial expertise and independence are positively associated with the level of disclosure via interim reports.

Nallareddy et al. (2017) considered the practical implications for firms that elect to voluntarily issue quarterly reports, paying particular attention to the impact regarding short-termism. Nallareddy et al. (2017) asserted that if reports were compiled and published on an annual or semi-annual basis, there would have been more attention paid to long-term investments offering superior returns. It is important to note, however, that it is challenging to verify what effect the frequency at which reports are published has on the decision-making processes of listed firms. Furthermore, no evidence was found to suggest that the compulsory or voluntary nature of interim reports has any bearing on the results.

Moreover, It was the US that was the focus of the first investigations of quarterly interim reporting because the practice has been compulsory since 1973. McEwen and Schwartz (1992) used a sample of seventy-six listed firms to better understand their approach to interim reporting, revealing that not all information is provided to adhere

to the Accounting Principles Board Opinion No. 28 '*Interim* Financial *Reporting*.' Moreover, McEwen and Schwartz (1992) suggested that the failure to comply in full of the requirements effectively jeopardised the usefulness of the reports. In some instances, no reference was made to the impact that seasonality has, and this may be due to a refusal to comply, or it could be that the firm's trade is unaffected by the seasons. Furthermore, McEwen and Schwartz (1992) advocated making interim reporting compulsory because this will increase their usefulness.

Leftwich et al. (1981) reviewed historical developments in terms of the requirements governing the frequency of interim reporting in the US. Using data for the period 1937-1948, they conclude that the two most notable determinants are the stock exchange and the history of interim reporting frequency.

Butler et al. (2007) obtained a dataset for the period 1950-1973 to explore the effect that the frequency of interim reporting had on the timeliness of earnings. During this period of study, there were considerable discrepancies in the frequency of reporting on a time-series and cross-sectional basis. They were able to confirm that news about annual earnings became incorporated into the price quicker when the transition from semi-annual reporting to quarterly reporting had been made on a voluntary basis.

McNichols and Manegold (1983) set out to establish the consequences for thirty-four companies listed on AMEX during the 1960s of reporting on a more frequent basis. This research was able to conclude that companies experienced less return variability around the time of their annual earnings announcements when reporting on a quarterly basis. This indicates that reporting quarterly reduces the marginal information that can be derived from a firm's annual report.

2.3.2 Interim reporting frequency

Interim reporting frequency has attracted considerable attention in the accounting and finance literature. A growing body of work has examined its consequences for capital markets. For example, Fu et al. (2012) and Arif and De George (2015) documented that more frequent disclosure improves liquidity and reduces information asymmetry. Hitz and Moritz (2019) showed that frequent interim reports enhance analysts'

forecasting accuracy, while Behrmann et al. (2021) fund that they reduce stock price volatility.

On the other hand, studies such as Gigler et al. (2014) Kraft et al. (2018), and Witte et al. (2022) highlighted potential costs of high-frequency disclosure, particularly its role in inducing managerial myopia. They argue that quarterly reporting pressures managers to focus excessively on short-term results, undermining long-term investment. Fu et al. (2012) considered the impact that the quality of disclosure has on information asymmetry and capital markets utilising the same set of data. They study what effect the frequency of interim reports has on the cost of equity and information asymmetry, concluding that an increase in frequency is associated with a lower cost of equity as well as reduced information asymmetry.

Consideration has also been paid to the effect that the frequency of interim reporting has on the decisions taken by managers including the manipulation of earnings, as aforementioned (Ernstberger et al. 2017), fixed asset investment (Nallareddy et al. 2017; Kraft et al. 2018; Kajüter et al. 2019), the quality of bank loan portfolios (Balakrishnan and Ertan 2018), and holdings of cash (Downar et al. 2018). Roychowdhury et al. (2019) stated that having reviewed the empirical literature, the evidence is mixed regarding whether more frequent reporting is associated with greater transparency and a disciplinary function or alternatively short-termism and myopia. This was given careful consideration by Fu (2020) who paid particular attention to innovation by companies. Fu concluded that increasing the frequency of reporting had a significant negative impact in terms of innovation output, although that the net externality effect among peer firms operating in the same industry appears to be insignificant. Taken in combination, the results suggest that increasing the frequency of reporting stifles innovation and brings about managerial myopia.

Pozen et al. (2017) Used the UK FCA's 2014 deregulation as their empirical context, the authors examine capital market effects of firms discontinuing quarterly reports. They find no substantial changes in investment, cost of capital, or information asymmetry post-deregulation. However, they observe that many firms continued to report quarterly, despite the absence of a legal mandate. While the study documents this voluntary behaviour, it does not explore the firm-level factors that explain it.

Therefore, this thesis builds directly on their work by investigating which firm characteristics are associated with continued quarterly reporting.

Kraft et al. (2018) examined the real effects of reporting frequency by leveraging regulatory changes in the United States between 1950 and 1970, with a particular focus on managerial myopia. Their study is grounded in a historical U.S. setting, exploiting regulatory changes and exchange-level pressures that altered reporting frequency requirements for American firms between 1950 and 1970. This period is particularly valuable for empirical analysis because it contains natural variation in financial reporting frequency driven by regulatory mandates, rather than voluntary firm choices, which helps mitigate concerns about endogeneity. They constructed a matched sample consisting of 937 treatment firms and 937 control firms, using firm size and industry classification to improve comparability.

Recently Fu et al. (2020) examined how increased reporting frequency affects corporate innovation. Using a difference in differences approach to examine whether changes in reporting frequency affect corporate innovation, measured by patents and R&D output. The results show that increasing frequency leads to lower innovation, interpreted as evidence of managerial short-termism.

In addition, a more recent study by Kajüter et al. (2022) provided a systematic and comprehensive literature review on interim reporting, covering 112 studies published between 1961 and 2020. The authors categorise the literature into three key characteristics: reporting frequency, report contents, and assurance, while also differentiating the consequences into firm-specific outcomes such as capital market reactions, investment behaviour, and managerial myopia and externalities affecting broader industry dynamics. Their study finds that most of the existing research focuses on the consequences of interim reporting, particularly capital market effects and real economic outcomes. However, despite the comprehensive of research on interim reporting frequency, no empirical study has investigated the determinants of firms' decisions regarding the frequency of their interim disclosures. To address this gap, the subsequent section of the current study examines firm-level, governance related, and CEO characteristics factors that may influence firms' interim reporting frequency choices in the UK after the 2014 FCA regulatory changes.

Most of these studies are set in mandatory disclosure environments (e.g., the US or EU pre-2014). Fewer studies focus on voluntary IRF, where managers have discretion over frequency. The UK, following the 2014 ending of mandatory quarterly reporting, provides a unique setting in which to test the determinants of IRF under a principles-based regime.

Building on these insights and addressing the identified gap, the following sections critically examine prior research on the determinants of interim reporting frequency and hypothesis development, structured around three main categories: firm-level attributes, CEO characteristics, and corporate governance mechanisms. This review also highlights the rationale for incorporating underexplored factors into the conceptual framework developed in this study.

2.4 Determinants of interim reporting and hypothesis development

As covered in the earlier sections, interim reporting plays a crucial role in corporate transparency by providing timely financial information to stakeholders between annual reporting periods. Research suggests it reduces information asymmetry, supports investor decision-making, and can enhance market efficiency (Healy and Palepu 2001; Beyer et al. 2010). The frequency and quality of interim disclosures are affected by regulatory frameworks. In the UK, the introduction of mandatory quarterly reporting in 2007 aimed to improve transparency but concerns over excessive short-termism and compliance costs led the FCA to remove the requirement in 2014. This deregulatory shift created a more flexible disclosure environment, where firms gained discretion to determine how often they report interim results. The post-2014 UK setting therefore presents a valuable opportunity to examine the voluntary determinants of interim reporting frequency.

Although several studies have examined the consequences of interim financial reporting such as its impact on investor behaviour, stock market efficiency, and firm valuation (Gigler et al. 2014; Ernstberger et al. 2017), research that specifically investigates the determinants of interim reporting frequency remains comparatively limited. Much of the literature focuses on how frequent disclosure affects market outcomes rather than on the firm-level, governance, or managerial factors that explain

why some firms report more frequently than others in voluntary basis. Nonetheless, a few studies have explored specific determinants of reporting frequency, often within the context of regulatory shifts.

For example, Kajüter et al. (2019) analysed the effects of the UK's 2014 deregulation of quarterly reporting and identified firm size, performance, and analyst coverage as potential drivers of voluntary disclosure frequency. Similarly, studies by Hope et al. (2009) and Boesso and Kumar (2007) highlighted financial attributes, governance mechanisms, and stakeholder considerations as important determinants of voluntary disclosure practices.

This research aims to contribute to the literature by identifying and empirically examining the firm-level, board-level, and CEO-level factors that influence voluntary interim reporting frequency. In this part of the chapter, this study will review the main studies that examined the determinants of interim reporting frequency. After that, it will describe why it is important to consider other factors as determinants of interim reporting as CEOs personalities and corporate governance mechanisms.

2.4.1 Firm-Level determinants of disclosure

This section highlights the development and formulation of the research hypotheses to answer the first research question. These hypotheses explain the relationship between interim reporting frequency and the independent variables - seven firm characteristics (firm size, profitability, leverage, liquidity, analyst following, ownership concentration and asset-in-place) that were deemed to influence the voluntary nature of interim reporting, based on the previous empirical studies.

2.4.1.1 Firm size

It is widely believed that the size of a firm will have a significant bearing on its willingness to voluntarily disclose information (Ahmed and Courtis 1999). For example, both Singhvi and Desai (1971) and Firth (1979) argued that there are notable reasons to believe that the size of a company is a key explanatory factor for whether or not it will voluntarily disclose. For instance, large companies are more likely to have the

financial wherewithal to meet the additional cost associated with producing voluntary disclosures. In addition, the scale of larger companies enables them to address such issues efficiently, thereby helping to drive down the cost. It is also true that larger companies are more likely to be listed and, therefore, they are more likely to disclose because this will reduce their cost of funding. It is also the case that large companies are more susceptible to political costs and, consequently, they will be keen to avoid bad publicity or interference from regulators. Finally, smaller companies may be more inclined to retain information in-house if they fear that disclosure could cost them their competitive advantage Firth (1979).

As companies become larger, there is a distinct possibility that regulators and other government bodies will take a greater interest in their activities and they may also become more likely to be involved in legal disputes, thereby prompting them to voluntarily disclose additional information (Watts and Zimmerman 1990). Indeed, Kolk and Perego (2010) observed that larger companies typically disclose more information on a voluntary basis because they are keen to maintain the trust of stakeholders and reassure them. In contrast, smaller companies, while equally committed to maintaining stakeholder trust, often disclose less information due to the high cost of doing so and the competitive threat posed by larger rivals (Firth 1979).

An alternative argument is that because smaller companies tend to be less complex, they should be more likely than the larger counterparts to make voluntary disclosures because they have relatively little information to disclose. As such, the cost of managing the information relating to a small company with simple operating practices will be significantly less than the equivalent cost for a sprawling multinational company. For this reason, it is likely that while the size of the firm is likely to have a significant bearing on its willingness voluntarily to disclose, the matter of whether any one particular firm is likely to disclose will depend on the specific circumstances of that company.

It has been established in empirical literature that a company's size is positively related to the voluntary release of information (Brammer and Pavelin 2006; Barako 2007; Sehar et al. 2013; Rakiv 2019; Thinh 2021). Meek et al. (1995) studied a sample of 226 multinational corporations headquartered in the US and Europe to establish whether various strategic, financial, and non-financial factors are related to the

voluntary disclosure of information. It was concluded that a company's size was significant, positively related to financial and non-financial disclosures. Moreover, firms were more inclined to disclose information if they had foreign listings. Similarly, Inchausti (1997) examined data for 138 companies listed in Spain in an attempt to clarify what seven factors have on the willingness to voluntarily disclose information. Moreover, Inchausti omitted companies operating in the heavily regulated financial sector from the research study.

Ku Ismail and Chandler (2004) studied the timeliness of quarterly reports issued by listed companies in Malaysia based on the lag in reporting for 117 reports filed during 2001. All but one of the companies met the requirement to issue their quarterly reports within the permitted time limit of two months. A positive association was recorded between the timeliness of publishing the reports and the size of the firm, its rate of growth as well as its profitability. Similarly, Mangena and Pike (2005) found that the size of a company measured in terms of its total assets is significantly positively associated with the degree of interim reporting disclosure. Hope (2003) also concluded that larger companies and those with a foreign listing are more likely to voluntarily disclose. Hossain and Hammami (2009) also confirmed a positive association between a company's total assets and its willingness to disclose. Leventis and Weetman (2004) used a different measure of firm size (market capitalisation) but reached the same conclusion that a company's size is positively related to corporate voluntary disclosure. Moreover, Eng and Mak (2003) reported that large companies based in Singapore disclose more information on a voluntary basis than their smaller counterparts. Similarly, it has been suggested that because small companies will incur relatively high costs by amassing the information necessary to disclose information about their reserves, they will be less likely than their larger counterparts to make such disclosures (Singhvi and Desai, 1971). Meanwhile, Butler et al. (2007) employed multivariate analysis and reported that large firms are more likely to report on a quarterly basis. This finding was supported by Lo (2017) who applied a logit model when evaluating how reporting practices are affected by the size of a company and its potential for growth.

There is an association between the size of a company and the degree of information asymmetry. To confirm why it is that certain firms listed in Singapore choose to report on a quarterly basis, Rahman et al. (2007) utilised a binary logistic regression model.

In doing so, they concluded that there was a significant relationship between voluntary reporting and the size of the company. If firms have news of promising investment opportunities, they are significantly more inclined to publish quarterly reports because there is considerable information asymmetry. In such situations, reporting more frequently helps to ensure that investors are better informed and can take appropriate investment decisions. It has also been observed that companies are more likely to issue quarterly reports if their shares have heightened levels of liquidity. Both Butler et al. (2007) and Botosan (1997) reported that the size of a company is associated with the extent of information asymmetry. Large companies are subject to elevated political costs if they fail to disclose readily, and they also have the financial wherewithal to meet the cost of reporting on a more regular basis.

In the context of interim reporting, Kajüter et al. (2022) documented that larger firms are more likely to continue providing quarterly reports after deregulation in Germany. Similarly, Bischof et al. (2020) noted that large European firms tend to maintain higher disclosure frequency to meet investor demand. However, little evidence exists on whether this effect holds in the UK's post-2014 deregulated environment, highlighting the need for further investigation. Overall, most previous studies suggest that larger firms disclose more information voluntarily. However, the evidence should be interpreted with some caution because the studies differ in their measures of disclosure and regulatory settings. In addition, although larger firms have greater resources to meet the costs of frequent reporting, their greater organisational complexity may also increase the costs of collecting and preparing timely information. Much of the previous research also focuses on the amount or timeliness of disclosure rather than the frequency of interim reporting. Therefore, it is not clear whether the same relationship applies to UK firms after the removal of mandatory quarterly reporting in 2014. Nevertheless, based on most previous findings and the greater information demands faced by larger firms, a positive relationship is expected in this study. Therefore, the following hypothesis has been developed:

H1a: Larger firms are more likely to report interim financial information more frequently on a voluntary basis in the UK.

2.4.1.2 Profitability

The overriding aim for all businesses is to operate profitably and Naser (1998) asserted that a company's managers are more inclined to disclose good news than bad news. As such, they will openly declare profits but be more hesitant to announce losses. Releasing positive news helps to attract investment whilst simultaneously retaining current investors, whereas the release of negative news is likely to deter investors. Similarly, signalling theory suggests that releasing positive news in a timely manner benefits shareholders by helping to ensure that equities are accurately valued (Singhvi and Desai 1971). It has been established in the empirical literature that if companies generate good profits, they are more inclined to disclose information to demonstrate that they are successful because management have an incentive to bolster investors' confidence owing to the fact that this will make it easier to drive through inflated compensation packages for management (Singhvi and Desai 1971). For instance, both Hossain (2007) and Agca and Onder (2007) observed that highly profitable firms are significantly more likely to disclose information, to attract investment. On a related matter, Naser (1998) inferred that because of the costs associated with making voluntary disclosures, only profitable firms would opt to do so.

Not all the empirical literature finds that there is a positive relationship between profitability and voluntary disclosure but Naser (1998), Singhvi and Desai (1971), Chau and Gray (2002), and Singhvi and Desai (1971) all report a positive association. More specifically, Naser (1998) believes that this positive relationship is attributable to the fact that information disclosures are costly and, therefore, only make sense if the underlying company is profitable. Cooke (1989) claimed that reporting positive news helps companies that are performing well to signal that fact to the wider market. Conversely, if a company is not generating sizeable profits, it has an incentive to avoid disclosing the fact (Singhvi and Desai 1971).

Conversely, numerous papers have concluded that there is a significant negative relationship between a company's profits and the disclosure of information (Wallace and Naser 1995; Chen and Jaggi 2000; Camfferman and Cooke 2002; Yhim et al. 2003; Barako et al. 2006). For instance, Yhim et al. (2003) found that information was more likely to be released by companies experiencing considerable earnings volatility.

Barako et al. (2006) reported a negative, albeit insignificant, relationship between a company's profits and the likelihood of it voluntarily disclosing information.

Overall, the empirical evidence on the relationship between profitability and voluntary disclosure is mixed. While several studies report that profitable firms disclose more information in order to signal strong performance and attract investment, other studies find a negative or insignificant relationship. These conflicting findings may reflect differences in institutional settings, disclosure measures and the costs and incentives associated with voluntary reporting. In addition, much of the existing evidence examines the extent of voluntary disclosure rather than the frequency of interim reporting. Therefore, it remains unclear whether profitability influences firms' decisions to report more frequently in the UK's post-2014 voluntary reporting environment. Nevertheless, consistent with signalling theory and the positive relationship reported in a substantial part of the previous literature, this study expects more profitable firms to report interim information more frequently on a voluntary basis.

H1b: More profitable firms are more likely to report interim financial information more frequently on a voluntary basis in the UK.

2.4.1.3 Leverage

According to agency theory, companies that operate with high levels of leverage are more inclined to disclose the possibility of wealth being transferred from the providers of debt funding to the companies' management and shareholders. As a result, companies that make greater use of debt for their funding needs typically experience elevated agency costs (Jensen and Meckling 1976). It has been suggested in the empirical literature that highly geared companies opt to disclose in an attempt to minimise the agency cost of their debt (Meek et al. 1995; Wallace et al. 1994; Lakhal 2005). It may be that such companies freely disclose in an attempt to reassure their creditors that covenants in their debt contracts will be respected (Myers 1977; Schipper 1981) or they disclose to serve the needs of their lenders (Cooke 1996).

Conversely, those who provide debt funding are able to obtain information about companies via other means by including covenants and onerous agreements in their

loan contracts. As such, there may be no need for highly geared companies to disclose any additional information on a voluntary basis, and they may even disclose less information (Wallace et al. 1994; Zarzeski 1996). For example, research conducted in Singapore suggests that there was no relationship between gearing and companies' willingness to disclose on a voluntary basis (Ho and Shun Wong 2001).

There are reasons to suggest that the extent of corporate indebtedness could either positively or negatively influence whether information is voluntarily disclosed. A high level of indebtedness makes companies riskier and there could be conflicts of interest (Jensen and Meckling 1976), thereby suggesting that highly geared firms are more inclined to voluntarily disclose (Ahmed and Courtis 1999; Barako et al. 2006; Naser et al. 2006). The providers of debt funding can access internal information regarding how companies perform, which reduces their reliance on any disclosures made in financial reports (Zarzeski 1996). An increase in gearing could make a company less inclined to disclose information. Despite this, agency theory suggests that highly geared companies have an incentive to disclose to present less of a risk.

Unsurprisingly, there is no consensus in the empirical literature regarding the effect that gearing has on the willingness of firms to disclose information. Several studies report a positive association between gearing and voluntary disclosures, and they suggest that this explains perceptions of risk and influencing stakeholder reactions (Ahmed and Courtis 1999; Barako et al. 2006; Naser et al. 2006; Palmer 2008). More specifically, a total of twenty-nine research papers concerning research in Asia, the US and Europe were subjected to a meta-analysis, revealing a positive correlation between gearing and voluntary disclosures (Ahmed and Courtis 1999). Similarly, a positive correlation between corporate gearing and voluntary disclosures was reported by Chavent et al. (2006) who studied a total of one hundred companies listed in France. They divided the firms into two samples that shared similar features to establish their willingness to disclose accounting provisions. A positive relationship between gearing and voluntary disclosures was similarly reported by Barako et al. (2006) and Hossain et al. (1995).

Both Eng and Mak (2003) and Meek et al. (1995) utilised the free cash flow problem and concluded that corporate gearing is inversely related to voluntary disclosures. They assert that highly indebted companies have less incentive to disclose information

because any cash flow problems that emerge can be managed using debt. Furthermore, it is important to note that Hanifa and Cooke (2002); Chau and Gray (2002); Leventis and Weetman (2004) did not find a significant relationship between gearing and the willingness of firms to voluntarily disclose. When studying a sample of multinational corporations headquartered in the US, Europe, and Pakistan, both Meek et al. (1995) and Sehar et al. (2013) found that leverage was negatively related to disclosing information voluntarily. The same conclusion was reached by Zarzeski (1996). Overall, the empirical evidence on the relationship between leverage and voluntary disclosure remains mixed. While several studies report a positive relationship, others find a negative or insignificant association. These conflicting findings may reflect differences in research methods, sample characteristics, institutional settings and the measures of voluntary disclosure used across studies. Furthermore, much of the existing literature examines the extent of voluntary disclosure rather than the frequency of interim reporting. Therefore, it remains unclear whether the same relationship applies to firms operating in the UK's post-2014 voluntary reporting environment. Nevertheless, consistent with agency theory and the majority of the empirical evidence discussed above, this study expects highly leveraged firms to report more frequently in order to reduce information asymmetry and mitigate agency costs. Accordingly, the following hypothesis is proposed:

H1c: Firms with higher leverage are more likely to report interim financial information more frequently on a voluntary basis in the UK.

2.4.1.4 Liquidity

A company's liquidity can provide insight into its ability to continue as a going concern. If a company faces liquidity shortages, managers may feel the need to disclose additional information to explain how it intends to continue operating (Wallace et al. 1994), thereby minimising the agency cost associated with the prospect of becoming insolvent. Those who provide capital to firms pay close attention to the liquidity ratio because a lack of liquidity could result in companies having to cease trading (Wallace et al. 1994). Firms operating under financial stress may feel the need to offer additional information to demonstrate their ability to continue as a going concern.

From an agency theory perspective (Jensen and Meckling 1976), managers of firms with weak liquidity may face heightened scrutiny from investors and creditors, prompting them to issue more frequent interim reports to reduce information asymmetry and reassure stakeholders about financial resilience. Similarly, signalling theory suggests that firms operating with low liquidity ratios will be more willing to voluntarily disclose information to demonstrate management's ability to address such risks. Diamond and Verrecchia (1991) provided a theoretical foundation for this link, arguing that greater disclosure reduces information asymmetry and enhances market liquidity by attracting institutional investors and lowering firms' cost of capital.

Related research also considers the reverse relationship, whereby greater disclosure may improve market liquidity by reducing information asymmetry and adverse selection costs (Heflin et al. 2000; Trombetta et al. 2005; Lang et al. 2009, 2011). Balakrishnan et al. (2013) further demonstrated that managers can influence market liquidity through voluntary guidance. However, this evidence does not directly establish whether a firm's liquidity position influences its decision to disclose more frequently. Evidence examining liquidity as a determinant of voluntary disclosure is less consistent. Wallace et al. (1994), for example, found that firms with relatively low liquidity provided additional information in their annual reports, whereas Barako et al. (2006) and Mangena and Pike (2005) found no significant relationship between liquidity and voluntary disclosure.

Overall, the relationship between liquidity and voluntary disclosure remains unclear. On the one hand, firms with lower liquidity may disclose more frequently to reduce information asymmetry and reassure investors and creditors about their financial position. On the other hand, firms with stronger liquidity may have greater incentives to disclose their favourable financial position and signal financial strength to the market. Empirical findings are also mixed, with some studies identifying an association between liquidity and disclosure, while others report no significant relationship. These differences may reflect variation in disclosure measures, samples and institutional settings. Moreover, much of the previous literature examines the extent of voluntary disclosure or the effect of disclosure on market liquidity rather than whether a firm's liquidity position determines the frequency of interim reporting. Therefore, the effect of liquidity on voluntary interim reporting frequency in the UK's post-2014 environment

remains uncertain. Nevertheless, consistent with signalling theory, this study expects firms with stronger liquidity positions to have greater incentives to communicate their financial strength through more frequent voluntary interim reporting. Accordingly, the following hypothesis is proposed:

H1d: Firms with higher liquidity are more likely to report interim financial information more frequently on a voluntary basis in the UK.

2.4.1.5 Analyst following

Analyst following plays an important role in influencing how often firms choose to disclose financial information, especially in voluntary reporting environments. Financial analysts act as independent monitors who evaluate company performance, interpret results, and communicate this information to investors. Their analysis helps to reduce information gaps between firms and the market, enabling investors to make better-informed decisions. From an agency theory perspective (Jensen and Meckling 1976) when more analysts follow a firm, managers face greater pressure to maintain transparency and consistency in their communication. Frequent interim reports help managers meet analysts' expectations and preserve their credibility with the market. Similarly, signalling theory (Spence 1978) suggests that regular reporting serves as a signal of managerial confidence and sound governance. Firms that communicate openly and consistently are viewed as more reliable and better managed, which can enhance their reputation among investors and analysts.

Analysts depend on interim reports to build earnings forecasts and valuation models. Firms that are closely followed by analysts tend to issue more frequent disclosures to sustain their reputation and avoid negative market surprises (Healy and Palepu 2001). In contrast, companies with limited analyst coverage face less external pressure and may not see the same benefits from reporting frequently.

However, the direction of the relationship between analyst following and disclosure is not straightforward. Much of the empirical literature shows that better disclosure attracts greater analyst coverage rather than demonstrating that analyst coverage itself causes firms to disclose more frequently. For example, Lang and Lundholm (1996) found that firms with more informative disclosure policies attract greater analyst following and experience more accurate earnings forecasts and lower forecast

dispersion. Similarly, Healy et al. (1999) and Hamrouni et al. (2015) provide evidence that greater disclosure is associated with increased analyst attention and improved information environments. These findings suggest that analyst following may be both a determinant and an outcome of corporate disclosure. More recent evidence, including Benlemlih et al. (2024), also suggests that analyst coverage can place external pressure on firms to increase the quantity and quality of information disclosed.

Analyst following is also linked to improved market outcomes, particularly liquidity and trading efficiency. Diamond and Verrecchia (1991) established that greater disclosure reduces information asymmetry and improves market liquidity by attracting more informed investors. Empirical studies further confirm this relationship, showing that firms with higher disclosure quality experience narrower bid-ask spreads and reduced adverse selection costs (Heflin et al. 2000). Roulstone (2003) found that analyst following directly enhances market liquidity by transforming private information into public knowledge. International evidence also supports this connection: Lang et al. (2012) showed that transparency measured through disclosure quality and analyst following reduces transaction costs and increases liquidity, especially in markets with weaker institutional oversight.

Overall, the relationship between analyst following and voluntary disclosure appears to be potentially two-way. Greater analyst coverage may increase external demand for timely information and place pressure on managers to provide regular updates, while greater disclosure may itself attract analysts by improving the firm's information environment. This makes the direction of the relationship difficult to establish from previous studies. Moreover, much of the existing literature examines disclosure quality or quantity rather than the frequency of interim reporting, and evidence from the UK's post-2014 voluntary reporting environment remains limited. Nevertheless, from an agency theory perspective, firms followed by more analysts face greater external monitoring and information demand. Therefore, this study expects greater analyst following to be associated with more frequent voluntary interim reporting. Accordingly, the following hypothesis is proposed:

H1e: Firms with greater analyst following are more likely to report interim financial information more frequently on a voluntary basis in the UK.

2.4.1.6 Ownership concentration

Ownership concentration refers to how much of a company's equity is controlled by a small number of major shareholders, such as institutional investors, families, or government bodies. This ownership structure can have a powerful influence on governance, managerial behaviour, and disclosure decisions. When a few shareholders hold substantial control, they can either promote or restrict transparency depending on their monitoring role and information needs. This issue is especially relevant in the UK's post-2014 context where firms have discretion over how often they publish interim financial reports.

From an agency theory perspective Jensen and Meckling (1976), concentrated ownership can reduce agency problems by aligning managers' incentives with those of large shareholders. Major investors usually have both the motivation and resources to monitor management closely, reducing opportunistic behaviour and information asymmetry. However, the opposite can occur when controlling shareholders have direct access to internal information. In such cases, they may place less pressure on managers to disclose publicly, reducing the need for frequent interim reports (Shleifer and Vishny 1997). Moreover, regarding to Signalling theory Spence (1978) offered a complementary view. Firms with widely dispersed ownership often use public disclosures to signal strong performance and attract investor confidence. By contrast, firms with concentrated ownership face less need to signal, since dominant shareholders already have private access to firm information and ongoing contact with management. Consequently, these firms may report less frequently. Conversely, firms with dispersed ownership use more regular interim reporting to reduce information asymmetry, appeal to new investors, and build market credibility. Regarding to resource dependence theory (Pfeffer and Salancik 2015) ownership structure also affects access to external finance. Companies with dispersed ownership rely more on capital markets, which encourages them to maintain frequent, transparent reporting to reassure investors. In contrast, firms with concentrated ownership depend more on the financial backing of their major shareholders and are therefore less reliant on public markets. This reduces the incentive to report interim results frequently. Thus, ownership concentration not only affects monitoring and control but also shapes how firms manage relationships with external stakeholders and resource providers.

In the UK's voluntary disclosure environment, these dynamics are particularly significant. Since the FCA removed mandatory quarterly reporting in 2014, firms have been free to decide how often to release interim results. Firms with high ownership concentration especially family-controlled or closely held companies may report less frequently because their key shareholders already have access to information and face limited external pressure to disclose. In contrast, firms with dispersed ownership and a large base of institutional investors are more likely to report regularly, as these investors value transparency and timely updates. Institutional investors such as pension funds and insurance companies typically push for greater disclosure to support informed decision-making and maintain confidence in management. Empirical evidence on ownership concentration and disclosure behaviour is mixed. Several studies find a negative relationship showing that higher concentration reduces disclosure levels. For instance, Al Sawalqa (2014) found that concentrated ownership lowered disclosure among Jordanian banks. Similarly, Khlif et al. (2015), in a meta-analysis of 69 studies, confirmed that concentrated ownership generally reduces voluntary disclosure. Comparable results have been reported for Thailand (Pongsaporamat 2020), France (Ben Ali 2008), and the U.S. (Ge et al. 2021), suggested that major shareholders often prefer private access to information over public transparency.

Other studies, however, fund positive or mixed effects depending on who the controlling owners are. In Malaysia, Ho and Taylor (2013) and Ho and Tower (2011) observed that concentrated ownership encouraged disclosure because large shareholders actively monitored management. Conversely, Haniffa and Cooke (2002) found that family-controlled firms preferred secrecy and disclosed less. Barako et al. (2006) reported that institutional ownership in Kenya enhanced voluntary disclosure, while Boehmer and Kelley (2009) found that institutional investors improved both the quantity and quality of disclosure in the U.S. Likewise, Bose et al. (2024) showed that foreign institutional investors increased disclosure across 34 countries, especially when they had long-term investment horizons. To sum up, ownership type clearly matters. Institutional, state, and foreign ownership usually promote greater disclosure, whereas family or managerial ownership tends to reduce it (Khlif et al. 2015). Institutional investors enhance transparency by encouraging management to share more information and by attracting analyst attention (Boone and White 2015).

However, very large block holdings may rely on private communication with management instead of public reporting (Ge et al. 2021). Family-controlled firms often disclose selectively offering fewer forecasts but more risk-related information (Chen et al. 2008). These differences highlight that the effect of ownership concentration is not the same but depends on who holds control and the surrounding governance environment.

Overall, the empirical evidence on the relationship between ownership concentration and voluntary disclosure is mixed. Several studies suggest that concentrated ownership reduces public disclosure because major shareholders can obtain information privately and therefore have less need for frequent public reporting. Other studies, however, find that concentrated ownership can increase disclosure when large shareholders actively monitor management and demand greater transparency. These conflicting findings suggest that the effect of ownership concentration may depend on the identity of the controlling shareholders, their information needs, and the institutional setting in which firms operate. Moreover, much of the existing evidence examines the extent of voluntary disclosure rather than the frequency of interim reporting. Therefore, it remains unclear whether ownership concentration influences voluntary interim reporting frequency in the UK's post-2014 environment. Nevertheless, consistent with agency and signalling arguments, this study expects that firms with more concentrated ownership will have less need for frequent public disclosure because major shareholders are more likely to have alternative channels through which they can obtain information. Accordingly, the following hypothesis is proposed:

H1f: Firms with higher ownership concentration are less likely to report interim financial information frequently on a voluntary basis in the UK.

2.4.1.7 Assets-in-place

According to Butler et al. (2007), companied facing high information asymmetry and agency costs might increase their information disclosure to reduce this asymmetry. However, firms with significant proprietary costs may opt to disclose less. Myers (1977) divided company assets into those currently held and those yet to be acquired, suggesting that transferring wealth between shareholders and debt holders becomes

more challenging with assets already owned. This implies a negative relationship between financial disclosure levels and existing corporate assets.

Research has long explored the relationship between assets-in-place and corporate disclosure practices. Leftwich et al. (1981) analysed how firm characteristics relate to the frequency of reporting. They discovered that the debt-equity ratios of U.S. companies reporting semiannually were significantly higher compared to those reporting at different frequencies, and that assets-in-place a measure of information asymmetry were lower for semiannual reporters. Hossain and Reaz (2007) studied the link between voluntary disclosure and specific firm characteristics in a sample of thirty-eight listed Indian banks. They found a significant relationship between assets-in-place and firms' propensity to disclose voluntarily. Haniffa and Cooke (2002) investigated the factors influencing voluntary disclosure among listed companies in China, using data from 1066 firms over a decade. Their regression analysis showed a positive and significant correlation between assets-in-place and voluntary information disclosure.

In a more recent study, Abubakar et al. (2021) investigated voluntary disclosure practices in Nigeria, using data from 2010 to 2019 for listed industrial goods. Their research indicated a positive relationship between assets-in-place and voluntary disclosure. Kipngetich (2020) also examined the effects of firm-specific characteristics on environmental accounting disclosure in Kenyan companies over the same period, with a sample of twenty-seven listed firms. The study found a positive and statistically significant link between asset tangibility and environmental accounting disclosure.

On the other hand, Link (2012) explored the impact of reporting frequency regulations in the European Union and the potential consequences of eliminating mandatory quarterly reporting. The study's regression results showed a negative and significant association between assets-in-place as a proxy for information asymmetry and voluntary quarterly reporting. This finding is particularly relevant to the present study because it examines reporting frequency rather than the general extent of voluntary disclosure. The negative relationship suggests that firms with fewer assets-in-place, and therefore potentially greater information asymmetry regarding future growth opportunities, have stronger incentives to provide information more frequently.

Overall, the empirical evidence on assets-in-place and voluntary disclosure is mixed. While some studies report a positive association between assets-in-place and different

forms of voluntary disclosure, Link (2012) identifies a negative relationship in the more directly relevant context of voluntary reporting frequency. These differences may arise because previous studies examine different forms of disclosure, including general voluntary disclosure and environmental reporting, rather than the frequency of interim financial reporting. The institutional settings and measures of assets-in-place also differ across studies. Therefore, findings from the broader voluntary disclosure literature may not apply directly to voluntary interim reporting frequency in the UK. Given that firms with fewer assets-in-place are likely to have greater information asymmetry surrounding their growth opportunities, they may have stronger incentives to provide frequent interim information. Accordingly, this study expects a negative relationship between assets-in-place and voluntary interim reporting frequency, leading to the following hypothesis:

H1g: Firms with higher assets-in-place are less likely to report interim financial information frequently on a voluntary basis in the UK.

2.4.1.8 Industry characteristics and reporting context

Prior research indicates that firms' disclosure practices vary systematically across industries due to differences in regulation, competitive dynamics, public visibility, and stakeholder scrutiny. Firms operating in highly regulated or socially sensitive industries such as energy, mining, utilities, and financial services are typically subject to stronger external monitoring by regulators, investors, and the wider public, which may increase expectations for transparency. In contrast, firms in less regulated or lower-profile industries generally face weaker disclosure pressure and greater discretion over their reporting practices.

From a theoretical perspective, agency theory suggests that stronger monitoring environments increase demand for timely disclosure to reduce information asymmetry between managers and external stakeholders. Signalling theory further predicts that firms operating in volatile or reputation-sensitive industries may engage in more frequent disclosure to signal financial strength, stability, and managerial confidence. Legitimacy theory complements these arguments by proposing that firms in environmentally or socially sensitive sectors may increase disclosure to maintain

legitimacy and manage reputational risk. Empirical studies generally document industry-level variation in voluntary disclosure behaviour, although findings remain mixed and appear to be sensitive to institutional and regulatory context.

In the UK's post-2014 voluntary interim reporting environment, industry affiliation is therefore expected to shape disclosure norms and peer behaviour rather than act as a direct determinant of reporting frequency. Consistent with prior disclosure research, industry characteristics are treated in this study as an important contextual factor and are controlled for in the empirical analysis through industry fixed effects, rather than being tested as a primary explanatory variable.

2.4.2 CEO characteristics

In the previous section, this study examined how firm characteristics influence voluntary interim reporting. These factors explain part of the variation in disclosure behaviour, yet other determinants particularly those related to CEO also worth investigation. According to upper echelons theory, organisational outcomes reflect the personal backgrounds, experiences, and values of top executives. The CEO, as the firm's primary decision-maker, plays a central role in setting the tone for transparency and determining the extent of information shared with external stakeholders (Hambrick and Mason 1984). CEOs' views on risk, openness, and accountability can influence corporate communication strategies. Prior research supports this view, showing that managerial characteristics such as age, education, experience, and psychological traits significantly affect disclosure policies and strategic choices (Hambrick 2007). Building on the theoretical perspective, the present study explores how specific CEO attributes including gender, age, tenure, duality, education, and managerial myopia may influence the frequency of voluntary interim reporting. Empirical research has examined how CEO characteristics affect corporate outcomes, including disclosure behaviour, the findings remain mixed and context dependent. Studies from emerging markets, for example, show divergent results. In India, Oware (2022) found that CEOs holding dual roles as both board chair and CEO were more likely to adopt integrated reporting practices, while Oware et al. (2022) reported that CEO duality increased environmental disclosure in family-controlled firms. Similarly, Ramaiah et al. (2022) observed a positive relationship between CEO duality and the extent of environmental information disclosure. These findings challenge the traditional agency theory

perspective, which suggests that CEO duality weakens board oversight and reduces transparency. Such contrasting evidence highlights how institutional and governance contexts shape the relationship between CEO structure and disclosure practices. In a related study, Lewis et al. (2014) examined how CEO tenure and educational achievements influence the voluntary issuance of environmental reports among U.S. companies. Using data from 2002 to 2008, they found that recently appointed CEOs were significantly more likely to issue voluntary environmental disclosures and to participate in the carbon disclosure project compared with long-serving CEOs. Furthermore, CEOs with an MBA qualification were found to be more responsive to disclosure initiatives, underscoring the influence of education on transparency-related decisions. Thuse, the literature highlights five key CEO characteristics age, tenure, duality, education, and gender that can shape strategic choices, reporting behaviour, and governance outcomes. These attributes influence how CEOs engage with transparency, particularly in voluntary disclosure settings. In contrast to much prior research, which has largely focused on U.S. firms, this study addresses the gap identified by Olsen et al. (2016) by examining CEO characteristics within the UK context. This is especially relevant following the 2014 amendment by the financial conduct authority, which made interim reporting voluntary for UK-listed companies. Therefore, the next section reviews each CEO characteristic in detail, outlining how these attributes may influence firms' interim disclosure frequency according to prior empirical evidence.

2.4.2.1 CEO gender

CEO gender has become an important topic in research on corporate governance and disclosure. Theories such as social role theory suggest that men and women may lead differently because of differences in values, priorities, and risk preferences (Eagly and Karau 2002). Women are often described as more community-oriented, ethical, and careful in decision-making, while men are seen as more focused on economic gains and more willing to take risks (Butz and Lewis 1996; Mason and Mudrack 1996). From the upper echelons' perspective, these differences can shape how CEOs make strategic choices, including disclosure decisions (Hambrick 2007).

Empirical evidence supports these ideas in several ways. García-Sánchez et al. (2019) reported that female CEOs are more inclined to voluntarily disclose information, and they tend to adopt a more ethical approach to business practices than male CEOs. Meanwhile, Carter et al. (2003) concluded that companies with female directors outperform both financially and in terms of corporate governance. Furthermore, García-Sánchez et al. (2019) observed that companies with female directors are less likely to engage in impression management, and this was attributed to female directors providing more balance when presenting information. Campbell and Minguez-Vera (2010) conducted a short-term event study using data for Spanish companies which indicated that the market reacted positively to the appointment of female directors.

When investigating the effect that CEO gender has on firm performance using Canadian data, Dunn (2012) found that female CEOs are more likely to anticipate and fulfil their responsibilities and their firms are more likely to outperform those overseen by male CEOs. In addition, Peni (2014) studied data for a sample of US companies and concluded that female CEOs are significantly positively related with ROA (firm performance) and Tobin's Q (firm value. Other studies confirm similar patterns in non-financial outcomes: Manner (2010) found that female leaders were more likely to support higher levels of corporate social responsibility disclosure, while Musteen et al. (2006) observed that female CEOs showed a stronger willingness to adapt strategies in response to external pressures.

Some studies suggest female CEOs are more cautious and conservative in financial decision-making. Schubert (2006) reported that women were more likely to avoid losses and risks, while men tended to display overconfidence in risky decisions. Palvia et al. (2015), studying US banks during the financial crisis, found that female CEOs were more conservative, holding higher levels of capital compared with their male counterparts. Similarly, Zalata et al. (2022) and Davis et al. (2015) noted that women tend to adopt more conservative reporting strategies and are less likely to engage in earnings management. Previous research suggests that gender may influence managerial decision-making and corporate disclosure, although the evidence is not entirely consistent. Several studies associate female leadership with greater transparency, ethical behaviour, conservative financial decisions and stronger disclosure practices, while Kartikarini and Mutmainah (2013) reported no significant relationship between gender and disclosure. In addition, much of the existing evidence

focuses on female directors, firm performance, corporate social responsibility or earnings management rather than specifically examining the gender of the CEO and the frequency of interim reporting. These differences in managerial roles, disclosure measures and institutional settings may partly explain the mixed findings. Therefore, it remains unclear whether CEO gender influences voluntary interim reporting frequency in the UK's post-2014 reporting environment. Nevertheless, consistent with upper echelons theory and the evidence associating female leadership with greater transparency and accountability, this study expects firms led by female CEOs to report interim information more frequently. Accordingly, the following hypothesis is proposed:

H2a: Firms led by female CEOs are more likely to disclose interim reports frequently compared to those led by male CEOs.

2.4.2.2 CEO tenure

CEO tenure how long a chief executive has held office is an important managerial characteristic that influences decision-making, governance behaviour, and disclosure practices. The length of time a CEO remains in their role influences their experience, knowledge of the business, relationships with stakeholders, and level of influence within the firm. These factors can affect whether a CEO chooses to adopt transparent reporting practices, including how often the company issues interim financial statements. Understanding this relationship is especially relevant in settings like the UK's post-2014 environment, where firms have voluntary over their reporting frequency.

According to agency theory, CEO tenure can affect the balance between managerial control and board oversight. In the early years of their appointment, CEOs may face greater supervision from the board and external stakeholders as they work to establish credibility and demonstrate their competence (Fama and Jensen 1983). As a result, new CEOs may choose more transparent communication such as frequent interim reporting to signal accountability and reassure investors of their leadership quality. Frequent disclosure can reduce uncertainty and help align managers with shareholder expectations. However, as CEOs stay in their position for longer, the situation often

changes. Long-serving CEOs usually gain more power, build strong relationships inside and outside the company, and have greater influence over the board (Miller 1991). This can reduce the level of oversight they face and give them more control over decisions. As a result, experienced or entrenched CEOs may feel less pressure to report frequently. They might prefer to control how much information is shared and avoid frequent updates, especially if regular reporting could reveal short-term performance changes.

Upper echelons theory (Hambrick and Mason 1984; Hambrick 2007) also explains how tenure shapes a CEO's mindset and decision-making style. With time, experienced CEOs gain deep knowledge of the business and the industry, which helps them make more informed and confident decisions. However, they may also become less open to change or new governance practices, believing that their existing leadership style has already been effective. In contrast, newer CEOs tend to be more innovative and open to adopting frequent interim reporting to demonstrate them strengthen their reputation in the market. Furthermore, signalling theory supports the argument that tenure influences disclosure. Newly appointed CEOs may use voluntary interim reporting to send positive signals about their abilities and commitment to transparency. On the other hand, long-tenured CEOs often rely on their established reputation and past performance to maintain investor confidence and therefore may see less need for frequent disclosure.

It has previously been indicated in the empirical literature that a CEO has been in position that can exert significant influence on the decisions taken by the firm (Hambrick and Mason 1984). Smith et al. (1994) and Michel and Hambrick (1992) reported that management teams with long tenures are more likely to be well acquainted with how the firm operates and they are also likely to be more cohesive, resulting in them being relatively more effective and efficient. Furthermore, it has been stated in empirical literature that there is a significant positive association between CEO tenure and the quality of a firm's financial reports (Francis et al. 2008).

According to Francis et al. (2008), when CEOs insist upon the highest possible standards when compiling financial reports, this enhances their reputation over time. Importantly, when they realise this, they have an incentive to maintain these high reporting standards (Francis et al. 2008). Similarly, Zhang and Wiersema (2009)

stated that the tenure of a CEO is indicative of the quality of their company's financial reports and this, in turn, is associated with the reputation of that CEO. Furthermore, empirical research provides mixed evidence on how tenure affects disclosure. Some studies suggest that CEOs early in their tenure provide more voluntary disclosures to signal their competence and gain investor support (Huang and Hilary 2018). Others suggest that long-tenured CEOs become less open due to increased managerial power and reduced monitoring (Ali and Zhang 2015). Research also indicates that long-tenured CEOs may become increasingly risk-averse, preferring conservative communication practices that avoid potential short-term scrutiny (Miller 1991; McClelland et al. 2012; Nguyen et al. 2018). Additionally, shorter-tenured CEOs may introduce more modern communication strategies, including frequent reporting, as part of efforts to differentiate their leadership style and establish trust with capital markets. Overall, the empirical literature suggests that CEO tenure is an important determinant of disclosure behaviour, but the direction of influence depends on the phase of tenure and the level of managerial power.

The UK's voluntary disclosure environment offers an ideal setting to examine how CEO tenure shapes reporting behaviour. Since the FCA removed mandatory quarterly reporting in 2014, firms have had discretion over how often they issue interim financial updates, making internal governance factors particularly CEO tenure central to disclosure decisions. Empirical evidence on this relationship remains mixed. Several studies report that longer tenure reduces disclosure quality as experienced CEOs become more entrenched and less motivated to signal performance (Muttakin and Khan 2025; Chen and Liao 2017; Chen et al. 2023; Khan et al. 2021; Ratri et al. 2021; Bochkay et al. 2018). Conversely, others find that longer-serving CEOs enhance disclosure through accumulated knowledge and deeper organisational understanding (Brockman et al. 2019; Baatwah et al. 2015). The mixed findings suggest that the impact of CEO tenure depends on institutional context and governance quality (Darouichi et al. 2021). In the UK's post-2014 voluntary reporting environment, where firms have full discretion over interim reporting frequency, long-tenured CEOs may feel less pressure to maintain frequent communication despite their experience and knowledge. Accordingly, the following hypothesis has been developed:

Therefore, it remains unclear whether CEO tenure influences voluntary interim reporting frequency in the UK's post-2014 environment. Nevertheless, consistent with

agency theory and upper echelons theory, this study expects shorter-tenured CEOs to face greater pressure to establish their credibility and demonstrate transparency, giving them stronger incentives to provide frequent interim information. Accordingly, the following hypothesis is proposed:

H2b: Firms with CEOs of shorter tenure are more likely to report interim financial information more frequently in the UK.

2.4.2.3 CEO duality

CEO duality refers to the situation where one person holds both the roles of CEO and Chair of the Board. This structure gives the same individual authority over company management and board oversight, concentrating decision-making power at the top. It has been a central topic in corporate governance debates because it raises important questions about independence, accountability, and transparency. Some scholars argue that combining these two roles weakens the board's ability to monitor management effectively, which can reduce transparency. Others believe that it improves coordination, speeds up decision-making, and helps align corporate strategy. Because of these opposing views, CEO duality remains one of the most debated governance mechanisms in corporate research.

Empirical evidence also shows mixed results. For example, Krause et al. (2014) noted that CEO duality produces different outcomes across contexts. Felo (2010) found that CEO duality had no clear link with higher reporting transparency, whereas board independence and financial expertise were more important for disclosure quality. Similarly, Oware (2022) found that CEO duality reduced sustainability reporting in emerging markets, and Torchia and Calabrò (2016) showed that independent directors improved financial transparency in Italian firms.

On the other hand, some research highlights potential benefits. Yang and Zhao (2014) found that firms with CEO duality performed 3% better than others during periods of market change, suggesting that unified leadership can improve responsiveness and efficiency. Carapeto et al. (2009) also observed positive short-term market reactions when firms separated the two roles, though the long-term benefits were limited.

Palanissamy (2015) concluded that while no single structure is universally better, most stakeholders still prefer separating the roles to strengthen independence and credibility.

According to agency theory (Fama and Jensen 1983; Jensen 1993), CEO duality can weaken governance. When the CEO also chairs the board, it becomes harder for directors to supervise management because the same person being monitored is leading the monitoring body. This concentration of power can reduce accountability and encourage self-serving behaviour. As a result, firms with CEO duality may prefer less frequent voluntary reporting to avoid scrutiny or to conceal short-term performance fluctuations (Brickley et al. 1997). In contrast, stewardship theory (Donaldson and Davis 1991) offers a more positive view. It suggests that executives are motivated by organisational goals rather than personal gain. Under this theory, combining the CEO and chair roles can create unity of command, improve coordination, and strengthen leadership. A confident dual-role CEO may choose to communicate more openly with investors and use voluntary interim reporting to demonstrate stability and commitment to stakeholders (Yang and Zhao 2014).

Resource dependence theory (Pfeffer and Salancik 2015) adds another useful perspective. It highlighted how the board helps the firm secure important external resources. A CEO who also chairs the board may be able to use their strong connections to attract investors and build trust with partners. This could lead to more voluntary disclosure to maintain market confidence (Hillman and Dalziel 2003). However, having both roles can also give the CEO too much control over information flow allowing them to release or withhold information based on personal interests.

Most evidence still supports the agency theory argument that CEO duality can weaken transparency. Studies show that when one person holds both roles, boards may become more secretive, and disclosure quality can decline (Brickley et al. 1997). Other scholars such as Dalton et al. (1998) note that in some cases, unified leadership can improve responsiveness and communication, especially when quick decisions are needed in changing environments.

Overall, the theoretical and empirical evidence on CEO duality and corporate disclosure remains mixed. Agency theory suggests that combining the CEO and chair roles concentrates managerial power, weakens board monitoring and may reduce

incentives for transparent disclosure. In contrast, stewardship and resource dependence theories suggest that unified leadership may improve coordination, decision-making and external relationships, potentially encouraging greater communication with stakeholders. These competing perspectives help explain why previous studies report negative, positive or insignificant effects of CEO duality across different settings. Moreover, much of the existing evidence examines firm performance, disclosure quality or sustainability reporting rather than the frequency of voluntary interim reporting. Therefore, it remains unclear whether CEO duality influences interim reporting frequency in the UK's post-2014 voluntary reporting environment. Nevertheless, consistent with agency theory, this study expects that the concentration of managerial and board leadership in one individual will weaken monitoring and reduce the pressure to provide frequent interim information. Accordingly, the following hypothesis is proposed:

H2c: Firms with CEO duality are less likely to report interim financial information frequently on a voluntary basis in the UK.

2.4.2.4 CEO age

The age of the CEO is usually assessed regarding experience, willingness to take risks and strategic orientation, and all these elements together determine priorities for corporate disclosure. CEO age often reflects differences in experience, attitude toward risk, and openness to change all of which shape how executives decide what information to share and how frequently to report it. According to upper echelons theory (Hambrick and Mason 1984), organisational outcomes mirror the personal values and experiences of top leaders. From this perspective, a CEO's age affects how they interpret uncertainty, assess risks, and make disclosure-related decisions. Younger and older CEOs may therefore differ in how they balance transparency, caution, and control when deciding how often to issue interim financial reports. Older CEOs are usually viewed as more experienced and cautious. Their long careers often make them more conservative in decision-making and more focused on preserving the company's stability and reputation. Because of this, they may prefer less frequent voluntary reporting, seeing frequent disclosure as potentially risky or unnecessarily

revealing of strategic information (Higgins and Gulati 2006; Ali and Zhang 2015). This conservative approach may lead them to emphasise long-term performance over short-term visibility, particularly in settings where frequent interim reporting is optional.

By contrast, younger CEOs are typically more open to innovation, risk-taking, and proactive communication. They may use frequent reporting to build credibility, attract investor confidence, and distinguish themselves from more traditional leaders. For younger CEOs, voluntary interim disclosure can serve as a signal of competence and confidence, consistent with signalling theory (Spence 1978), which suggested that managers use transparency to communicate positive information about their ability and the firm's prospects. However, the agency theory perspective, which further complicates manager-shareholder relationships, proposes that older CEOs may face different incentives regarding voluntary disclosure, influenced by their upcoming retirement and related changes in risk reward calculations (Dechow and Sloan 1991). In contrast, younger CEOs, who are still building their reputations, might have stronger career-related incentives to communicate frequently and transparently to demonstrate performance and attract market confidence.

Empirical evidence on the link between CEO age and disclosure is mixed. Some studies find that older CEOs are more conservative and disclose less (Serfling 2014; Ali and Zhang 2015), reflected their risk-averse nature. Others argue that older executives may, in fact, be more transparent to protect their legacy and reputation (Davis et al. 1997) Younger CEOs, meanwhile, are often more proactive in communicating results and engaging with investors, especially when trying to build trust or attract analysts' attention.

Previous studies provide mixed evidence on the relationship between CEO age and corporate disclosure. Some studies suggest that older CEOs are more conservative and less willing to take risks, which may discourage frequent disclosure. Other studies suggest that older, more experienced CEOs may value transparency to protect their reputation and legacy. These conflicting findings indicate that age may reflect several managerial characteristics, including experience, attitudes towards risk and career concerns, which may have different implications for reporting decisions. Many of the existing research examines corporate disclosure or managerial decision-making more broadly, rather than voluntary interim reporting frequency. This limits the extent to

which its findings can explain how often firms choose to report. The relationship between CEO age and voluntary interim reporting frequency therefore remains unclear, particularly in the UK's post-2014 environment. Nevertheless, the theory of the upper echelons suggests that age may shape how CEOs assess and respond to disclosure decisions. From a signalling perspective, younger CEOs may have stronger incentives to demonstrate their abilities and establish credibility with investors. More frequent voluntary interim reporting may provide a way for them to communicate their performance and build investor confidence. Drawing on these arguments, this study expects firms led by younger CEOs to issue voluntary interim reports more frequently. Accordingly, the following hypothesis is proposed:

H2d: Firms led by younger CEOs are more likely to voluntarily disclose interim financial information frequently in the UK.

2.4.2.5 CEO education

CEO education is widely recognised as an important factor influencing managerial decision-making, strategic thinking, and corporate transparency. Education shapes how leaders analyse information, assess risks, and respond to investor expectations. Highly educated CEOs tend to have stronger analytical and communication skills, greater financial literacy, and a deeper understanding of corporate governance and ethics. These qualities can encourage more responsible reporting and a stronger commitment to transparency. Since interim reporting provides updates between annual financial statements, a CEO's educational background may play a key role in determining how frequently firms choose to report in a voluntary disclosure environment.

According to upper echelons theory (Hambrick and Mason 1984), executives' backgrounds including their education shape their values, beliefs, and strategic choices. Well-educated CEOs, especially those with postgraduate degrees or training in business, accounting, or finance, are likely to appreciate the importance of transparent communication and investor trust. Their academic and professional experiences provide them with a better understanding of financial reporting standards,

corporate governance principles, and the long-term benefits of maintaining market credibility. Consistent with this view, Ge et al. (2011) fund that CEOs with accounting or finance qualifications are associated with higher-quality financial reporting, while Graham et al. (2013) reported that CEOs educated at top universities are more likely to adopt progressive disclosure practices. These findings suggest that education enhances executives' awareness of governance norms and strengthens their commitment to accurate and timely reporting. Moreover, signalling theory (Spence 1973) offers another perspective, suggesting that CEOs use disclosure practices to signal their competence and leadership quality to the market. Frequent voluntary disclosures such as interim reports can help CEOs demonstrate managerial confidence and reduce information asymmetry between the firm and investors. Empirical evidence supports this argument, Rezaee et al. (2021) found that CEOs with financial expertise were less likely to issue financial restatements in Iranian firms, while Harymawan et al. (2022) observed that CFOs educated at reputable universities produced higher-quality financial reports in Indonesia. Likewise, Oehoedoe et al. (2023) showed that CEOs with accounting backgrounds improved ESG disclosure practices, reflecting a proactive communication approach aimed at maintaining stakeholder trust.

From an agency theory perspective (Jensen and Meckling 1976), education may help reduce agency problems by promoting informed and transparent communication. Educated CEOs are better equipped to understand how disclosure reduces conflicts between managers and shareholders and lowers information asymmetry. Their exposure to ethical frameworks and stakeholder-oriented thinking during their education can foster stronger governance values and enhance their motivation to report regularly. Supporting this argument, Tuo et al. (2019) found that CEOs with business education improved the readability of annual reports, and Darmadi (2011) demonstrated that CEOs with degrees from prestigious institutions positively influenced firm performance through better strategic and reporting decisions.

However, not all evidence is consistent. Some studies suggest that higher education does not always lead to greater transparency. For instance, Ngo and Nguyen (2024) found that financially expert CEOs in Vietnam engaged more in earnings management, indicating that education can also be used strategically to manipulate information. Similarly, Hu et al. (2013) discovered that some highly educated female

CEOs were more prone to aggressive accounting practices. These findings highlight that education enhances skill and knowledge, but ethical intent and governance culture ultimately determine how that knowledge is applied.

Overall, previous studies suggest that CEO education may influence corporate reporting behaviour, although the findings are mixed. Higher education may help CEOs understand reporting requirements, investors' information needs and the benefits of transparent communication. However, education does not necessarily lead to greater transparency. Related research on financial expertise suggests that executives may also use their knowledge strategically in financial reporting. Although educational attainment and financial expertise are different, these findings suggest that greater knowledge alone may not ensure more transparent reporting. How CEOs use their knowledge may also depend on their incentives, ethical values and the firm's governance arrangements. Many of the existing research examines financial reporting quality, earnings management, readability or ESG disclosure rather than voluntary interim reporting frequency. These studies therefore provide limited direct evidence on whether CEO education influences the frequency of voluntary interim reporting in the UK's post-2014 environment. Nevertheless, upper echelons theory suggests that education may shape how CEOs understand and respond to investors' information needs. Signalling theory also suggests that voluntary reporting can help firms communicate their quality and reduce information gaps between managers and investors. Drawing on these perspectives, this study expects more highly educated CEOs to recognise the benefits of regular communication and to be better equipped to support more frequent voluntary interim reporting. Accordingly, the following hypothesis is proposed:

H2e: Firms led by more highly educated CEOs are more likely to report interim financial information frequently in the UK.

2.4.2.6 CEO myopia

CEO myopia describes a leader's tendency to focus on short-term financial performance, share price movements, and immediate investor approval rather than

long-term value creation, innovation, and sustainability. This short-term orientation has important implications for voluntary disclosure particularly how often firms issue interim financial reports. According to agency theory (Stein 1989; Bebchuk and Stole 1993), managers often act to maximise personal benefits linked to short-term incentives such as bonuses, stock options, and market-based rewards. This behaviour can lead them to prioritise immediate results over sustainable performance. Myopic CEOs may use frequent disclosure to manage investor perceptions, maintain market confidence, and signal control especially when they are concerned about share price reactions or analyst expectations. Empirical evidence supports this tendency. Cheng et al. (2014) found that firms providing frequent earnings guidance invested less in R&D and achieved weaker long-term growth, while Edmans et al. (2013) linked short-term equity incentives to reduced innovation. Similarly, Brochet et al. (2015) observed that short-term disclosure horizons encourage earnings management, as CEOs focus on meeting short-term benchmarks.

Upper echelons theory (Hambrick and Mason 1984; Hambrick 2007) provides a behavioural explanation for CEO myopia by emphasising that executives' experiences, values, and rational biases affect how they interpret information and make strategic choices. From this perspective, a myopic CEO driven by the require demonstrating quick success and satisfy immediate market expectations may choose to report more frequently to project a positive image and inform investors about firm performance. However, this tendency to prioritise short-term results can undermine long-term strategic goals by encouraging risk aversion and reduced investment in innovation. Empirical evidence supports these arguments. Sun et al. (2025) fund that myopic CEOs generally disclose less ESG information; however, their transparency increases when they face stronger external scrutiny, such as analyst monitoring. Similarly, Arya and Ramanan (2024) showed that short-term oriented disclosures can, in some cases, improve stakeholder trust especially when perceived as authentic and responsive suggesting that the outcomes of CEO myopia depend on context and market perception. Furthermore, signalling theory (Spence 1973) helps explain why myopic CEOs might increase voluntary disclosure even when motivated by short-term goals. Frequent interim reports can act as a market signal of confidence and stability. By providing frequent updates, CEOs aim to reduce uncertainty and present themselves as proactive and transparent leaders. However, such disclosures do not

always reflect genuine openness they can also be used strategically to maintain investor attention and manage perceptions. Empirical evidence supports this view. Healy and Palepu (2001) and Leuz and Verrecchia (2000) demonstrated that firms often use voluntary disclosure as a strategic communication tool aimed at shaping market expectations and investor sentiment rather than simply providing neutral information. Likewise, Bhojraj and Libby (2005) provided experimental evidence showing that when frequent reporting occurs under strong capital market pressure, managers tend to prioritise short-term financial targets over sustainable performance, especially when earnings and cash flow goals conflict.

Empirical evidence on reporting frequency supports these arguments. Using the U.S. transition from annual to quarterly reporting, Kraft et al. (2018) demonstrated that more frequent mandatory reporting reduced corporate investment, consistent with myopic management behaviour. Likewise, Ernstberger et al. (2017) and Fu et al. (2020) found that increased reporting frequency was linked to greater real activities manipulation and lower innovation output. These studies suggest that frequent disclosure can unintentionally fuel managerial short-termism. However, findings are not entirely one-sided. Butler et al. (2007) observed that voluntary not mandatory reporting frequency improved the timeliness and relevance of earnings, implying that transparency motivated by managerial choice rather than regulation can enhance information quality. The UK's post-2014 disclosure environment, following the financial conduct authority's removal of mandatory quarterly reporting, provides a unique setting to examine these dynamics. In this voluntary context, managerial characteristics play a stronger role in shaping disclosure policy. Myopic CEOs may opt for frequent interim reporting to maintain share price, meet short-term investor demands, and strengthen visibility in capital markets. However, such practices may prioritise market image over long-term accountability and strategic stability.

While prior studies suggest that myopic CEOs may increase disclosure frequency to manage investor perceptions and short-term market expectations, this behaviour is unlikely to be uniform across firms. Insights from agency theory and upper echelons theory suggest that the extent to which managerial short-termism translates into disclosure outcomes depends on the strength of corporate governance oversight. In particular, board structures such as gender diversity and board size may constrain managerial discretion and limit the ability of myopic CEOs to use disclosure

strategically. Despite the growing literature on CEO myopia and disclosure behaviour, existing studies largely focus on direct effects and provide limited evidence on how governance mechanisms condition the disclosure decisions of myopic CEOs, especially in voluntary reporting environments. This gap motivates the examination of governance as a moderating mechanism in the relationship between CEO myopia and interim reporting frequency. In summary, while frequent interim reporting can improve transparency and market confidence, it may also reflect the short-term orientation of myopic CEOs who seek to satisfy immediate investor expectations rather than build sustainable value.

H2f: Firms led by myopic CEOs are more likely to report interim financial information frequently in the UK.

2.4.3 Board level governance characteristics

The previous section highlighted the importance of considering CEOs' personal characteristics when studying disclosure practices. However, in the context of voluntary interim reporting, it is equally important to consider board-level corporate governance mechanisms as key determinants of interim reporting frequency. This is because voluntary disclosure decisions are rarely made by CEOs in isolation; rather, they are subject to oversight, approval, and influence by the board of directors, particularly in environments where reporting frequency is no longer mandated by regulation.

Boards play a central role in overseeing management and safeguarding shareholders' interests, especially when managers have discretion over disclosure practices. In a voluntary reporting setting, the board determines the overall tone for transparency and accountability and influences how much information is disclosed, how frequently it is reported, and how responsive the firm is to stakeholder information demands. As a result, board characteristics such as board independence, board size, gender diversity, and audit committee effectiveness are likely to affect interim reporting frequency by shaping monitoring intensity, decision-making quality, and attitudes towards transparency.

Boards that are more independent, diverse, and actively engaged are generally better positioned to monitor managerial behaviour, reduce information asymmetry, and encourage more frequent and transparent reporting. Independent directors are less reliant on management and therefore more willing to challenge disclosure decisions that may serve managerial interests rather than those of shareholders. Similarly, diverse boards particularly those with greater gender diversity may bring a wider range of perspectives, enhance debate, and promote a stronger focus on accountability and stakeholder communication. In contrast, boards with limited independence or diversity may allow managers greater discretion over disclosure choices, potentially leading to less frequent or less informative interim reporting.

From a theoretical perspective, agency theory and resource dependence theory provide complementary explanations for the role of board governance in voluntary interim reporting decisions. Agency theory suggests that strong governance structures such as independent and diverse boards enhance monitoring, align managerial actions with shareholder interests, and reduce opportunistic behaviour, thereby promoting greater transparency (Jensen and Meckling 1976). Resource dependence theory further emphasises the board's role in providing expertise, legitimacy, and access to external resources, which can support more proactive and credible communication with investors and other stakeholders (Pfeffer and Salancik 2015).

Accordingly, analysing board-level governance characteristics alongside CEO attributes allows for a more comprehensive understanding of voluntary interim reporting frequency. By jointly considering managerial behaviour and board oversight, this study recognises that disclosure practices in a post-deregulation environment are shaped not only by individual executives, but also by the governance structures that constrain, guide, and influence managerial decision-making.

2.4.3.1 Board gender diversity

In recent years, board gender diversity has become an increasingly important topic in corporate governance. More women are now serving on corporate boards, and prior research suggested that their presence may enhance board independence, improve decision-making quality, and promote stronger ethical oversight (Zhou 2019; Ntim

2015). As a result, regulators and investors have increasingly encouraged gender diversity as a means of improving board effectiveness and transparency. In the UK, the Financial Reporting Council (2011) and the UK Corporate Governance Code (2016) explicitly support gender diversity, arguing that a balanced mix of genders on boards brings different experiences and perspectives that lead to better governance outcomes. Consequently, board gender diversity is now widely regarded as a key element of good corporate governance.

The influence of gender-diverse boards on financial reporting practices can be explained through several theoretical perspectives. Agency theory suggests that boards play a central role in monitoring management and mitigating conflicts of interest between shareholders and executives. In this context, gender-diverse boards may enhance monitoring effectiveness by introducing higher ethical standards, greater independence, and stronger oversight (Adams and Ferreira 2009). From a resource dependence theory perspective, female directors may provide access to valuable external resources, including stakeholder legitimacy, reputational capital, and alternative knowledge bases, which can support more transparent voluntary disclosure (Hillman et al. 2009; Pfeffer and Salancik 2015). In addition, critical mass theory argues that the influence of female directors becomes more pronounced when their representation reaches a meaningful threshold. When women hold three or more board seats, they are more likely to actively shape board discussions and influence decisions related to transparency and disclosure practices, including the frequency of interim reporting (Konrad et al. 2008; Joecks et al. 2013).

Empirical evidence largely supports these theoretical arguments. Several studies document a positive association between board gender diversity and reporting transparency. For example, Dobija et al. (2022) fund that boards with female directors produce more timely and higher-quality financial reports. Similarly, García-Sánchez et al. (2019) and Gul et al. (2011) report that gender-diverse boards are associated with more balanced and less biased financial reporting. In the UK context, Liao et al. (2015) showed that gender-diverse boards are more likely to engage in voluntary environmental disclosure, indicating greater responsiveness to stakeholder information needs. Additional evidence from Carter et al. (2003), Campbell and Minguez-Vera (2010), and Sarhan et al. (2019) suggested that female board

participation strengthens overall governance quality and enhances firm performance, particularly when supported by strong corporate governance structures.

Recent research also highlights that the influence of gender diversity extends beyond the boardroom. Janahi et al. (2021) fund that U.S. banks with female chief financial officers recognise loan losses more promptly, indicating a more transparent reporting approach. Likewise, DeBoskey et al. (2018) showed that higher female representation on boards is associated with greater transparency in political disclosures among S&P 500 firms. Taken together, this literature suggests that gender diversity is closely linked to transparency and accountability across a wide range of disclosure contexts. In this regard, interim reporting plays a critical role in reducing information asymmetry and enhancing communication between firms and stakeholders.

Based on the theoretical and empirical arguments discussed above, the present study expects that boards with greater female representation will be more inclined to adopt frequent interim reporting practices as part of a broader commitment to transparency and accountability. Accordingly, the following hypothesis is proposed:

H3a: *Firms with higher board gender diversity are more likely to report interim financial information more frequently in the UK.*

Importantly, the effect of board gender diversity on interim reporting frequency may depend on managerial behavioural characteristics, particularly CEO myopia. Agency theory and upper echelons theory suggest that myopic CEOs, who focus on short-term performance, may prefer less frequent disclosure to avoid heightened market scrutiny and short-term evaluation pressure. In such circumstances, strong board oversight becomes especially important. Gender-diverse boards, characterised by greater ethical sensitivity, stakeholder orientation, and monitoring effectiveness, may be better positioned to challenge short-term oriented disclosure strategies and constrain managerial discretion.

Despite growing interest in both CEO myopia and board gender diversity, existing studies primarily examine their direct effects on disclosure outcomes. There is limited evidence on how board gender diversity moderates the relationship between CEO myopia and interim reporting frequency, particularly in voluntary disclosure

environments such as the UK. To address this gap, the present study proposes the following moderation hypothesis:

H4a: *Board gender diversity weakens the negative relationship between CEO myopia and voluntary interim reporting frequency.*

2.4.3.2 Board independence

Board independence is widely viewed as one of the most important foundations of good corporate governance, because independent directors are expected to bring objectivity, fairness, and strong oversight to the boardroom. Unlike executive directors, independent directors do not take part in the company's daily operations. This separation allows them to evaluate management decisions more critically and act in the best interests of shareholders rather than management.

According to agency theory (Fama and Jensen 1983), this independence enables directors to monitor management more effectively and reduce the risk of opportunistic behaviour. In practice, independent directors often encourage timely and transparent financial reporting, including frequent interim reports, to keep investors well-informed and prevent managers from hiding poor performance or delaying bad news.

From a signalling perspective, independent directors also help build investor confidence. Their presence signals to the market that the company values transparency and accountability (Forker 1992; Gul and Leung 2004). Investors tend to trust firms that communicate openly and consistently, and independent directors play a vital role in maintaining that trust. By supporting frequent interim reporting, they help ensure that investors receive regular updates, reducing speculation and uncertainty in the market.

Empirical research strongly supports this positive relationship. Studies such as Eng and Mak (2003) and Cheng and Courtenay (2006) find that firms with a higher proportion of independent directors disclose more information voluntarily. Similarly, Akhtaruddin and Hossain (2008) and Allegrini and Greco (2013) stated that UK firms with more independent boards tend to follow stronger disclosure practices. These findings align with the UK corporate governance code, which emphasises independent

oversight as essential for transparency and shareholder protection. In a market like the UK where institutional investors expect regular, meaningful updates independent directors face natural pressure to maintain consistent communication through interim reports.

This role has become even more important since the financial conduct authority removed mandatory quarterly reporting in 2014, giving firms the freedom to choose how often they release interim results. In this voluntary setting, boards have more discretion, and independence becomes a key factor in determining reporting behaviour. Boards with strong independence are likely to support frequent interim reporting to maintain transparency and meet investor expectations. In contrast, boards with weaker independence may report less frequently, potentially limiting the information available to shareholders.

That said, board independence is not always a perfect safeguard. Some independent directors may lack detailed firm-specific knowledge or may sit on several boards, which can limit their ability to effectively challenge management (Boone et al. 2007; Faleye et al. 2011). Even so, the overall evidence suggests that independent directors generally strengthen transparency and accountability, thereby helping firms communicate more openly with investors.

In summary, theory and evidence together suggest that independent directors play a vital role in promoting frequent interim reporting. Their oversight helps ensure that disclosure decisions reflect the interests of shareholders and the expectations of transparent capital markets. Therefore, it is expected that

H3b: Firms with a higher proportion of independent directors are more likely to report interim financial information more frequently in the UK.

2.4.3.3 Board size

Board size is one of the most widely discussed features of corporate governance and plays an important role in shaping the quality, credibility, and transparency of financial

reporting, including firms' decisions regarding interim reporting frequency. Board size reflects the number of individuals responsible for overseeing management, shaping corporate strategy, and safeguarding shareholder interests. Larger boards are often viewed as a source of diverse skills, experience, and perspectives, which can enhance decision-making quality and strengthen monitoring effectiveness (Jensen 1993; Coles et al. 2008).

From a resource dependence theory perspective, larger boards are valuable because they provide access to external resources, broader networks, and stronger stakeholder relationships (Pfeffer and Salancik 2015). These attributes can encourage more transparent communication with investors and support voluntary disclosure practices, such as more frequent interim reporting. A wider range of directors also increases the likelihood that board members recognise the reputational and governance benefits of timely and regular disclosure, thereby placing pressure on management to adopt more proactive reporting strategies. However, agency theory highlights that increasing board size does not always improve governance outcomes. As boards become larger, their effectiveness may decline due to coordination problems, slower decision-making, and reduced individual accountability (Jensen 1993; Yermack 1996). In extreme cases, large boards may function more symbolically, with limited active monitoring, which can weaken their ability to challenge managerial decisions and ensure consistent disclosure practices.

Empirical evidence on the relationship between board size and disclosure is mixed. Some studies report that larger boards are associated with greater transparency and higher reporting quality (Arcay and Vázquez 2005; Allegrini and Greco 2013). For example, Ho and Wong (2001) fund that firms with larger boards are more responsive to stakeholder information needs and therefore provide more comprehensive disclosure, helping to build legitimacy and reduce the cost of capital. In contrast, other studies argue that smaller boards are more effective because they are more organised, efficient, and easier to manage (Yermack 1996; Cheng 2008). Lim et al. (2007) fund no consistent relationship, suggesting that the impact of board size on disclosure practices may depend on institutional and regulatory context.

The UK context provides a suitable setting to revisit this debate. Following the Financial Conduct Authority's removal of mandatory quarterly reporting in 2014, firms

gained greater discretion over how frequently they issue interim reports. In this voluntary reporting environment, internal governance mechanisms such as board size are likely to play a more influential role in shaping disclosure decisions. Larger boards, with broader expertise and oversight capacity, may encourage more frequent interim reporting as a means of demonstrating accountability, maintaining investor confidence, and reducing information gaps between annual or semi-annual disclosures. Conversely, smaller or less active boards may allow greater managerial discretion, potentially resulting in less frequent reporting.

Overall, while prior evidence remains mixed, the balance of theoretical arguments and empirical findings suggests that larger boards are more likely to value transparency and timely communication with stakeholders. Their collective expertise and monitoring capacity can create stronger pressure for regular voluntary disclosure. Accordingly, the present study proposes the following hypothesis:

H3c: Firms with larger boards are more likely to report interim financial information more frequently in the UK.

Importantly, the effectiveness of board size in promoting disclosure may depend on managerial behavioural characteristics, particularly CEO myopia. From an agency theory perspective, larger boards may provide stronger monitoring by increasing the diversity of expertise and oversight capacity, which becomes especially relevant when CEOs exhibit short-term orientation. Upper echelons theory further suggests that managerial behaviour is shaped by organisational context (Hambrick and Mason 1984). In firms led by myopic CEOs, larger boards may constrain managerial discretion by increasing scrutiny and collective involvement in disclosure decisions. Although larger boards may face coordination challenges, their broader oversight may be particularly effective in limiting short-term oriented disclosure strategies in voluntary reporting environments.

Prior empirical research provides limited evidence on how board size conditions the relationship between CEO myopia and disclosure frequency. Given the increased managerial discretion in the UK following the removal of mandatory quarterly reporting, board size is expected to play an important moderating role. Accordingly, the following hypothesis is proposed:

H4b: Board size weakens the negative relationship between CEO myopia and voluntary interim reporting frequency.

2.4.3.4 Audit committee independence

Audit committee independence plays a critical role in promoting transparency, accountability, and high-quality financial reporting within organisations. The audit committee is responsible for overseeing the financial reporting process, monitoring internal control systems, and ensuring that external auditors perform their work objectively. When the audit committee is composed largely of independent, non-executive directors, it is expected to provide stronger monitoring and more effective oversight. This is because independent members are less likely to be influenced by management and more likely to act in the interest of shareholders and other stakeholders who depend on accurate and timely financial information. As a result, audit committee independence is frequently highlighted as an essential element of good corporate governance and is widely associated with enhanced financial reporting quality and voluntary disclosure.

From an agency theory perspective (Fama and Jensen 1983), independent audit committees help reduce information asymmetry between managers and shareholders. Managers may sometimes be tempted to withhold bad news, smooth earnings, or delay disclosures to protect their reputation or personal interests. Independent audit committee members act as a safeguard against such behaviour by insisting on transparency, enforcing reporting discipline, and maintaining high standards of disclosure. Their oversight naturally extends to interim reporting: independent committees are more likely to require regular interim updates to reassure investors, sustain confidence, and prevent information gaps that could distort market perceptions.

Resource dependence theory (Pfeffer and Salancik 2015) states that independent committee members often bring strong financial expertise, professional qualifications, and broad external networks to the firm. These attributes allow them to enhance reporting quality and promote a culture of openness. Independent members with

accounting or auditing experience understand the importance of timely communication with investors and may advocate for frequent interim reporting to protect the firm's credibility and reputation. They also draw on their professional standards and external connections to promote transparency and discourage opportunistic financial behaviour.

Empirical evidence supports these theoretical expectations. Klein (2002) found that audit committees with a higher proportion of independent members are associated with lower earnings manipulation. Similarly, Abbott et al. (2004) reported that independent audit committees reduce the likelihood of financial restatements and improve reporting reliability. Bédard et al. (2004) also found that independent audit committees enhance voluntary disclosure, particularly in settings where firms have flexibility over their reporting choices. These findings are consistent with UK regulatory expectations where the UK corporate governance code recommends that audit committees be composed primarily of independent non-executive directors to ensure effective monitoring. The UK context provides a particularly relevant setting for studying this relationship. After the financial conduct authority removed the requirement for mandatory quarterly reporting in 2014, UK firms gained discretion over how often they issue interim reports. In this voluntary environment, internal governance mechanisms such as audit committee independence have become more influential in determining disclosure decisions. Independent audit committees in UK firms are likely to see frequent interim reporting as a means of maintaining strong market regulation, meeting investor expectations, and demonstrating responsible governance. Moreover, UK audit committee members operate under scrutiny from shareholders and the financial reporting council, which strengthens their accountability and commitment to timely disclosure.

However, the effectiveness of audit committee independence can vary. Some committees may appear independent in form but not in substance, especially when members lack financial expertise, depend heavily on management for information, or hold multiple directorships that limit their focus (Carcello et al. 2003). In such cases, formal independence may not translate into meaningful oversight. Despite these limitations, most research agrees that independent audit committees are generally more effective at promoting transparency and ensuring reliable reporting than those dominated by executives.

In the context of voluntary interim reporting, independent audit committees are expected to favour regular disclosure as part of their broader commitment to investor protection and transparency. Frequent interim reporting reduces theory, provides timely performance updates, and enhances investor confidence during periods of uncertainty. Independent audit committee members are therefore likely to promote consistent communication with shareholders to maintain market trust and minimise information gaps. In summary, audit committee independence enhances governance oversight, supports credible financial reporting, and encourages voluntary disclosure. Independent committee members contribute expertise, objectivity, and external credibility attributes that promote transparency and accountability. Within the UK's voluntary reporting environment, where firms are guided by governance standards rather than strict regulation, independent audit committees play a crucial role in motivating management to issue timely and reliable interim reports. Therefore, it is expected that

H3d: Firms with more independent audit committees are more likely to report interim financial information more frequently in the UK.

2.5 Summary of previous studies on interim reporting

2.1: Summary of key previous studies on interim reporting

Study	**Setting**	**Main focus**	**Key findings**	**Limitation/relevance to current study**
Mangena and Pike (2005)	UK; 262 listed non-financial firms	Audit committee characteristics and interim disclosure	Audit committee financial expertise is positively associated with interim disclosure; audit committee shareholding is negatively associated; committee size is insignificant.	Examine the extent/content of interim disclosure, rather than firms' voluntary choice of reporting frequency.

Study	Setting	Main focus	Key findings	Limitation/relevance to current study
Mangena and Tauringana (2007)	UK; pre-IFRS reporting environment	Compliance with UK interim reporting disclosure requirements	Identifies firm and governance characteristics associated with the degree of interim reporting compliance.	Focuses on compliance and disclosure level in an earlier regulatory environment rather than post-2014 voluntary IRF.
Link (2012)	15 EU countries; Transparency Directive setting	Determinants of voluntary quarterly reporting	Voluntary quarterly reporting varies with firm, industry and country characteristics, including the institutional and regulatory environment.	Highly relevant to reporting-frequency choice, but examines a cross-country EU regulatory environment, rather than the UK post-2014 setting.
Ernstberger et al. (2017)	European cross-country setting	Consequences of mandatory interim reporting	More frequent mandatory reporting is associated with stronger short-term reporting pressures and earnings-management behaviour.	Primarily examines the consequences of mandatory reporting, rather than determinants of voluntary reporting frequency.
Pozen et al. (2017)	UK; post-2014 FCA deregulation	Consequences of discontinuing quarterly reporting	The study documents firms' responses following deregulation and observes continued quarterly reporting among a number of firms.	Closely related UK setting but does not provide the multi-level analysis of firm, CEO and board determinants used in the present study.
Kraft et al. (2018)	US; regulatory changes, 1950–1970	Reporting frequency and	Increased reporting frequency is associated with lower investment,	Examines reporting frequency → managerial myopia, whereas the present study also

Study	Setting	Main focus	Key findings	Limitation/relevance to current study
		managerial myopia	consistent with frequent reporting inducing managerial myopia.	considers CEO myopia → voluntary reporting-frequency choice.
Fu et al. (2020)	US regulatory reporting-frequency setting	Reporting frequency and corporate innovation	Higher reporting frequency reduces innovation output, consistent with managerial myopia and short-termism.	Examines a consequence of reporting frequency rather than why firms voluntarily choose different reporting frequencies.
Kajüter et al. (2022)	International literature; 112 studies, 1961–2020	Comprehensive review of interim reporting	Reviews reporting frequency, content and assurance and finds mixed consequences of greater frequency, including stronger monitoring but possible managerial myopia.	Demonstrates the breadth of research on interim reporting but also shows strong emphasis on its consequences, supporting further investigation of determinants.

2.6 Summary of the research gap and study contribution

Research on interim reporting has examined voluntary disclosure, corporate governance, reporting quality and the capital-market consequences of reporting frequency. Much of this work focuses on mandatory reporting regimes or on the consequences of reporting frequency. Less attention has been paid to the factors that shape firms' decisions to report more frequently when additional reporting is voluntary. Differences in institutional settings and disclosure measures also complicate comparisons between studies and may partly explain their mixed findings. Firm characteristics, managerial attributes and board governance have often been examined separately. In particular, relatively little attention has been given to CEO

myopia and to whether board governance moderates the relationship between managerial short-term orientation and voluntary interim reporting frequency.

This study examines these factors within an integrated framework that combines firm characteristics, CEO characteristics and board governance mechanisms. It considers CEO myopia as a potential determinant of voluntary interim reporting frequency and investigates whether board gender diversity and board size moderate this relationship. The contribution lies in examining how firm-level incentives, managerial characteristics and board governance relate to reporting decisions within the same institutional setting. This approach helps explain why firms subject to the same reporting requirements may choose different frequencies of voluntary reporting.

The UK following the 2014 removal of mandatory interim management statements provides a relevant setting for this analysis. The change increased firms' discretion over whether to continue issuing additional periodic financial information. Voluntary reporting in this study therefore concerns reporting frequency above the minimum statutory requirements. Other European settings in which firms have discretion over reporting frequency offer the closest basis for comparison. Link (2012), for example, links voluntary quarterly reporting across European countries to firm, industry and country characteristics, indicating that reporting decisions depend partly on the institutional environment. Some of the firm, managerial and governance mechanisms examined here may therefore be relevant elsewhere in Europe. The strength of these relationships may nevertheless vary with enforcement, investor protection, capital-market development and established reporting practices.

Generalisability to the US requires greater caution because its regulatory environment differs from the voluntary reporting-frequency setting examined here. Managerial incentives, information asymmetry, signalling, investor information demand and board oversight may still help explain discretionary corporate communication in other reporting regimes. Their relevance, however, does not establish that the relationships observed in the UK will hold elsewhere. The findings should therefore be interpreted in the context of firms' discretion over additional periodic reporting. Future research could examine whether these relationships also hold in other settings where reporting frequency is voluntary or flexible.

2.7 Conclusion

This chapter reviewed the theoretical and empirical literature on voluntary interim reporting frequency. It drew on agency, signalling, upper echelons, resource dependence, critical mass, legitimacy and institutional theories to examine how firm characteristics, managerial attributes, governance mechanisms and institutional context may shape reporting decisions. These perspectives informed the study's theoretical framework and offered complementary explanations for why firms operating within the same reporting environment may choose different reporting frequencies.

The theoretical discussion and mixed empirical findings informed the development of hypotheses concerning firm characteristics, CEO characteristics and board governance. The chapter also examined the theoretical basis for the moderating role of board governance in the relationship between CEO myopia and voluntary interim reporting frequency. These hypotheses guide the empirical analysis of reporting decisions among UK-listed firms in the post-2014 reporting environment.

The next chapter presents the methodology used to test these hypotheses. It describes the research design, sample selection, data sources, variable measurement, empirical models and statistical techniques employed in the analysis.

The next chapter, Methodology, outlines how these hypotheses will be tested. It explains the research design, sample selection, data sources, and variable measurement, as well as the empirical models and statistical methods used for analysis. This methodological framework sets the stage for the subsequent empirical chapters, which examine the determinants of voluntary interim reporting frequency and explore how CEO characteristics and governance mechanisms interact to influence disclosure behaviour in UK firms.

Chapter 3 : Research design and methodology

3.1 Introduction

This chapter sets out the research methodology employed to examine the determinants of voluntary IRF among UK FTSE All-Share non-financial firms. It explains the philosophical foundations underpinning the study, the research design adopted, and the empirical strategies used to test the hypotheses developed in Chapter Two. In addition, the chapter outlines the data sources, sample selection procedures, variable measurement, and econometric models applied in the empirical analysis.

The study adopts a positivist research philosophy and a deductive approach, reflecting its objective of empirically testing theory-driven predictions concerning how firm-level characteristics, CEO attributes, and board-level governance mechanisms influence voluntary interim reporting behaviour. Quantitative methods are employed as they enable systematic measurement of reporting frequency across firms and over time, while supporting statistical inference and the generation of generalisable findings.

The chapter further details the data collection process. The sample comprises UK listed non-financial firms over the period 2015–2022, corresponding to the post-deregulation environment for interim reporting. Firm-level, CEO-level, and board-level variables are obtained from Bloomberg, Refinitiv Datastream, and BoardEx. Data on interim reporting frequency are manually collected from company websites, regulatory announcements, and corporate financial calendars to ensure accuracy, completeness, and consistency with firms' actual disclosure practices.

The empirical framework is implemented in three sequential stages. The first stage examines firm-level determinants of IRF, the second introduces CEO-level characteristics, and the third incorporates board-level governance variables. In addition, moderation models are estimated to assess whether board gender diversity and board size condition the relationship between CEO myopia and interim reporting frequency. These models are motivated by the theoretical argument that managerial disclosure behaviour is shaped by the governance environment in which reporting decisions are made.

Finally, the chapter outlines the robustness checks conducted to assess the stability and reliability of the results. These include alternative specifications of the dependent variable, Fixed-Effects (FE) estimations, linear probability models, subsample analyses, and controls for COVID-19 and industry-specific shocks. Diagnostic procedures addressing

multicollinearity, heteroskedasticity, and the proportional odds assumption underlying ordered logit models are also discussed. Throughout the analysis, standard errors are clustered at the firm level to account for within-firm correlation over time.

3.2 Research framework

Figure 3.1 presents an illustration of the current study's research framework. As discussed in Chapter Two, interim reports represent an important disclosure channel through which firms communicate timely and value-relevant information to capital market participants, thereby supporting informed decision-making by investors and other stakeholders (Heitzman and Huang 2019; Bae et al. 2017; Roychowdhury et al. 2019; Kay 2012). In this context, the frequency with which firms voluntarily issue interim reports reflects a strategic disclosure choice rather than a purely regulatory response. Building on this theoretical foundation, the research framework illustrates the key firm-level, CEO-level, and board-level factors hypothesised to influence voluntary IRF among UK listed firms following the 2014 FCA deregulation.

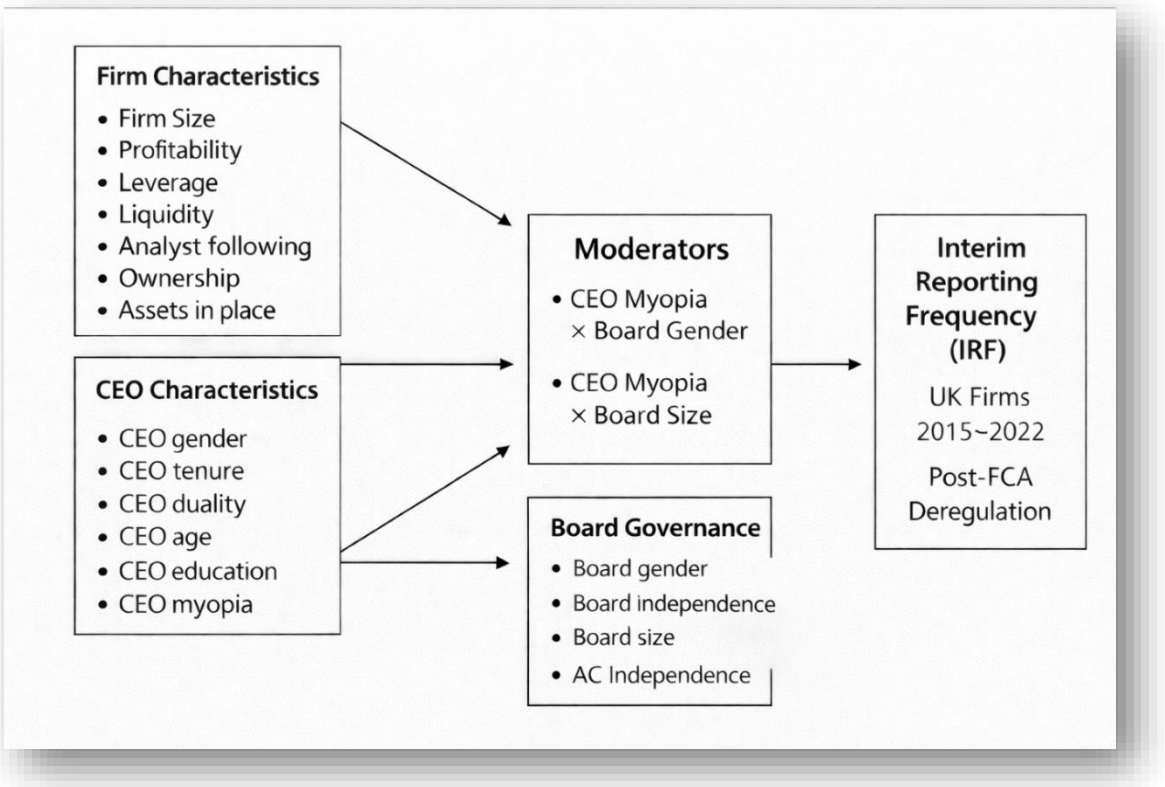


Figure 3.1: The research framework of the determinants of voluntary in UK Firms

Prior empirical research has extensively examined voluntary disclosure practices, particularly in the context of annual reporting. This literature demonstrates that firms' disclosure decisions are shaped by a combination of economic incentives, governance structures, and monitoring pressures. For example, studies such as Barako (2007), Sehar et al. (2013), Soliman (2013) and Rakiv (2019) documented significant associations between voluntary disclosure and firm characteristics as well as corporate governance attributes. However, this body of research is predominantly focused on annual reports, with relatively limited attention devoted to interim reporting, especially when such reporting is undertaken on a voluntary basis.

In the specific context of interim and quarterly reporting, existing studies largely examine regulatory regimes in which reporting frequency is mandatory. For instance, Cuijpers and Meek (2010) analysed quarterly reporting practices across several Western European countries, including the UK, prior to the 2007 regulatory reforms. Nallareddy et al. (2017) investigated the consequences of mandatory quarterly reporting, while Ernstberger et al. (2017) examined the effects of interim management statements on earnings management and

long-term firm performance in European settings. Importantly, these studies focus on the consequences of mandated reporting and do not explicitly address the determinants of *voluntary* interim reporting decisions. Moreover, the limited evidence that does exist is largely based on US firms (Arif and De George 2015), thereby limiting its applicability to the UK's post-deregulation institutional environment.

Against this background, the present study addresses a clear gap in the literature by developing and empirically testing a comprehensive research framework that explains why UK firms voluntarily choose to issue interim reports more frequently in the absence of a regulatory mandate. As illustrated in Figure 3.1, the framework integrates firm-level economic characteristics, CEO attributes, and board-level governance mechanisms as key determinants of IRF. Firm-level factors capture firms' economic importance, financial capacity, and operational complexity; CEO-level characteristics reflect managerial incentives, experience, and behavioural traits; and board-level governance variables represent internal monitoring and oversight mechanisms that shape firms' disclosure policies.

In addition, the framework explicitly incorporates moderation effects to capture the interaction between managerial behaviour and corporate governance structures. Specifically, the study examines whether board-level governance mechanisms namely board gender diversity and board size moderate the relationship between CEO myopia and interim reporting frequency. This approach recognises that the influence of managerial short-term orientation on disclosure behaviour may be constrained or amplified by the strength and effectiveness of board oversight, rather than operating uniformly across firms.

The research framework directly informs the empirical strategy adopted in this study. The determinants of IRF are examined sequentially across firm-level, CEO-level, and board-level models, followed by moderation analyses that assess how board governance mechanisms condition the relationship between CEO myopia and voluntary interim reporting behaviour. In doing so, the framework ensures coherence between the theoretical arguments developed and the hypotheses formulated in Chapter Two as well as the econometric analysis presented in Chapter Four.

3.3 Research philosophy

Research philosophy provides the foundational assumptions concerning the nature of reality and the nature of knowledge that underpin the research process. In management and accounting research, explicit philosophical positioning is important because it shapes the formulation of research questions, the choice of research design, the methods of data

collection, and the analytical techniques employed (Saunders et al. 2019). In this respect, two core philosophical dimensions are particularly relevant: ontology and epistemology.

Ontology concerns assumptions about the nature of reality and whether phenomena exist independently of social actors or are socially constructed through human interpretation. Gill and Johnson (2010, p. 100) define ontology as the branch of philosophy concerned with "the essence of phenomena and the nature of their existence." From an ontological perspective, reality may be viewed as objective and external, existing independently of individuals, or as subjective and socially constructed, shaped by individual experiences and interpretations. These ontological assumptions influence how researchers conceptualise the objects of their study and the extent to which phenomena are treated as observable and measurable.

Epistemology, by contrast, relates to the nature of knowledge and the ways in which knowledge about reality can be acquired and validated. Bryman (2016) and Blaikie (2007) emphasised that epistemological assumptions address what constitutes acceptable knowledge and how researchers can establish claims about reality. Epistemology therefore concerns the relationship between the researcher and the object of inquiry, including whether knowledge is viewed as objective and independent of the researcher or as inherently influenced by the researcher's perspectives and interpretations. Together, ontological and epistemological assumptions shape the overall philosophical stance adopted in a study.

Saunders et al. (2019) conceptualise these philosophical choices through the research onion (figure 3.2), which illustrates how management and business research may adopt alternative paradigms such as positivism, interpretivism, critical realism, pragmatism, or postmodernism. Among these paradigms, social science research is most commonly grounded in either positivism or interpretivism, reflecting fundamentally different assumptions about reality, knowledge, and the role of the researcher.

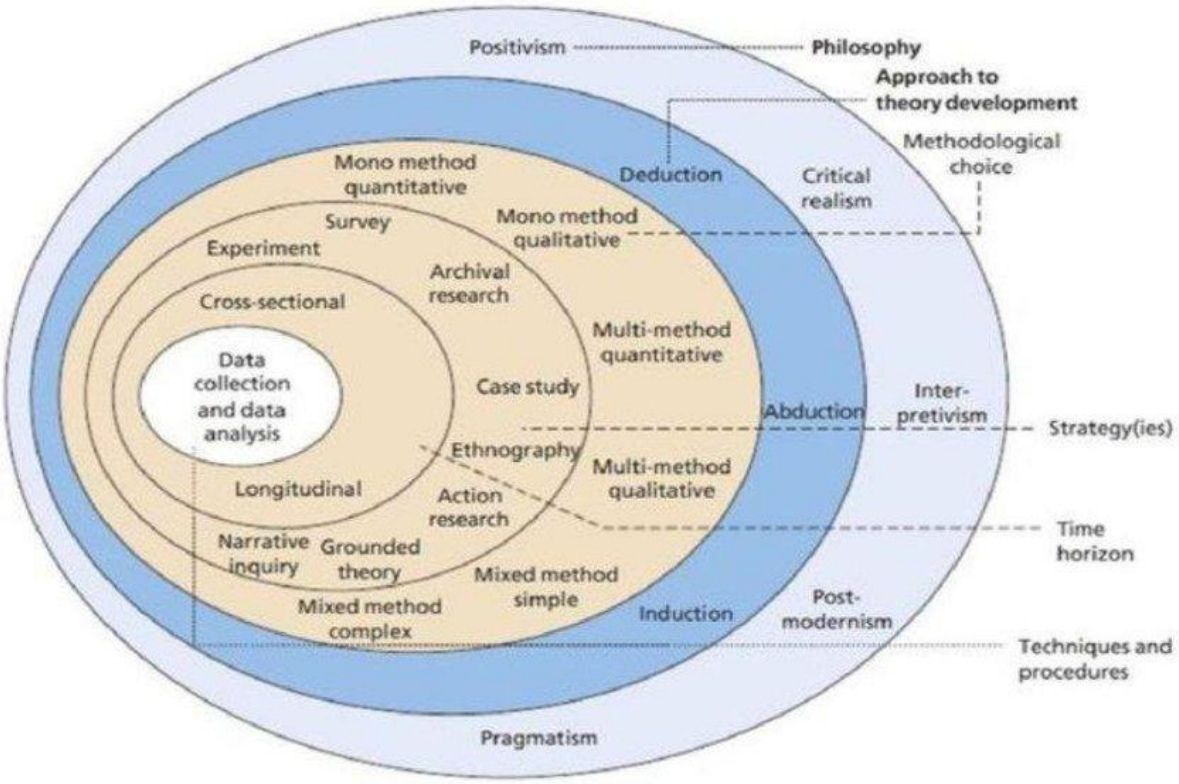


Figure 3.2: Research onion

Source: Saunders et al. (2019)

According to the positivist paradigm, there is just one external reality which is the result of natural mechanisms and laws (Saunders et al. 2019; Blaikie 2007). Moreover, a positive approach asserts that causal relationships exist between variables (Saunders et al. 2019). Positive paradigm has also been noted that the researcher acts independently of the research objects, thereby maintaining objectivity when applying the positive paradigm (Saunders et al. 2019). The positivist paradigm considers the world to be an external entity whereby research objects have intrinsic meaning, and it is the researcher's job to reveal these meanings (Blaikie 2007). When applying the positivist paradigm, a researcher will typically undertake a literature review and use this insight to develop hypotheses and theories.

In line with this philosophical stance, the study adopts a deductive research approach. A deductive approach begins with established theories and prior empirical evidence, from which testable hypotheses are derived and subsequently subjected to empirical verification using observable data (Saunders et al. 2019; Bryman 2016). The emphasis of deduction is therefore on theory testing rather than theory building.

In the context of the present study, hypotheses concerning the determinants of voluntary interim reporting frequency are developed based on agency theory, signalling theory, and upper echelons theory, as discussed in Chapter Two. These hypotheses specify expected relationships between firm-level characteristics, CEO attributes, board-level governance mechanisms, and interim reporting frequency. The hypotheses are then tested empirically using quantitative archival data and econometric models. This structured progression from theory to hypotheses and empirical testing is consistent with the core principles of deductive reasoning.

The adoption of a positivist and deductive approach is particularly appropriate for the objectives of this study. The research relies on large-sample quantitative data and employs econometric techniques to examine systematic associations between variables. Such an approach facilitates statistical inference, supports generalisability of the findings, and ensures that the results are not driven by subjective interpretation. By contrast, interpretivist approaches, which emphasise subjective meaning and social construction of reality, are less suited to the aims of this study, which does not seek to explore individual perceptions but rather to test theory-driven propositions using observable data.

Given the insight provided by empirical literature, the positivist philosophy was selected for the current study. positivist approach is particularly well-suited to research that entails statistical tests of hypotheses (Saunders et al. 2019). In the current study, the hypotheses and stated objectives concern how interim reporting frequency are affected by independent variables and, consequently, a positivist approach is the most suitable.

3.4 Research design

Research design is at the heart of an investigative study, providing the structure and explaining how the various aspects come together to answer the stated research questions (Trochim 2008). It effectively serves as a bridge connecting the planned research with the realisation of its application so that answers can be provided to the research questions. Typically, the research design will entail numerous steps so that valid results can be arrived at (Saunders et al. 2019).

Exploratory, descriptive, and causal are the three different types of research design (Sekaran and Bougie 2016). A causal research design seeks to provide explanations based on causality relationships between variables (Mitchell and James 2001). Meanwhile, the purpose of explanatory research is to examine “a situation or a problem in order to explain the relationships between variables” (Saunders et al. 2019: 188). Meanwhile, Gómez and Mouselli

(2018) stated that a descriptive research design is one that seeks to provide 'what,' 'where,' 'when' and 'how' answers to a research question. Descriptive research design is a scientific method whereby a subject is observed and reported on with no attempt to influence that subject (Saunders et al. 2019). In addition, a research design serves as a plan for how data should be collected, measured, and analysed.

Both causal and descriptive research are applied in the current study. It was deemed that causal research was best suited considering the stated research objective which involved investigating the causal relationship between the characteristics of companies and the frequency that they report to answer the research questions and test the hypotheses.

Stata 18 software was utilised in the current study to analyse the data and help identify the factors associated with the frequency of voluntary reports. More specifically, the software was used to provide descriptive statistics, the minimum and maximum values, mean, mode and median and to conduct t-tests. Stata was also used when causal relationships were tested using binary logistic regression and multiple regression (ordinary least square), whilst the relationship between the independent and dependent variables was established using correlation analysis.

3.5 Data and sample selection

When conducting research, one of the critical factors that needs to be considered is data sources. A researcher should clearly define how they intend to respond to the research questions and achieve the stated aim of the study (Bell et al. 2019). Data should be gathered from reliable sources and should take into consideration the time and resources available for the study. This study examines the determinants of voluntary interim reporting frequency among UK listed firms, the data used in the current research is derived from the FTSE all-share (non-financial) index over the period from 2015 to 2022. The FTSE All-Share Index is employed because it provides the most comprehensive coverage of firms listed on the London Stock Exchange, capturing approximately 98% of the UK equity market. Consequently, it offers a broad and representative sample of UK publicly traded firms, thereby enhancing the external validity and generalisability of the findings (Li 2010). Financial companies are excluded because these firms are subject to strict regulations regarding their disclosures (Athanasakou and Hussainey 2014). Moreover, the period of study enables comparison of the years preceding and following the change in the requirement to report on a quarterly which took place in 2014 (Pozen et al. 2017). There are several reasons for selecting the UK as the

country of interest. Firstly, in 2014 the UK government removed the quarterly reporting requirement which had been introduced in 2007 (Pozen et al. 2017). It meant that these companies had the liberty to choose whether or not to make quarterly reports. Making frequent reports about a firm's financial health and progress is still critical for many stakeholders who may not want to wait for the biannual or annual reports. However, these stakeholders have to contend with the fact that firms only issue these quarterly reports on a voluntary basis. Second, the determinants identified by scholars who conducted similar studies in the US may not be the same in the UK. For instance, the two countries have fundamental differences in their socio-economic and political structures. Consequently, the UK is studied to examine how company characteristics, CEO traits, and board governance influence how often firms choose to report interim information in this new voluntary reporting environment.

Furthermore, collecting data entails systematically gathering information about the variables being investigated to enable the researcher to test hypotheses, achieve the research objectives and assess the findings (Saunders et al. 2019). According to Saunders et al. (2019), the data collected will be determined by the type of data needed, the source of that information and the anticipated difficulty of accessing that data. This study primarily relies on secondary data, which is essential for testing hypotheses, achieving research objectives, and interpreting the results. Thus, the data for this sample were collected from multiple databases including Bloomberg, Refinitiv Datastream, and BoardEx. Financial and market variables such as firm size, profitability, leverage, liquidity, analyst following, ownership concentration, and assets in place were extracted from Refinitiv Datastream and Bloomberg, both recognised for their accuracy and extensive coverage of global financial markets. CEO-level characteristics, including gender, age, tenure, duality, education, and indicators of CEO myopia, were obtained from Bloomberg and BoardEx, which provide detailed executive profiles and leadership information for UK listed firms.

Board governance variables, such as board independence, board size, gender diversity, and audit committee independence, were sourced from BoardEx. Interim reporting frequency were manually collected using firms' annual reports, interim announcements, and disclosures available through corporate websites and the London Stock Exchange portal.

Critically, the data required to construct the interim reporting frequency variable were collected manually, because no centralised database provides consistent coverage of voluntary interim disclosures following the 2014 deregulation. For each firm-year observation, interim announcements were extracted directly from companies' official websites, including the investor relations sections, news releases, regulatory disclosures, and financial calendars. This process involved manually reviewing all available interim publications such as interim

management statements, trading updates, quarterly results, and half-year reports to count the exact number of interim reports issued during each fiscal year.

After excluding financial institutions and companies with incomplete data, the final dataset consists of 311 UK non-financial listed companies, resulting in 1989 firm-year observations over the period from 2015 to 2022.Although the sample period spans eight years, the final number of firm-year observations is lower than the maximum possible due to several data constraints. Specifically, observations were lost because of firm entry and exit from the index, delistings, missing financial data, unavailable governance or CEO-level information, and incomplete interim reporting disclosures. After applying these filters, the final usable sample consists of 1,989 firm-year observations.

Dependent variable

The dependent variable is the frequency with which firms release interim reports. Specifically, the dependent variable represents each firm's IRF, reflecting how often firms in the FTSE All-Share (non-financial) index voluntarily issue interim reports during a given financial year. This measure captures firms' voluntary disclosure behaviour in the post-2014 UK regulatory environment, following the Financial Conduct Authority's (FCA) removal of the mandatory Interim Management Statement (IMS) requirement under Policy Statement PS14/15, which made quarterly reporting discretionary.

Because no database systematically reports voluntary interim disclosures after 2014, the interim reporting frequency measure was manually constructed. For each firm-year observation between 2015 and 2022, interim announcements were collected from companies' official websites, including investor relations pages, regulatory news releases, and financial calendars. Each interim publication, including trading updates, quarterly results, interim management statements, and half-yearly reports, was reviewed individually to determine the exact number of interim reports issued during the financial year.

Consistent with previous financial reporting frequency studies (e.g., Butler et al., 2007; Fu et al., 2012; Kraft et al., 2018; Fu et al., 2020; Kajüter et al., 2022), the dependent

variable is operationalised as an ordinal variable representing increasing levels of interim reporting frequency, where:

- 1 = Firms are issuing annual reports only
- 2 = Firms issue semi-annual reports only
- 4 = Firms issue quarterly reports (four interim reports during the financial year)

This ordinal measure is used in the main empirical analysis because it captures progressively higher levels of voluntary disclosure while preserving the natural ordering of firms' reporting behaviour. Given that the primary dependent variable is measured as an ordinal variable with four naturally ordered categories, the main empirical analysis employs an ordered logistic regression model. Ordered logistic regression is appropriate because it is specifically designed for ordinal dependent variables and estimates the probability that firms belong to higher reporting-frequency categories while preserving the natural ordering of the outcome variable. In contrast, Ordinary Least Squares (OLS) regression assumes that the dependent variable is continuous and that the intervals between adjacent categories are equal. These assumptions are not satisfied in the present study because the transition from annual to semi-annual reporting cannot be assumed to represent the same increase in reporting frequency as the transition from three interim reports to quarterly reporting. Consequently, applying OLS to ordinal data may produce biased and inefficient estimates.

An alternative modelling approach is multinomial logistic regression. However, multinomial logistic regression treats the outcome categories as nominal rather than ordered and therefore ignores the natural ranking of reporting frequency. Since the reporting categories represent progressively higher levels of voluntary disclosure, preserving this ordering provides a more parsimonious and statistically efficient modelling framework. Consequently, ordered logistic regression is more appropriate than multinomial logistic regression for analysing the determinants of interim reporting frequency.

To assess the robustness of the empirical findings, the study additionally constructs a binary dependent variable (IRF_Dummy), where firms that do not voluntarily issue quarterly reports following PS14/15 are coded as 0, while firms that continue to publish

quarterly reports are coded as 1. Similar binary classifications have been adopted in previous reporting frequency studies (e.g., Leftwich et al., 1981; Link, 2012; Pozen et al., 2017). Although binary logistic regression has been employed in studies that classify firms into only two reporting groups, collapsing the four reporting categories into a binary outcome would result in the loss of valuable information regarding firms' reporting behaviour. Therefore, binary logistic regression is employed only as a robustness test using the IRF_Dummy variable, whereas ordered logistic regression is retained as the primary estimation technique because it fully exploits the ordinal nature of the dependent variable.

The variable definition applied for the dependent variable are presented in the following table:

Table 3.1: Dependent variable definition

Dependent Variable	Measurement/ Definition	Data Source	Resource
Interim Reporting Frequency (IRF)	Ordinal measure that records how many interim reports a company publishes each year. The coding is as follows: 1 = one interim report (usually a half-year report), 2 = two interim updates, and 4 = quarterly reporting. This variable was manually created by counting all interim announcements available for each firm, including trading updates, quarterly earnings releases, interim management statements, and half-year reports.	Data were manually collected from multiple public sources, including company websites (Investor Relations sections), annual reports, regulatory news announcements	Butler et al. (2007); Fu et al. (2012); Kraft et al. (2018); Kajüter et al. (2022)
IRF_Dummy (Robustness models)	A binary measure that separates firms based on whether they continue to report quarterly on a voluntary basis. Dummy variable =1 if the firm continues quarterly reporting, and 0= otherwise.	Constructed directly from the ordinal IRF measure described above and used as a simplified binary form for robustness analysis.	Pozen et al. (2017); Ernstberger et al. (2017); Bornemann et al. (2021)

Independent variables

Following the dependent variable definition, this section outlines the independent variables incorporated into the empirical analysis. The independent variables used in this study are selected based on the theories discussed in chapter two and supported by previous research showing that voluntary reporting behaviour is influenced by firm characteristics, the CEO, and board governance factors. Earlier studies find that firm characteristics play an important role in disclosure decisions. For example, firm size is often positively associated with voluntary

reporting because larger firms are more visible, face higher public and investor scrutiny, and have more resources to support frequent reporting (Hossain et al. 1995; Brammer 2005; Soliman 2013; Kend 2015). Other firm-level variables such as profitability, leverage, liquidity, ownership structure, analyst following, and industry classification have also been examined in the literature, although findings are sometimes inconsistent across different studies and regulatory settings (Ahmed and Courtis 1999; Donnelly and Mulcahy 2008). Based on this evidence, the present research includes firm size, profitability (ROA), leverage, liquidity, assets-in-place, ownership concentration, analyst following, and industry classification to reflect differences in resources, reporting incentives, and external monitoring. These variables were retrieved from Bloomberg and Refinitiv Datastream.

In addition to firm characteristics, the study also includes CEO-level attributes, following the upper-echelons theory, which states that organisational decisions are influenced by the characteristics and values of senior leaders (Hambrick and Mason 1984; Huang and Hilary 2018). Previous research shows that factors such as CEO gender, age, educational background, and role structure can affect managerial decision-making and reporting behaviour (Huang et al. 2012; Girella et al. 2022; Zamil et al. 2023). In particular, CEO duality where the CEO is also the board chair has been associated with lower transparency due to reduced oversight (Gul and Leung 2004), while gender diversity in leadership has been linked to stronger reporting practices (Adams and Ferreira 2009; Girella et al. 2022). CEO myopia is also included, based on studies suggesting that younger or short-tenure CEOs may focus more on short-term outcomes rather than long-term reporting practices (Ali and Zhang 2015; Graham et al. 2005). Information on CEO characteristics was collected from Bloomberg and BoardEx.

Finally, the model includes keyboard-level governance variables because governance structures influence how reporting decisions are monitored and controlled (Kend 2015; Zalata et al. 2022). The variables include board size, board independence, board gender diversity, and audit committee independence. Prior research shows that independent boards and separation of the CEO and chair roles may strengthen governance and help improve transparency (Gul and Leung 2004; Fama and Jensen 1983). Gender diversity and board size may also increase reporting quality by improving oversight and broadening expertise (Fama and Jensen 1983; Hillman et al. 2007). These variables were collected from BoardEx.

Overall, including variables at the firm, CEO, and board levels provides a well-rounded and theory-based framework for analysing what determines interim reporting frequency in the UK voluntary reporting environment after the removal of mandatory quarterly reporting in 2014

(Ernstberger et al. 2017; Kajüter et al. 2022). The definitions and measurement approaches for all independent variables used in the current study are presented in the following table.

Table 3.2: Independent variable definitions

Independent Variables	**Measurement / Definition**	**Data Source**	**Expected Sign**	**Resource**
Firm Size	Measured as the natural logarithm of total assets at the end of fiscal year.	Refinitiv Datastream Bloomberg	+	Kend (2015); Sukthomya (2011)
Profitability (ROA)	Calculated as the ratio of net income to total assets, representing the firm's efficiency in generating returns on its assets.	Refinitiv Datastream Bloomberg	+	Hossain et al. (1995); Donnelly and Mulcahy (2008)
Leverage	Measured as the ratio of short-term debt plus long-term debt to total assets, reflecting the firm's financial leverage.	Refinitiv Datastream Bloomberg	+	Jensen and Meckling (1976); Momeni et al. (2012)
Liquidity	The ratio of current assets to current liabilities, indicating the firm's ability to meet short-term obligations.	Refinitiv Datastream Bloomberg	+	Hitz and Moritz (2019); Zamil et al. (2021)
Assets-in-Place (AIP)	Calculated as total assets divided by total liabilities plus the market value of equity.	Refinitiv Datastream Bloomberg	−	Barako et al. (2006); Zamil et al. (2021)
Analyst Following	Number of analysts covering the company.	Bloomberg Institutional Brokers' Estimate System, I/B/E/S	+	Lang and Lundholm (1996); Healy and Palepu (2001)
Ownership Concentration	Defined as the percentage of closely held shares, reflecting the firm's ownership concentration.	Refinitiv Datastream Bloomberg	−	Donnelly and Mulcahy (2008)
CEO Age	The actual age of the CEO at the end of the fiscal year.	BoardEx Bloomberg	+	Girella et al. (2022)

Independent Variables	Measurement / Definition	Data Source	Expected Sign	Resource
CEO Gender	A dummy variable where 1 indicates the CEO is female, and 0 indicates the CEO is male.	BoardEx Bloomberg	+	Adams and Ferreira (2009); Girella et al. (2022)
CEO Tenure	The number of years the individual has served as the CEO of the company.	BoardEx Bloomberg	+	Ali and Zhang (2015); Huang and Hilary (2018)
CEO Duality	A dummy variable where 1 indicates the CEO also serves as the Chairperson of the Board, and 0 indicates the roles are separated.	BoardEx Bloomberg	−	Khlif et al. 2021
CEO Education	Dummy variable where 1 = CEO holds postgraduate degree (e.g., MBA, MSc, PhD) and 0 = otherwise.	BoardEx Bloomberg	+	Bamber et al. (2010)
CEO Myopia	Dummy variable where 1 = CEO is both young and short-tenured, indicating short-term orientation.	BoardEx Bloomberg	+	Ali and Zhang (2015); Graham et al. (2005)
Board Size	Total number of directors serving on the board.	BoardEx	+	Dalton et al. (1999)
Board Independence %	Percentage of independent non-executive directors on the board.	BoardEx	+	Donnelly and Mulcahy (2008)
Board Gender Diversity %	Percentage of women directors on the board.	BoardEx	+	Adams and Ferreira (2009); Post and Byron (2015)
Audit Committee Independence	Percentage of independent directors serving on the audit committee.	BoardEx	+	Klein (2002); Kend (2015)

Note: In addition to the variables presented in this table, all empirical models include year and industry fixed effects. Industry classification is based on the FTSE Industry Classification Benchmark (ICB) sector codes obtained from Datastream and the London Stock Exchange (LSE). These fixed effects control for unobserved time-specific and industry-specific influences on interim reporting frequency (Cuijpers and Peek 2010; Pozen et al. 2017).

3.6 Empirical models

As discussed in chapter two and illustrated in Figure 3.1 research framework, the present study aims to investigate the determinants of interim reporting frequency among UK listed firms following the financial conduct authority's 2014 deregulation of mandatory quarterly reporting. The empirical approach is designed to assess whether voluntary reporting behaviour is influenced by firm characteristics, CEO attributes, and board governance mechanisms, and whether the effect of CEO myopia on reporting behaviour is moderated by board-level governance structures.

To achieve these objectives, a set of econometric models are developed and estimated. The modelling framework proceeds in stages to allow for systematic identification of the main drivers of IRF. The first model examines firm-level determinants to assess whether reporting behaviour is primarily driven by economic and structural factors. The second model extends the analysis by incorporating CEO-level variables to test whether managerial attributes influence disclosure choices, while the third model introduces board-level characteristics to assess the effects of corporate governance mechanisms. This staged approach enables assessment of how explanatory power evolves as additional theoretical layers are added and provides insights into whether disclosure decisions are driven more strongly by economic incentives, leadership characteristics, or governance mechanisms. After the main models, moderation tests are conducted to examine interaction effects, followed by robustness models to assess whether the results remain consistent under alternative specifications and variable measurements.

The dependent variable is operationalised as an ordinal variable coded from 1 to 4 based on the number of interim reports issued in a financial year. For robustness testing, an additional binary measure (IRF_Dummy) is used. coded as 1 for firms issuing interim reports frequency and 0 otherwise. All models also include year and industry fixed effects to control for broader economic changes over time and differences in reporting practices across sectors. The following section will discuss the research models that will be investigated in the empirical part of the current study.

3.6.1 Determinants of interim reporting frequency

One of the main aims of this study is to identify what determines how often UK listed firms choose to issue interim reports in the voluntary reporting environment that emerged after the

2014 regulatory change. In this first stage of the analysis, interim reporting frequency (IRF) is used as the dependent variable. The model examines how firm characteristics, CEO traits, and board governance structures influence the frequency of interim reporting, especially now that quarterly reporting is no longer compulsory. Existing UK evidence shows that firms differ widely in their reporting behaviour, with some continuing to report quarterly while others reduced their reporting frequency (Butler et al. 2007; Cuijpers and Peek 2010; Pozen et al. 2017; Kajüter et al. 2022). Prior research also suggests that voluntary disclosure is influenced by a mix of economic incentives, managerial behaviour, and governance oversight, which supports the use of a multidimensional approach in this study. To increase robustness, an additional binary measure (IRF_Dummy) is included to distinguish between firms that report more frequently and those that report less often.

Previous studies show that voluntary reporting decisions are shaped by several factors, including financial performance, company size, expected reporting benefits, monitoring pressures, and information asymmetry. Research by Butler et al. (2007), Rahman et al. (2007), Link (2012), Nallareddy et al. (2017), Hitz and Moritz (2019), and Bornemann et al. (2021) fund that larger or more visible firms, as well as firms under greater external scrutiny, tend to disclose more frequently. On the other hand, companies with high proprietary costs, fewer resources, or weaker governance may delay or reduce reporting to limit exposure.

Based on this evidence, the present study examines whether similar drivers explain variation in reporting frequency within the UK setting following deregulation. The move from mandatory to voluntary reporting created wide differences in disclosure practices across firms, making it important to understand what drives these differences.

To structure the analysis, the explanatory variables are grouped into three categories. The first group includes firm-level factors such as size, profitability, leverage, liquidity, assets in place, analyst following, ownership concentration, and industry. These variables reflect the firm's economic position, information environment, and operating complexity. The second group focuses on CEO characteristics, including gender, age, tenure, duality, education, and myopia, because personal leadership style and decision-making preferences may affect transparency and reporting choices. The third group includes board-level governance variables such as board independence, board size, gender diversity, and audit committee independence. Strong corporate governance may improve oversight and encourage timely and credible reporting.

Overall, these variable groups help evaluate whether interim reporting frequency is mainly driven by economic conditions, CEO behaviour, or governance quality. Based on these

considerations, the following logistic regression model is estimated to examine how these factors influence the likelihood that a firm will issue more frequent interim reports.

3.6.1.1 Firm-level determinants

Prior research on voluntary disclosure suggests that interim reporting behaviour is influenced by firm characteristics, the information environment, and monitoring pressures. In the UK's post-2014 voluntary reporting context, firms have discretion over how often they issue interim financial updates, which makes firm-specific factors especially relevant. Building on earlier studies on disclosure and reporting frequency (Butler et al. 2007; Rahman et al. 2007; Nallareddy et al. 2017; Kajüter et al. 2022), this study examines whether several key organisational characteristics explain differences in interim reporting frequency.

Information asymmetry is measured using assets-in-place, following Smith and Watts (1992). Firms with a higher proportion of tangible assets operate in a more transparent business environment, where investment opportunities are easier to assess. In contrast, firms with stronger growth prospects face greater uncertainty and may wish to protect strategic information. For this reason, AIP is expected to play a role in determining reporting frequency.

Agency costs are captured using leverage, based on the framework of Jensen and Meckling (1976). Firms with higher levels of debt are subject to greater scrutiny from creditors and external financiers. To reduce uncertainty and assure stakeholders, these firms may choose to report more frequently. Therefore, a positive relationship is expected between leverage and interim reporting frequency.

Profitability is included to capture a firm's performance. More profitable firms may issue frequent interim reports to signal success and maintain investor confidence. Liquidity is also incorporated as a measure of short-term financial strength, which may encourage managers to provide more frequent updates.

Firm size is another key determinant, as larger firms tend to have greater public visibility, face stronger regulatory and investor scrutiny, and possess more resources to support frequent disclosure. Therefore, size is expected to be positively associated with interim reporting frequency.

Analyst following is used to represent the external information environment. Firms monitored by a larger number of analysts experience higher demand for timely financial information, which may result in more frequent reporting.

Finally, ownership concentration is included to reflect internal monitoring structures. Firms with concentrated ownership may have fewer incentives to issue public reports because key shareholders can access private information directly. In contrast, firms with dispersed ownership may issue updates more regularly to ensure information is shared fairly among stakeholders.

To ensure that these effects are isolated and not driven by external factors, the model includes year fixed effects to control for regulatory or macroeconomic changes and industry fixed effects to account for sector-specific disclosure norms.

Based on these considerations, the following model is estimated:

$$IRF_it = \alpha + \beta_1\, Size_it + \beta_2\, ROA_it + \beta_3\, Leverage_it + \beta_4\, Liquidity_it + \beta_5\, AIP_it + \beta_6\, Analyst_it + \beta_7\, Ownership_it + Year_(FE_t) + IND_(FE_i) + \varepsilon_it$$

(**Model 1**)

3.6.1.2 CEO-level determinants

In addition to firm characteristics, previous research shows that managerial attributes also play an important role in shaping financial reporting behaviour, particularly in voluntary disclosure settings. Studies such as Hambrick and Mason (1984), Bamber et al. (2010), Ali and Zhang (2015), and Huang and Hilary (2018) provided evidence that CEOs' personal traits can influence how firms communicate with stakeholders, how much information is disclosed, and when it is provided. Based on upper echelons theory, observable CEO characteristics are considered indicators of deeper behavioural tendencies, decision-making preferences, and risk attitudes. These characteristics may therefore influence strategic choices such as how often interim financial information is reported. Building on this theoretical basis, the present study extends the firm-level model by including a set of CEO-specific variables that reflect managerial experience, leadership power, behavioural style, and short-term versus long-term decision orientation. The following equation summarises the extended model incorporating CEO-level determinants:

$$IRF_it = \alpha + \beta_1\, CEOgender_it + \beta_2\, CEOage_it + \beta_3\, CEOtenure_it + \beta_4\, CEOduality_it + \beta_5\, CEOeducation_it + \beta_6\, CEOmyopia_it + Firm_(controls_it) + Year_(FE_t) + IND_(FE_i) + \varepsilon_it$$

(**Model** 2)

Model (2) assumes that interim reporting practices may differ depending on the personal attributes of the CEO. Accordingly, six CEO-level variables are included. First, CEO gender is incorporated based on evidence that female executives may demonstrate higher ethical sensitivity, stronger monitoring behaviour, and a greater orientation toward transparent communication (Adams and Ferreira 2009; Girella et al. 2022). which may be more likely to report interim information more frequently.

CEO gender is included because prior evidence suggests that female executives tend to exercise stronger ethical judgement, greater risk awareness, and a higher commitment to transparent communication (Adams and Ferreira 2009; Girella et al. 2022). If these behavioural patterns influence disclosure strategy, firms led by female CEOs may be more likely to issue frequent interim reports.

CEO age and tenure are included as indicators of experience and leadership stability. Younger or newly appointed CEOs may face stronger pressure to establish credibility and signal competence, which may encourage more frequent reporting. In contrast, older or long-tenured CEOs may rely on their established reputation and adopt more conservative disclosure patterns. This expectation aligns with prior evidence linking CEO demographic traits to disclosure style and short-term decision horizons (Graham et al. 2005; Ali and Zhang 2015).

CEO duality is included as a measure of concentrated managerial authority. When the CEO also chairs the board, monitoring may be weaker, reducing incentives to issue frequent or transparent financial reports. Previous findings associate dual leadership structures with lower transparency and reduced voluntary reporting (Khlif et al. 2021), suggesting a negative expected association.

CEO education is incorporated as an indicator of technical and analytical capability. Executives holding postgraduate qualifications particularly in management, business, or finance may be more aware of disclosure expectations and better equipped to support structured reporting processes.

Finally, CEO myopia is included as a behavioural disclosure determinant. Myopic CEOs focus more on short-term outcomes than on long-term value and may delay or minimise reporting to avoid scrutiny or unfavourable market reactions (Graham et al. 2005; Ali and Zhang 2015). Therefore, a negative association is expected between CEO myopia and interim reporting frequency.

Consistent with previous models, year fixed effects control for macroeconomic variation, while industry fixed effects account for sector-specific reporting norms. These controls ensure that estimated coefficients reflect the independent influence of CEO characteristics on interim reporting frequency.

3.6.1.3 Board-level determinants

Model (3) extends the analysis by examining whether interim reporting frequency is influenced by board-level governance mechanisms. Both agency theory and resource dependence theory emphasise that the board of directors plays a central role in monitoring managerial behaviour, reducing information asymmetry, and ensuring the quality and timeliness of financial reporting (Fama and Jensen 1983; Pfeffer and Salancik 2015). To capture these governance effects, the following model incorporates several key board characteristics:

$$IRF_{it} = \alpha + \beta_1 BoardSize_{it} + \beta_2 BoardInd_{it} + \beta_3 FemaleRatio_{it} + \beta_4 ACInd_{it} + Firm_{controls_{it}} + Year_{FE_t} + IND_{FE_i} + \varepsilon_{it}$$

(**Model 3**)

Board independence is included as a central indicator of governance quality and monitoring effectiveness. Boards with a higher proportion of independent directors are generally more capable of constraining managerial opportunism and demanding transparent and timely disclosure (Beasley 1996; Chen and Jaggi 2000). Consequently, greater board independence is expected to increase the firm's likelihood of issuing interim updates more frequently. Board size is incorporated to capture differences in board capacity and expertise. Larger boards may bring broader knowledge and resources, which can enhance oversight of financial reporting. However, previous research also notes that very large boards may face coordination and communication challenges that weaken monitoring effectiveness (Jensen 1993; Yermack 1996). As a result, the effect of board size on interim reporting frequency may be positive or negative and must be tested empirically.

Board gender diversity reflects the growing evidence that female directors strengthen board monitoring, ethical oversight, and communication quality. Gender-diverse boards are linked to greater diligence, reduced opportunistic reporting, and enhanced transparency (Adams and Ferreira 2009; Gul et al. 2011). Therefore, higher female representation may promote more frequent interim reporting as part of an improved governance environment. Audit committee independence is incorporated to assess its influence on interim disclosure. Independent audit

committees enhance reporting accuracy, reduce information asymmetry, and strengthen oversight of financial statements (Klein 2002). Firms with more independent audit committees are therefore expected to issue interim reports more frequently.

As with previous models, year and industry fixed effects are included to control for macroeconomic conditions and sector-specific reporting norms. Model (3) therefore identifies the extent to which board governance mechanisms contribute to differences in interim reporting frequency, beyond the firm-level and CEO-level determinants examined in earlier models.

3.6.2 Moderation models: CEO myopia and board governance

Building on the theoretical arguments developed in the previous chapter, this study extends the empirical analysis by examining whether board governance mechanisms moderate the effect of CEO myopia on interim reporting frequency. The motivation for employing moderation analysis stems from the understanding that managerial short-term orientation does not operate independently; instead, it is embedded within a broader governance environment that shapes and constrains executive decision-making.

Existing evidence shows that CEO myopia can affect disclosure preferences by encouraging managers to limit reporting frequency, delay the release of negative information, or retain greater control over operational decisions (Kraft et al. 2018). However, Agency Theory emphasises that the board of directors serves as the main internal monitoring mechanism responsible for constraining such opportunistic behaviour and ensuring transparent and timely communication (Fama and Jensen 1983; Bushman et al. 2004). At the same time, Upper Echelons Theory suggests that the extent to which managerial traits influence organisational outcomes depends on the governance context in which managers operate. Therefore, to fully understand what drives interim reporting frequency in a voluntary setting, it is necessary to analyse how board governance interacts with CEO myopia, rather than examining each factor independently.

Prior research also highlights that the influence of managerial attributes on disclosure outcomes depends on the strength of the governance structure (Armstrong et al. 2010). Strong boards, particularly those with gender diversity, independence, or specialised expertise, are better equipped to challenge executives, correct behavioural biases, and encourage transparent communication (Adams and Ferreira 2009; Gul et al. 2011). In contrast, weak or passive boards may be less effective in counteracting managerial short-termism, thereby allowing myopic CEOs to prioritise short-term incentives over timely and informative disclosure

(Jensen 1993; Fama and Jensen 1983). Moderation analysis therefore helps determine whether specific board characteristics weaken, strengthen, or amplify the behavioural impact of CEO myopia on interim reporting practices.

In the present study, two governance mechanisms are selected for moderation analysis: board gender diversity and board size. These variables are chosen due to their strong theoretical relevance, prominent role in the governance literature, and consistent empirical evidence linking them to enhanced monitoring, decision-making quality, and board effectiveness.

3.6.2.1 CEO myopia × board gender diversity

Board gender diversity is widely recognised in the corporate governance literature as an important mechanism for strengthening board effectiveness. Research shows that gender-diverse boards enhance monitoring quality, promote ethical oversight, and contribute to more rigorous and well-informed board discussions (Adams and Ferreira 2009; Gul et al. 2011). Female directors, in particular, are often associated with greater diligence, stronger transparency preferences, and more active engagement in oversight activities. These attributes may help reduce a myopic CEO's ability to withhold information or limit the frequency of interim reporting.

Because gender diversity can be conceptualised in different ways, this study employs three interaction models to capture alternative dimensions of board gender diversity and ensure robustness in the moderating analysis. The first model uses the percentage of female directors as a continuous measure. The second model applies a critical mass indicator (Diversity2), coded as 1 when the board has at least two female directors. The third model employs a female presence or threshold dummy, coded as 1 when the proportion of female directors meets or exceeds a meaningful benchmark (for example, one female director or at least 30% female representation).

To test whether gender-diverse boards moderate the relationship between CEO myopia and interim reporting frequency, the following interaction model is estimated:

$$IRF_{it} = \alpha + \beta_1 CEOmyopia_{it} + \beta_2 Diversity2_{it} + \beta_3 (CEOmyopia_{it} \times Diversity2_{it}) + Firm_controls_{it} + Year_FE_t + IND_FE_i + \varepsilon_{it}$$

(Model 4)

In Model (4), β_3 represents the moderating effect, indicating whether gender diversity strengthens, weakens, or changes the influence of CEO myopia on interim reporting frequency.

Including multiple measures of gender diversity provides a more complete understanding of how board composition affects firms led by potentially short-term-oriented CEOs. If the interaction term is positive, this would suggest that gender diversity helps counteract CEO myopia by improving oversight and encouraging more frequent disclosure. If the coefficient is negative, it would indicate that gender-diverse boards intensify or respond differently to CEO myopia, revealing a more complex behavioural interaction. Interpreting this moderating effect contributes to a deeper theoretical understanding of how gender diversity shapes the CEO–reporting behaviour relationship in voluntary disclosure settings.

3.6.2.2 CEO myopia × board Size

Board size is another important governance mechanism that can influence how effectively the board monitors managerial behaviour. Larger boards may offer a wider range of expertise, greater cognitive diversity, and more resources for evaluating executive decisions. These features can strengthen oversight and potentially limit the ability of a myopic CEO to restrict interim reporting. However, prior research also highlights that large boards may suffer from coordination difficulties, slower decision-making, and reduced accountability (Jensen 1993; Yermack 1996). Because of these conflicting arguments, the moderating effect of board size on the relationship between CEO myopia and interim reporting frequency is theoretically mixed and must be assessed empirically.

To examine whether board size influences the effect of CEO myopia on interim reporting behaviour, the following interaction model is estimated:

$$IRF_{it} = \alpha + \beta_1 CEOmyopia_{it} + \beta_2 BoardSize_{it} + \beta_3 (CEOmyopia_{it} \times BoardSize_{it}) + Board_{controls_{it}} + CEO_{controls_{it}} + Firm_{controls_{it}} + Year_{FE_t} + IND_{FE_i} + \varepsilon_{it}$$

(**Model 5**)

In Model (5), β_3 represents the moderating effect of board size. A positive coefficient would suggest that larger boards help weaken the influence of CEO myopia, likely by improving

oversight and increasing the board's capacity to challenge short-term managerial decisions. In contrast, a negative coefficient would indicate that larger boards may strengthen or enable managerial short-termism, possibly because coordination challenges reduce their monitoring effectiveness.

Understanding the direction of this interaction provides important insight into how different board structures shape managerial behaviour in a voluntary disclosure environment.

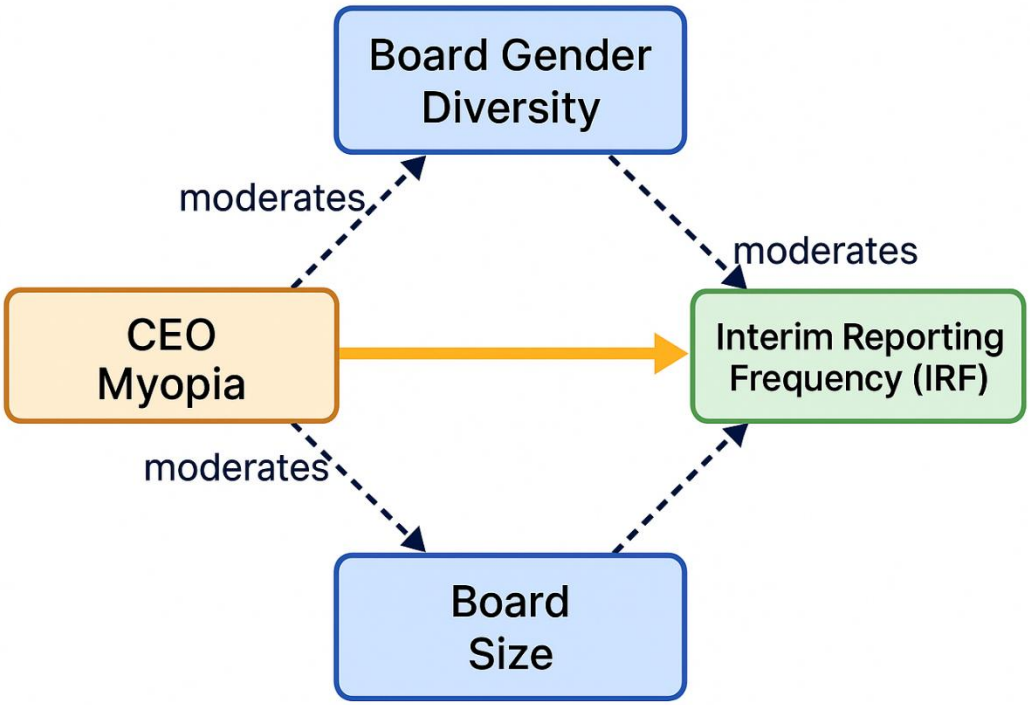


Figure 3.3: Moderation models: CEO myopia and board governance

Source: Author's illustration based on this study framework.

The visual summary of the empirical model for the current study is presented in figure 3.4. The figure integrates the three levels of analysis firm-level characteristics, CEO characteristics, and board-level governance mechanisms and illustrates their relationships with voluntary IRF. In line with the empirical specifications outlined in Section 3.7.1.1, firm-level variables (including firm size, profitability, leverage, liquidity, ownership concentration, analyst following, assets-in-place, and industry effects) are modelled as baseline determinants of IRF. CEO characteristics, with particular emphasis on CEO myopia and leadership power, are incorporated to capture managerial behavioural influences on disclosure decisions. Board-

level governance mechanisms, including board size, board independence, audit committee independence, and board gender diversity, are introduced both as direct determinants of IRF and as moderating mechanisms shaping the relationship between CEO characteristics and reporting frequency.

Consistent with the moderation models developed in Section 3.7.2, the empirical framework explicitly recognises that board governance mechanisms particularly board gender diversity and board size may condition the impact of CEO myopia on voluntary interim reporting behaviour. The figure therefore provides a concise visual representation of the study's empirical strategy, clarifying how the regression models are structured and how the interaction effects are examined. This integrated presentation enhances transparency and supports interpretation of the empirical results reported in Chapter 4.

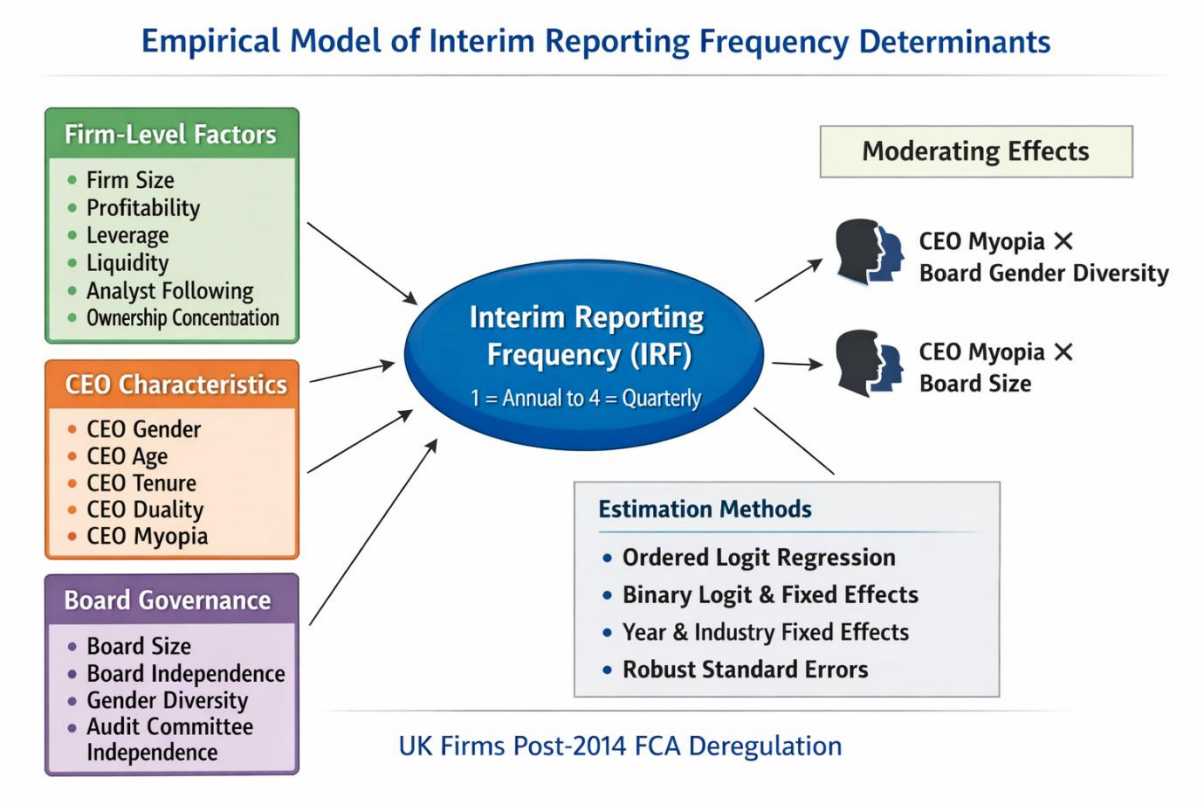


Figure 3.4: Empirical model of voluntary interim reporting frequency

Source: Author's illustration based on this study framework.

To ensure that the results from the main and moderation models are reliable and not driven by model specification or measurement choices, the following section presents a series of robustness tests designed to confirm the stability and validity of the findings.

3.6.3 Endogeneity and potential sources of bias

As with many studies examining voluntary corporate disclosure, this study is subject to potential endogeneity concerns that may affect the estimated relationships between the explanatory variables and interim reporting frequency (IRF). Following the FCA's 2014 deregulation, firms voluntarily decide whether to provide more frequent interim reporting. Because these reporting decisions are not randomly assigned, the estimated relationships may be affected by endogeneity. Previous studies recognise that firms may self-select their reporting frequency, making endogeneity an important consideration in empirical studies of voluntary disclosure (Butler et al. 2007; Link 2012). Therefore, the results of this study are interpreted primarily as empirical associations rather than definitive causal relationships.

One potential source of endogeneity is omitted variable bias. Although the empirical models include a range of firm-level, CEO-level, and board-level variables, together with year and industry effects, some unobserved factors may influence both IRF and the explanatory variables. These factors may include firms' disclosure culture, managerial ability, investor relations strategy, proprietary disclosure costs, and other firm-specific characteristics. If these unobserved factors are correlated with the explanatory variables, the estimated coefficients may be biased.

A second concern is reverse causality. While firm characteristics, CEO attributes, and board governance mechanisms may influence firms' voluntary reporting decisions, reporting frequency may itself affect some of the explanatory variables. For example, firms that report more frequently may attract greater analyst following or investor attention. Previous research suggests that reporting frequency can influence firms' information environment, analyst following, investor monitoring, and managerial behaviour (Fu et al. 2012; Fu et al. 2020). Therefore, the direction of some relationships may not be entirely one-way.

A related concern is simultaneity. CEO characteristics, board governance structures, and reporting decisions may be jointly determined within the firm's governance and reporting environment. For example, governance structures may influence reporting decisions, while firms' reporting practices and information environments may also contribute to changes in governance arrangements over time. This makes it difficult to establish the precise direction of some observed relationships.

Another potential source of bias is measurement error. Because no commercial database systematically records voluntary interim reporting frequency following the FCA's 2014 deregulation, the IRF variable was manually collected from firms' official reports and investor-relations sources. This approach is consistent with previous reporting-frequency research that has relied on firms' disclosure records to identify reporting practices (Butler et al. 2007; Bornemann et al. 2025). Nevertheless, manual data collection may introduce some risk of classification or recording error. To reduce this risk, reporting frequency was identified using consistent criteria across firms and years.

Several approaches are used to reduce or assess these concerns. First, the regression models include theoretically motivated firm-level, CEO-level, and board-level variables, together with year and industry effects, to account for observable differences across firms, time periods, and industries. Second, an alternative binary measure of interim reporting frequency (IRF_Dummy) is estimated using binary logistic regression to examine whether the main findings are sensitive to the measurement of the dependent variable. Third, firm fixed-effects models are used as an additional robustness test to control for unobserved firm characteristics that remain constant over time. Further robustness analyses, including alternative specifications and subsample analyses, are also conducted to assess the stability of the findings (Butler et al. 2007; Fu et al. 2020).

In addition, standard errors are clustered at the firm level where applicable to account for possible correlation of observations within the same firm over time. However, clustered standard errors do not address endogeneity itself; rather, they improve statistical inference by allowing for within-firm dependence in the error terms.

Despite these procedures, endogeneity cannot be completely eliminated because firms voluntarily choose their reporting frequency and some unobserved or jointly

determined factors may remain. In particular, the study does not employ an external instrument or a research design that provides definitive causal identification. The findings are therefore interpreted as empirical associations rather than causal effects. Nevertheless, the use of theoretically motivated controls, year and industry effects, firm fixed-effects estimation, alternative measures of IRF, and additional robustness analyses helps assess whether the main findings are sensitive to alternative specifications and observable sources of heterogeneity.

3.6.4 Robustness models

To ensure that the empirical findings are valid, reliable, and not dependent on a particular modelling choice, this study conducts several robustness tests. These tests examine whether the main results remain stable when alternative model specifications, variable definitions, and sample adjustments are applied. Consistent with prior research on voluntary reporting and corporate governance (e.g., Hitz and Moritz 2019; Bornemann et al. 2021; Kajüter et al. 2022), the robustness procedures provide additional assurance that the observed relationships are not driven by measurement error, model choice, or contextual shocks.

3.6.4.1 Alternative dependent variable: binary Interim reporting measure

The primary analysis models interim reporting frequency as an ordered categorical variable based on the number of interim reports a firm issue. Following prior literature that distinguishes between high- and low-frequency reporters (e.g., Link 2012; Nallareddy et al. 2017), a binary measure of reporting frequency is constructed as a robustness check.

The alternative dependent variable IRF_Dummy equals 1 for firms issuing quarterly interim reports and 0 for firms that do not issue quarterly reports.

The following logistic model is estimated:

$$IRF_Dummy_{it} = \alpha + \beta X_{it} + Year_FE_t + IND_FE_i + \varepsilon_{it} \qquad \textbf{(Model 6)}$$

where X_{it}includes the same firm, CEO, and board-level determinants used in the main ordered model.

This robustness approach assesses whether the findings are sensitive to the measurement of the dependent variable. If the results remain consistent when using a binary classification of reporting frequency, this strengthens confidence that they are not driven by the ordered specification employed in the primary analysis.

3.6.4.2 Alternative estimator: OLS linear probability approximation

Although OLS is not the preferred estimator for categorical dependent variables, the linear probability model is widely employed in disclosure and governance research as a robustness benchmark because of its simplicity, interpretability, and ease of comparison across models (Bornemann et al. 2021). To verify whether the findings are sensitive to the choice of a non-linear estimator, the following OLS specification is estimated:

$$IRF_{it} = \alpha + \beta X_{it} + Year_FE_t + IND_FE_i + \varepsilon_{it} \qquad (\textbf{Model } 7)$$

This additional test assesses whether the core relationships remain consistent when interim reporting frequency is approximated using a linear probability framework, thereby providing further confidence that the main results are not driven only by the functional form of the ordered logit model.

3.6.4.3 Alternative estimator: firm fixed effects model

The main ordered logit model does not account for unobservable firm-specific characteristics that may influence both governance structures and interim reporting policies. To address this limitation, a FE regression is estimated using a continuous version of the interim reporting frequency variable (a rescaled IRF measure). The model is specified as follows:

$$IRF_{it} = \alpha_i + \beta X_{it} + Year_{FE_t} + \varepsilon_{it} \qquad (\textbf{Model } 8)$$

where $\alpha_i$captures time-invariant firm-level attributes such as reporting culture, governance quality, or managerial style.

This approach provides a stringent robustness test that isolates within-firm variation and ensures that the main findings are not driven by unobserved heterogeneity.

where $\alpha_i$captures all time-invariant firm-level characteristics, including reporting culture, internal governance quality, managerial preferences, and other persistent organisational traits.

By controlling for these unobservable factors, the FE model provides a stringent robustness check. It isolates within-firm variation over time and ensures that the main results are not driven by differences between firms that remain constant throughout the sample period. Consistency between the FE results and the baseline ordered logit findings strengthens confidence in the stability and validity of the study's conclusions.

3.6.4.4 Subsample analyses by firm size

To explore whether the determinants of interim reporting frequency differ between smaller and larger firms, the sample is divided at the median value of firm size. Ordered logit and OLS estimations are then conducted separately for each subsample.

For each size group $g \in$ {Small,Large}, the model takes the form:

$$IRF_{it} = \alpha_g + \beta_g' X_{it} + YearFE_t + IndustryFE_i + \varepsilon_{it} \qquad (\textbf{Model } 9)$$

where X_{it}includes the same firm, CEO, and board-level determinants used in the baseline models. Allowing the coefficients $\beta_g'$to vary across size groups enables an assessment of whether key drivers such as profitability, leverage, liquidity, or ownership concentration operate differently in small versus large firms. This approach provides insight into the extent to which disclosure incentives are sensitive to organisational scale.

3.6.4.5 Industry subsamples: manufacturing vs non-manufacturing

To further assess whether the determinants of interim reporting frequency vary across sectors, the sample is partitioned into manufacturing and non-manufacturing firms based on industry classification codes. For each industry group $s \in$ {Manufacturing,non-manufacturing}, the following specification is estimated using ordered logit and OLS methods:

$$IRF_{it} = \alpha_s + \beta_s' X_{it} + YearFE_t + \varepsilon_{it} \qquad \textbf{(Model 10)}$$

This allows the coefficients on firm-level, CEO-level, and board-level variables to differ by sector. The results show whether the main determinants identified in the full-sample analysis remain stable across industries or whether reporting incentives are shaped by sector-specific characteristics such as production cycles, regulatory oversight, or information complexity.

3.6.4.6 COVID-19 and industry effects

Finally, the study tests whether the COVID-19 pandemic and industry-level factors materially affect interim reporting behaviour after controlling for firm, CEO, and board characteristics.

First, mean and variance comparison tests are conducted to compare interim reporting frequency between the pre-COVID period (2015–2019) and the COVID/post-COVID period (2020–2022). Two complementary tests are employed:

- a t-test to assess differences in mean interim reporting frequency, and
- a robust variance test (robvar) to examine whether the dispersion of interim reporting frequency changed during the pandemic period.

Second, COVID-19 and industry effects are incorporated into the regression framework via the following ordered logit specification:

$$IRF_{it} = \alpha + \gamma\, CovidDummy_{it} + \beta' X_{it} + YearFE_t + IndustryFE_i + \varepsilon_{it} \qquad \textbf{(Model 11)}$$

where $CovidDummy_{it} = 1$for all observations falling within the COVID/post-COVID period (2020–2022), and 0 otherwise. The X_{it}captures the full set of firm-, CEO-, and board-level control variables included in the baseline models.

This specification allows the analysis to determine whether the pandemic exerted a systematic influence on interim reporting behaviour once other determinants are accounted for. It also assesses whether the primary relationships identified in the main models remain robust after explicitly controlling for pandemic-related effects and industry-specific characteristics. This robustness check is particularly important in the context of voluntary disclosure research, as exogenous shocks such as COVID-19 may alter managerial incentives, investor information

needs, and reporting practices across sectors with varying levels of exposure to operational disruption and market uncertainty.

3.7 Statistical analysis and tests

In the previous sections, this chapter introduced the variables, outlined the empirical models, and described the data collection and sample selection procedures. The current section presents the statistical techniques and diagnostic tests that will be employed to analyse the determinants of interim reporting frequency among FTSE All-Share non-financial firms. Consistent with established empirical research in accounting and finance, the analysis incorporates descriptive statistics, diagnostic checks, and multivariate regression models to ensure that the results are reliable, valid, and robust.

The choice of statistical estimators in this study is guided by the nature of the dependent variable, the panel structure of the data, and established practice in the disclosure and corporate governance literature. IRF is measured as an ordinal variable capturing increasing levels of reporting intensity within a financial year. Accordingly, ordered logistic regression is employed as the primary estimation technique, as it is specifically designed to model ordered outcomes without imposing cardinal assumptions on the distance between reporting categories. This approach allows for an appropriate and theoretically consistent examination of factors associated with higher reporting frequency.

To strengthen inference and address potential concerns regarding model dependence, the ordered logit results are complemented by alternative estimators reported as robustness checks. These include binary logit models based on alternative specifications of IRF, OLS regressions to facilitate comparison with prior disclosure studies, and fixed-effects estimators to control for time-invariant unobserved firm characteristics. The consistency of results across these approaches enhances confidence in the empirical findings.

Statistical procedures are commonly classified into parametric and non-parametric techniques. While parametric methods typically offer higher statistical power, they rely on assumptions relating to distributional properties and functional form. Although ordered logit models do not require normally distributed residuals, assessing the distributional properties of continuous explanatory variables remains important to ensure that extreme skewness does not distort estimation accuracy or influence coefficient stability.

3.7.1 Normality and linearity tests

Normality is assessed using skewness and kurtosis statistics alongside visual inspection tools such as histograms and kernel density plots. Variables exhibiting substantial skewness particularly firm size and market-based measures are transformed using natural logarithms to improve distributional properties and reduce the influence of extreme values.

Linearity is assessed by examining scatterplots between IRF and key continuous explanatory variables to confirm the presence of monotonic relationships. While ordered logit models do not require strict linearity in levels, monotonic relationships between predictors and the latent outcome are important for meaningful interpretation of estimated effects.

3.7.2 Multicollinearity diagnostics

Given the inclusion of multiple firm-level, CEO-level, and board-level predictors, multicollinearity is explicitly assessed to ensure that coefficient estimates are stable and interpretable. Variance Inflation Factors (VIFs) and Pearson correlation matrices are used to evaluate the degree of correlation among explanatory variables. VIF values remain below the conventional threshold of 10, indicating that multicollinearity does not materially affect the reliability of the estimated coefficients. Correlation matrices further assist in identifying potential redundancies and confirming that the included variables capture distinct theoretical constructs.

3.7.3 Heteroskedasticity and model adequacy tests

Given the panel structure of the dataset, heteroskedasticity and within-firm correlation represent potential sources of biased statistical inference if not appropriately addressed. Accordingly, all regression models in this thesis are estimated using heteroskedasticity-robust standard errors clustered at the firm level. Firm-level clustering is consistent with best practice in panel data analysis, as it simultaneously accounts for cross-sectional heteroskedasticity and serial correlation within firms over time.

For the ordered logit models, particular attention is given to model adequacy and underlying assumptions. The proportional odds (parallel lines) assumption which

requires that the relationship between explanatory variables and the cumulative probability of higher reporting frequency remains consistent across outcome thresholds is explicitly considered. To ensure that the empirical findings are not driven by potential violations of this assumption, the main results from the ordered logit estimations are validated using alternative model specifications, including binary logit, OLS, and fixed-effects estimators.

Taken together, the use of clustered robust standard errors and multiple alternative estimators strengthens the credibility of the empirical analysis and ensures that the reported results are robust to potential violations of distributional assumptions, heteroskedasticity, and model specification concerns.

3.8 Conclusion

This chapter has outlined the methodological framework adopted to investigate the determinants of voluntary interim reporting frequency among UK FTSE All-Share non-financial firms in the post-FCA deregulation period. It began by establishing the philosophical foundation of the study, identifying positivism and a deductive research approach as appropriate for examining causal relationships using structured quantitative methods. The research design combined descriptive, explanatory, and causal elements to allow for a systematic assessment of firm-level, CEO-level, and board-level influences on interim reporting practices.

The chapter also detailed the sampling strategy and data collection procedures, which drew on multiple high-quality secondary sources including Bloomberg, Refinitiv Datastream, and BoardEx, complemented by manual extraction of interim reporting information from firms' official disclosures, such as interim statements, trading updates, and financial calendars. This multi-source approach ensured accurate identification of reporting frequency and strengthened the completeness and reliability of the dataset. The final panel dataset, covering UK listed non-financial firms from 2015 to 2022, provides a robust basis for analysing voluntary reporting behaviour in a setting where disclosure frequency is a discretionary managerial choice.

A structured modelling framework was introduced to reflect the multidimensional nature of interim reporting frequency. Three main empirical models were developed to examine firm characteristics, CEO attributes, and board governance mechanisms. These were followed by two moderation models designed to assess whether board gender diversity and board size

shape the influence of CEO myopia on disclosure frequency. This approach allows the study to move beyond simple direct effects and explore how behavioural traits interact with governance structures to influence reporting outcomes.

To ensure the reliability of the results, the chapter presented a series of robustness checks, including alternative dependent variable specifications, FE models, linear probability models, subsample analyses by firm size and industry, and explicit tests for COVID-19 and industry effects. These enhancements provide confidence that the findings are not driven by modelling choices, measurement assumptions, or external shocks. Finally, the chapter described the diagnostic procedures employed to validate the empirical models, including tests for normality, linearity, multicollinearity, heteroskedasticity, and the proportional-odds assumption. All regressions were estimated using heteroskedasticity-robust standard errors clustered at the firm level to support reliable inference. Building on the methodological foundation established in this chapter, the next chapter delivers the empirical results and offers an integrated discussion of the key drivers of interim reporting frequency within the UK voluntary disclosure environment.

Chapter 4 : Empirical result and analysis of interim reporting frequency

4.1 Introduction

This chapter presents and discusses the empirical findings of the study, examining the determinants of voluntary IRF among UK FTSE All-Share non-financial firms following the FCA removal of mandatory quarterly reporting in 2014. In this post-deregulation environment, interim reporting frequency represents a discretionary managerial choice rather than a regulatory obligation, enabling an examination of the economic, managerial, and governance drivers of voluntary disclosure behaviour.

Building on the theoretical framework and hypotheses developed in Chapter Two, the analysis investigates how firm level characteristics, CEO attributes, and board level governance mechanisms influence firms' interim reporting frequency decisions. In addition, it examines whether board governance structures moderate the relationship between CEO myopia and disclosure behaviour, recognising that managerial short-term orientation may be constrained or amplified by governance oversight. By adopting this multi-level approach, the chapter extends prior research that has focused primarily on firm level determinants and integrates behavioural and governance perspectives into the study of voluntary reporting decisions.

The findings are interpreted in relation to the theoretical perspectives developed in Chapter 2, particularly agency theory, signalling theory, upper echelons theory, resource dependence theory, and critical mass theory. The discussion also compares the results with prior empirical evidence, with particular attention given to findings that differ from theoretical expectations or previous studies. This approach allows the analysis to move beyond statistical significance and consider the economic, behavioural, and governance explanations underlying firms' voluntary reporting choices.

The empirical analysis is based on an unbalanced panel of UK FTSE All-Share non-financial firms covering the period from 2015 to 2022. Interim reporting frequency is measured as an ordinal variable reflecting the number of interim reports issued within a financial year. Given the ordinal nature of the dependent variable, ordered logistic regression is employed as the primary estimation technique. To assess the robustness of the findings, alternative model specifications including binary logistic regression and FE estimations are also reported. Year

and industry fixed effects are included across all models to control for time-specific and sector-specific influences on reporting practices.

The remainder of the chapter is organised as follows. Section 4.2 presents the descriptive statistics and correlation analysis, providing an overview of sample characteristics and preliminary relationships among the key variables. Section 4.3 reports the main regression results, beginning with firm-level determinants, followed by CEO-level characteristics and board-level governance factors. Section 4.4 whether board governance mechanisms moderate the relationship between CEO myopia and voluntary interim reporting frequency. Section 4.5 presents a series of robustness checks to assess the stability of the main findings. Finally, Section 4.6 summarises the key empirical results and provides a transition to the concluding chapter.

4.2 Descriptive statistics and correlation analysis

This section presents the descriptive statistics and correlation analysis for the variables employed in the study. The sample comprises 1,989 firm-year observations drawn from UK FTSE All-Share non-financial firms over the period 2015–2022. Although the sample period spans eight years, the total number of firm-year observations is lower than the maximum possible due to firm entry into and exit from the FTSE All-Share Index, as well as data availability constraints, as discussed in Chapter Three.

Section 4.2.1 reports the descriptive statistics. Sections 4.2.2 and 4.2.3 examine variation in interim reporting frequency across years and industries, respectively. The correlation analysis is presented in Section 4.2.4.

4.2.1 Descriptive statistics

Table 4.1 presents the descriptive statistics for the variables employed in the empirical analysis, including the dependent variable IRF, and the firm-level, CEO-level, and board-level explanatory variables. The final sample comprises 1,989 firm-year observations drawn from UK FTSE All-Share non-financial firms over the period 2015–2022. As discussed earlier, the unbalanced nature of the panel reflects firm entry into and exit from the index, as well as data availability constraints for certain governance- and analyst-related variables.

The dependent variable has a mean value of 1.923, with a standard deviation of 0.299 and a range from 1 to 4. This distribution indicates meaningful variation in voluntary interim reporting practices, with some firms issuing only the minimum number of interim reports and others engaging in more frequent disclosure. The IRF dummy variable has a mean of 0.472, indicating that approximately 47.2% of the firm-year observations are classified as adopting quarterly or more frequent interim reporting. This relatively balanced distribution between the two categories provides useful variation for the subsequent binary logistic regression robustness analysis. More generally, the variation in both measures is consistent with the discretion available to UK firms over reporting frequency in the post-2014 regulatory environment.

With respect to firm-level characteristics, FirmSize has a mean value of 14.179, indicating substantial variation in firm scale within the FTSE All-Share Index. Profitability, measured by return on assets (ROA), averages 0.069, with values ranging from −0.347 to 0.507, reflecting the presence of both loss-making and highly profitable firms. Leverage has a mean of 0.279, suggesting moderate reliance on debt financing, while liquidity averages 2.134, indicating that firms generally maintain sufficient short-term assets to meet current obligations. Analyst following has a mean of 9.248 analysts per firm, highlighting considerable variation in external monitoring intensity. Ownership concentration averages 13.129%, with substantial dispersion across firms, indicating heterogeneous ownership structures. Assets in place, used as a proxy for information asymmetry consistent with prior literature, has a mean value of 1.624, suggesting differences in asset tangibility and investment structure across firms.

CEO-level characteristics also exhibit meaningful variation. Female CEOs remain relatively under-represented, with CEO gender having a mean value of 0.043. CEO tenure averages 8.778 years, indicating a mix of newly appointed and long-serving executives, while the average CEO age is 58.6 years, consistent with prior evidence on executive demographics in UK listed firms. CEO duality is observed in approximately 9.4% of firm-year observations, suggesting that the separation of the CEO and chair roles remains the dominant governance structure in the UK context. The CEO education dummy has a mean of 0.417, indicating that a substantial proportion of CEOs possess advanced or specialised educational qualifications. CEO myopia, measured as a binary variable, has a mean value of 0.251, implying that approximately one-quarter of firm-year observations are characterised by short-term-oriented managerial behaviour.

With respect to board-level governance characteristics, the average proportion of female directors is 28.5%, with some firms reporting no female representation and others exceeding

two-thirds female participation. Board independence, measured as a binary indicator, has a mean value of 0.358, indicating that independent directors form a majority of board members in approximately 36% of firm-year observations. Board size averages 8.75 directors, with boards ranging from 2 to 23 members, reflecting notable variation in board structure and governance capacity. Audit committee independence is generally high, with a mean value of 92.34%, consistent with the UK Corporate Governance Code's emphasis on effective audit oversight.

Table 4.1: Descriptive statistics

	Obs	Mean	SD	Min	Max
IRF	1989	1.923	0.299	1	4
IRF Dummy	1989	.472	0.499	0	1
FirmSize	1989	14.179	2.714	.075	19.745
ROA	1989	.069	0.122	-.347	.507
Leverage	1989	.279	0.171	.002	.841
Liquidity	1989	2.134	1.863	.27	6.54
Analystfollowing	1989	9.248	6.767	1	27
Ownership	1989	13.129	17.457	.06	74.36
Assetinplace	1989	1.624	0.970	.075	5.547
CEOgender	1989	.043	0.203	0	1
CEOtenure	1989	8.778	4.792	1	32
CEOduality	1989	.094	0.292	0	1
CEOage	1989	58.614	5.328	43	74
CEOeducation	1989	.417	0.493	0	1
CEOmyopia	1989	.251	0.434	0	1
Boardgender	1989	28.523	11.901	0	66.67
Boardindep	1989	.358	0.479	0	1
Boardsize	1989	8.747	2.274	2	23
ACindependence	1989	92.338	14.039	14.29	100

Notes: IRF is the ordinal measure of interim reporting frequency, coded from 1 to 4, with higher values indicating more frequent interim reporting. IRF_Dummy equals 1 for firms that adopt quarterly or more frequent interim reporting and 0 otherwise. FirmSize is the natural logarithm of total assets; ROA is net income divided by total assets; Leverage is total debt divided by total assets; Liquidity is current assets divided by current liabilities; Analystfollowing is the number of analysts covering the firm; Ownership represents the percentage of closely held shares; and Assetinplace is calculated as total assets divided by the sum of total liabilities and the market value of equity. CEOgender, CEOduality, CEOeducation, CEOmyopia, and Boardindep are dummy variables. Boardgender and ACindependence are expressed as percentages. Detailed variable definitions and data sources are provided in Chapter 3. The sample comprises UK FTSE All-Share non-financial firms over 2015–2022. Obs denotes the number of firm-year observations; SD denotes standard deviation.

Overall, the descriptive statistics reveal substantial heterogeneity in interim reporting behaviour, firm characteristics, managerial attributes, and governance structures across UK FTSE All-Share firms. This variation provides a strong empirical foundation for examining the determinants of voluntary interim reporting frequency and for testing the study's hypotheses relating to firm-level incentives, CEO behaviour, and board-level governance mechanisms.

4.2.2 Interim reporting frequency by year

Table 4.2 reports descriptive statistics for IRF by year over the period 2015–2022. The results indicate a year-to-year variation in the average level of interim reporting

frequency across the sample period. Between 2015 and 2017, the mean IRF remains relatively stable at approximately 1.91. From 2018 onwards, a slight increase is observed, with the average IRF rising to 1.93 and reaching its highest value of 1.95 in 2020. However, the mean subsequently declines slightly to 1.93 in 2021 and 1.92 in 2022, suggesting that the increase observed in 2020 was not sustained.

The year 2020 is also characterised by the highest standard deviation (0.362), indicating greater dispersion in firms' reporting practices during that period. This suggests that firms differed more markedly in their interim reporting frequency compared with other years. In subsequent years, the average IRF remains broadly stable, accompanied by a reduction in dispersion, reflecting a return to more consistent reporting behaviour.

Overall, the observed time-series variation in interim reporting frequency provides empirical justification for the inclusion of year fixed effects in the regression analysis, allowing the models to control for time-specific influences on firms' disclosure practices.

Table 4.2: IRF based on Years

Year	Mean	SD	Min	Max	N
2015	1.906	.340	1.000	4	202
2016	1.906	.293	1.000	2	212
2017	1.908	.289	1.000	2	218
2018	1.931	.301	1.000	4	232
2019	1.922	.269	1.000	2	243
2020	1.945	.362	1.000	4	307
2021	1.930	.256	1.000	2	284
2022	1.924	.265	1.000	2	291

Notes: IRF is the ordinal measure of interim reporting frequency, coded from 1 to 4, with higher values indicating more frequent interim reporting. The table reports the mean, standard deviation (SD), minimum (Min), maximum (Max), and number of firm-year observations (N) for each year. The sample comprises UK FTSE All-Share non-financial firms over the period 2015–2022.

4.2.3 Interim reporting frequency by industry

Table 4.3 and Figure 4.1 present the distribution of IRF across industries based on the Industry Classification Benchmark (ICB). In this analysis, interim reporting frequency is measured as a binary variable, where “Yes” indicates voluntary quarterly reporting and “No” indicates the absence of voluntary quarterly reporting.

The results reveal substantial heterogeneity in voluntary interim reporting practices across industries. Firms operating in the basic materials, telecommunications, and consumer discretionary sectors exhibit the highest proportions of voluntary quarterly reporting, with 77.11%, 71.79%, and 62.36% of firms, respectively, reporting more frequently than required by regulation. Other industries display more moderate levels of voluntary reporting, including Industrials (51.15%), Consumer Staples (59.75%), Utilities (52.86%), and Technology (48.00%).

In contrast, firms in the Health Care (33.71%), Real Estate (36.22%), and Energy (47.30%) sectors exhibit lower proportions of voluntary quarterly reporting. These patterns indicate pronounced sectoral differences in interim reporting practices across UK FTSE All-Share firms. Such differences may reflect variation across industries in information environments, financing structures, investor demand, operating complexity, and disclosure incentives. However, as these results are descriptive, they do not establish which specific industry characteristics account for the observed differences.

Overall, the observed variation in interim reporting frequency across industries underscores the importance of accounting for industry-specific characteristics when analysing voluntary disclosure behaviour. This evidence provides clear empirical justification for the inclusion of industry fixed effects in the regression models reported later in this chapter, ensuring that sector-level influences are appropriately controlled for in the multivariate analysis.

Table 4.3: IRF based on industry

Industry	IRF		
	No	Yes	Total
Basic Materials	38	128	166
	22.89	77.11	100.00
Consumer Discretionary	195	323	518
	37.64	62.36	100.00
Consumer Staples	64	95	159
	40.25	59.75	100.00
Energy	39	35	74
	52.70	47.30	100.00
Health Care	59	30	89
	66.29	33.71	100.00
Industrials	254	266	520
	48.85	51.15	100.00
Real Estate	162	92	254
	63.78	36.22	100.00
Technology	52	48	100
	52.00	48.00	100.00
Telecommunications	11	28	39
	28.21	71.79	100.00
Utilities	33	37	70
	47.14	52.86	100.00
Total	907	1082	1989
	45.60	54.40	100.00

Notes: The first row reports the number of firm-year observations, and the second-row reports row percentages.

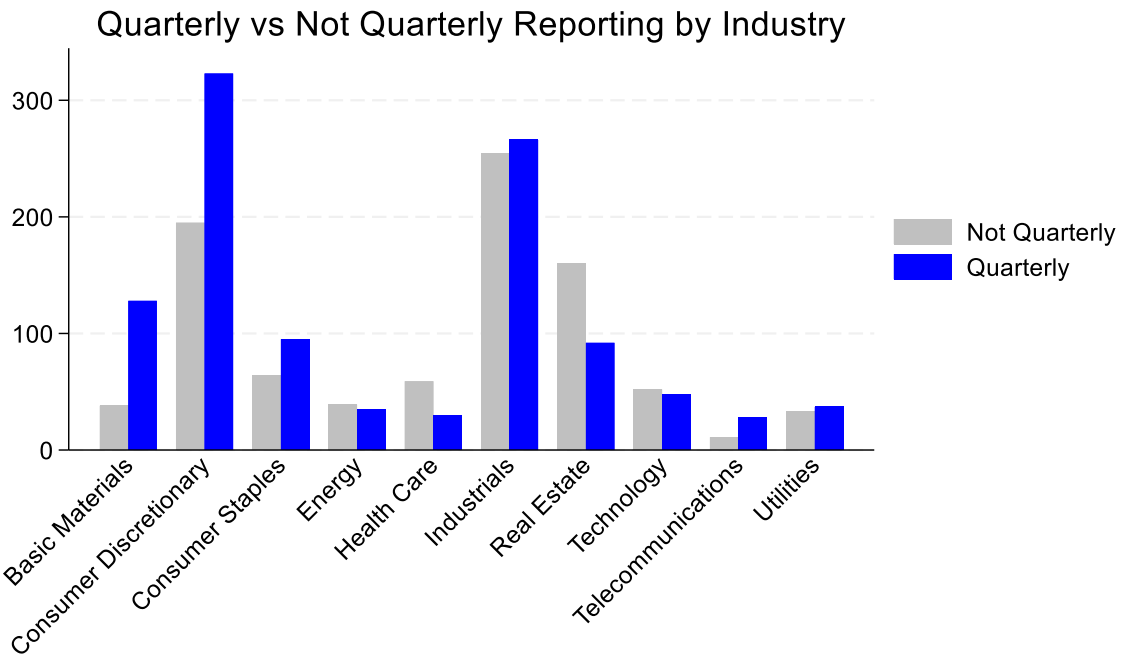


Figure 4.1: Quarterly vs. Non-Quarterly of IRF based on industries

Notes: The figure is based on 1,989 firm-year observations from UK FTSE All-Share non-financial firms and covers the full sample period from 2015 to 2022. Interim reporting frequency is measured as a binary variable, where quarterly reporting indicates voluntary quarterly disclosure.

4.2.4 Correlation analysis and multicollinearity diagnostics

This section presents the Pearson correlation matrices and Variance Inflation Factor (VIF) diagnostics for the main variables used in the empirical analysis. The purpose of this analysis is twofold. First, it provides preliminary insights into the bivariate relationships between IRF and the explanatory variables. Second, it assesses the potential presence of multicollinearity prior to the estimation of the multivariate regression models.

To reflect the structure of the empirical analysis and avoid overcrowded tables, separate correlation matrices are reported for firm-level variables, CEO-level characteristics, and board-level governance variables, each presented alongside the dependent variable, IRF. All correlation matrices are based on the full sample of 1,989 firm-year observations.

The correlation results indicate that IRF is positively and statistically significantly correlated with firm size ($r = 0.122$, $p < 0.01$) and leverage ($r = 0.098$, $p < 0.01$). In contrast, IRF is not

significantly correlated with profitability (ROA), liquidity, analyst following, ownership concentration, or assets in place. This suggests that the influence of these variables may be more apparent in a multivariate setting than through simple bivariate associations.

Among the firm-level explanatory variables, several correlations are statistically significant but remain moderate in magnitude. Firm size is negatively correlated with profitability ($r = -0.115$, $p < 0.01$) and positively correlated with leverage ($r = 0.235$, $p < 0.01$), reflecting structural differences between larger and smaller firms. Leverage is negatively associated with both profitability ($r = -0.216$, $p < 0.01$) and liquidity ($r = -0.086$, $p < 0.01$). Importantly, none of the firm-level correlations approach levels that would raise concerns about severe multicollinearity.

Table 4.4: Pairwise correlations

Variables	IRF	FirmSize	ROA	Leverage	Liquidity	Analystfollowing	Ownership	Assetinplace
IRF	1.000							
FirmSize	0.122* (0.000)	1.000						
ROA	0.026 (0.250)	-0.115* (0.000)	1.000					
Leverage	0.098* (0.000)	0.235* (0.000)	-0.216* (0.000)	1.000				
Liquidity	0.002 (0.928)	0.014 (0.547)	0.030 (0.181)	-0.086* (0.000)	1.000			
Analystfollowing	0.009 (0.673)	-0.014 (0.536)	0.012 (0.591)	-0.076* (0.001)	0.009 (0.686)	1.000		
Ownership	-0.025 (0.260)	-0.053* (0.018)	-0.011 (0.634)	-0.041 (0.069)	0.053* (0.017)	0.005 (0.839)	1.000	
Assetinplace	-0.006 (0.79)	-0.012 (0.585)	-0.026 (0.255)	0.021 (0.359)	0.048* (0.033)	-0.015 (0.506)	0.023 (0.316)	1.000

Notes: This table reports Pearson correlation coefficients for IRF and the firm-level explanatory variables based on 1,989 firm-year observations from UK FTSE All-Share non-financial firms over 2015–2022. P-values are reported in parentheses. IRF is the ordinal measure of interim reporting frequency, with higher values indicating more frequent reporting. FirmSize is the natural logarithm of total assets; ROA is return on assets; Leverage is total debt divided by total assets; Liquidity is current assets divided by current liabilities; Analystfollowing is the number of analysts covering the firm; Ownership represents the percentage of closely held shares; and Assetinplace is calculated as defined in Chapter 3. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

The correlation matrix for CEO-level characteristics reveals several notable relationships. CEO duality is negatively correlated with IRF ($r = -0.096$, $p < 0.01$), indicating that greater concentration of leadership roles is associated with lower interim reporting frequency at the bivariate level. CEO myopia is strongly negatively correlated with CEO tenure ($r = -0.451$, $p < 0.01$) and CEO age ($r = -0.523$, $p < 0.01$), supporting the construct validity of the myopia

measure. CEO myopia also exhibits small but statistically significant positive correlations with firm size (r = 0.045, p < 0.05) and leverage (r = 0.049, p < 0.05); however, these associations remain modest in magnitude.

Table 4.5: Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) IRF	1.000											
(2) IRF_Dummy	-0.026	1.000										
	(0.238)											
(3) CEOgender	-0.020	0.012	1.000									
	(0.379)	(0.590)										
(4) CEOtenure	-0.038	-0.042	-0.071*	1.000								
	(0.087)	(0.059)	(0.002)									
(5) CEOduality	-0.096*	-0.059*	-0.026	0.134*	1.000							
	(0.000)	(0.008)	(0.244)	(0.000)								
(6) CEOage	0.039	0.039	-0.076*	0.084*	0.016	1.000						
	(0.082)	(0.084)	(0.001)	(0.000)	(0.488)							
(7) CEOeducation	0.034	0.005	0.033	0.032	-0.044	-0.011	1.000					
	(0.124)	(0.825)	(0.138)	(0.156)	(0.050)	(0.629)						
(8) CEOmyopia	-0.041	-0.009	-0.015	-0.451*	-0.040	-0.523*	-0.093*	1.000				
	(0.068)	(0.694)	(0.506)	(0.000)	(0.076)	(0.000)	(0.000)					
(9) FirmSize	0.122*	0.114*	0.008	-0.029	-0.062*	-0.008	-0.004	0.045*	1.000			
	(0.000)	(0.000)	(0.738)	(0.204)	(0.006)	(0.712)	(0.859)	(0.043)				
(10) ROA	0.026	0.041	0.028	-0.034	-0.080*	-0.047*	-0.038	-0.005	-0.115*	1.000		
	(0.250)	(0.070)	(0.211)	(0.131)	(0.000)	(0.038)	(0.088)	(0.814)	(0.000)			
(11) Leverage	0.098*	0.084*	0.015	-0.013	0.000	-0.006	0.009	0.049*	0.235*	-0.216*	1.000	
	(0.000)	(0.000)	(0.493)	(0.571)	(0.991)	(0.787)	(0.694)	(0.029)	(0.000)	(0.000)		
(12) Liquidity	0.002	-0.149*	-0.007	0.060*	-0.034	0.067*	0.064*	-0.020	0.014	0.030	-0.086*	1.000
	(0.92	(0.00	(0.74	(0.00	(0.12	(0.00	(0.00	(0.37	(0.54	(0.18	(0.00	

	8)	0)	9)	8)	7)	3)	4)	4)	7)	1)	0)	

*p-values appear in parentheses *** p<0.01, ** p<0.05, * p<0.1*

With respect to board-level governance variables, board gender diversity, board size, board independence, and audit committee independence display relatively low correlations with IRF and with one another. This pattern suggests that these governance mechanisms capture distinct dimensions of board structure and oversight, thereby reducing concerns about redundancy among governance controls. Overall, while some statistically significant correlations are observed, their magnitudes are generally small and consistent with theoretical expectations, indicating that bivariate relationships are unlikely to dominate the multivariate results.

Table 4.6: Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) IRF	1.000									
(2) IRF_Dummy	-0.026	1.000								
	(0.238)									
(3) boardgender	0.003	0.061*	1.000							
	(0.895)	(0.007)								
(4) boardindep	-0.084*	-0.039	0.107*	1.000						
	(0.000)	(0.081)	(0.000)							
(5) boardsize	-0.220*	0.179*	0.107*	0.095*	1.000					
	(0.000)	(0.000)	(0.000)	(0.000)						
(6) ACindependence	0.046*	0.039	0.074*	0.011	0.009	1.000				
	(0.044)	(0.085)	(0.001)	(0.621)	(0.680)					
(7) FirmSize	0.122*	0.114*	0.106*	0.069*	0.073*	0.074*	1.000			
	(0.000)	(0.000)	(0.000)	(0.002)	(0.001)	(0.001)				
(8) ROA	0.026	0.041	-0.022	-0.059*	-0.071*	0.050*	-0.115*	1.000		
	(0.250)	(0.070)	(0.321)	(0.009)	(0.002)	(0.026)	(0.000)			
(9) Leverage	0.098*	0.084*	0.025	0.016	0.053*	0.090*	0.235*	-0.216*	1.000	
	(0.000)	(0.000)	(0.277)	(0.490)	(0.019)	(0.000)	(0.000)	(0.000)		
(10) Liquidity	0.002	-0.149*	-0.035	-0.040	-0.153*	0.017	0.014	0.030	-0.086*	1.000
	(0.928)	(0.000)	(0.117)	(0.075)	(0.000)	(0.447)	(0.547)	(0.181)	(0.000)	

*p-values appear in parentheses *** p<0.01, ** p<0.05, * p<0.1*

To formally assess multicollinearity, VIF statistics are calculated for the explanatory variables included in the respective model specifications. Across all specifications, VIF values remain well below conventional thresholds. The highest VIF is observed for CEO myopia (VIF = 1.857), followed by CEO age (VIF = 1.487), while all remaining variables exhibit relatively low VIF values. Mean VIF values range from 1.039 to 1.164 across specifications, which is substantially below commonly accepted cut-off points of 5 or 10. These low VIF values provide no evidence of problematic multicollinearity among the explanatory variables.

Taken together, the correlation and VIF diagnostics indicate that multicollinearity is unlikely to affect the estimation of the regression models reported in the subsequent sections.

Table 4.7: Variance inflation factor

Variables	VIF	1/VIF
Leverage	1.116	.896
FirmSize	1.067	.937
ROA	1.055	.948
Liquidity	1.012	.989
Ownership	1.007	.993
Analystfollowing	1.006	.994
Assetinplace	1.004	.996
Mean VIF	1.039	

Notes: This table reports the VIF and tolerance (1/VIF) values for the variables included in the firm-level model. Detailed variable definitions are provided in Chapter 3.

Table 4.8: Variance inflation factor

	VIF	1/VIF
CEOmyopia	1.857	.538
CEOage	1.487	.673
CEOtenure	1.36	.735
Leverage	1.12	.893
FirmSize	1.073	.932
ROA	1.07	.935
CEOduality	1.035	.966
Liquidity	1.031	.97
CEOeducation	1.028	.973
Ownership	1.026	.975
CEOgender	1.025	.976
Analystfollowing	1.015	.985
Assetinplace	1.006	.994
Mean VIF	1.164	.

Notes: This table reports the VIF and tolerance (1/VIF) values for the CEO-level variables and firm-level controls. Detailed variable definitions are provided in Chapter 3.

Table 4.9: Variance inflation factor

	VIF	1/VIF
Leverage	1.122	.891
FirmSize	1.081	.925
ROA	1.066	.938
boardgender	1.045	.957
Ownership	1.037	.965
Liquidity	1.036	.965
boardsize	1.032	.969
ACindependence	1.028	.972
boardindep	1.01	.99
Mean VIF	1.051	

Notes: This table reports the VIF and tolerance (1/VIF) values for the board-level variables and firm-level controls. Detailed variable definitions are provided in Chapter 3.

4.3 Regression results and interpretation

One of the main objectives of this study is to examine whether CEO characteristics influence IRF in the UK, relative to firm-level economic factors and board-level governance mechanisms. Accordingly, this section assesses whether voluntary interim reporting behaviour is primarily driven by firm characteristics, managerial attributes, or corporate governance structures.

The following subsections report the results of the empirical regression models analysing the determinants of IRF for firms listed in the FTSE All-Share Index. The analysis proceeds in three stages. First, firm-level characteristics are examined to assess whether economic importance, financial performance, and monitoring pressures are associated with more frequent interim reporting. Second, CEO characteristics are introduced to evaluate the extent to which managerial traits and leadership structure affect voluntary disclosure decisions. Third, board-level governance variables are incorporated to examine whether board composition and oversight mechanisms exert an independent influence on IRF.

At each stage, the regression results are discussed in relation to the corresponding hypotheses and interpreted using the theoretical perspectives developed in Chapter 2, including agency theory, signalling theory, upper echelons theory, and relevant governance perspectives. This staged modelling approach enables the study to assess the incremental explanatory power of CEO- and board-level factors beyond firm-level economic determinants and to provide a comprehensive evaluation of the drivers of voluntary interim reporting in the UK following the 2014 regulatory change.

4.3.1 Firm characteristics and interim reporting frequency

This section examines the relationship between firm-level characteristics and IRF in the UK following the 2014 deregulation. Model 1 in Table 4.10 reports the ordered logit regression results for firm-specific variables, with year and industry fixed effects included to control for unobserved time-related and sectoral heterogeneity. The Wald chi-square statistic indicates that the model is statistically significant, suggesting that firm-level characteristics play an important role in explaining variation in voluntary interim reporting practices.

The results presented in Table 4.10 show that firm size, profitability, and leverage are positively and statistically significantly associated with IRF. In contrast, liquidity, analyst following, ownership concentration, and assets in place do not exhibit significant effects. These findings indicate that voluntary interim reporting frequency in the UK is mainly driven by economic importance, financial performance, and monitoring pressures rather than by short-term liquidity conditions or the presence of external information intermediaries. The results suggest that the removal of mandatory quarterly reporting has not eliminated economically motivated disclosure behaviour. Instead, firms with stronger incentives for transparency continue to engage in more frequent interim reporting.

Firm size is positively and significantly associated with IRF ($\beta = 0.083$, $t = 3.35$), providing support for hypothesis H1a. This finding is consistent with agency theory, which argues that larger firms face higher agency costs due to more complex organisational structures and more dispersed ownership, leading to greater demand for monitoring and disclosure (Jensen and Meckling, 1976). It also aligns with signalling theory, which suggests that firms with greater visibility have incentives to disclose more information in order to reduce information asymmetry and signal transparency to capital market participants (Spence, 1973). Larger firms typically attract more investor attention and regulatory scrutiny, increasing the benefits of frequent interim reporting. This result is consistent with prior empirical studies that identify firm size as one of the strongest predictors of disclosure intensity (Leftwich et al., 1981; Holthausen and Leftwich, 1983; Ahmed and Courtis, 1999; Watson et al., 2002). In addition, Diamond and Verrecchia (1991) argued that larger firms benefit

more from disclosure through improved stock liquidity and a lower cost of capital, further reinforcing incentives for frequent reporting. Thus, the result suggests that deregulation did not eliminate the disclosure incentives associated with firm visibility and organisational complexity; rather, these incentives continue to differentiate firms' voluntary reporting choices.

Profitability also shows a positive and statistically significant relationship with IRF (β = 1.871, t = 2.86), supporting hypothesis H1b. This finding is consistent with signalling theory, which predicts that firms with superior performance voluntarily disclose more information to differentiate themselves from weaker firms (Spence, 1973; Verrecchia, 1983). In this study, more profitable firms may have stronger incentives to report more frequently because interim reports allow them to communicate their good performance to the market and increase investor confidence. In contrast, less profitable firms may be less willing to report frequently because they may prefer to avoid greater market attention to their weaker performance. Prior empirical evidence supports this interpretation. For example, Bini et al. (2010) find that profitable firms provide more extensive performance-related disclosure, while Fu et al. (2012) show that more frequent reporting reduces information asymmetry and the cost of equity capital. Therefore, this result supports the signalling theory discussed in Chapter 2 and suggests that profitability is an important factor influencing firms' disclosure decisions, even when the frequency of reporting is voluntary. However, the literature also cautions that frequent reporting may increase short-term performance pressure and expose firms to negative market responses when reported outcomes fall below expectations (Nöldeke 2007; Kajüter et al. 2020). This suggests that the relationship between profitability and IRF depends on the balance between the benefits of greater transparency and the costs of more frequent reporting.

Leverage is positively and significantly associated with IRF (β = 2.083, t = 4.09), providing support for hypothesis H1c. According to agency theory, higher leverage intensifies conflicts between managers and creditors, increasing the demand for monitoring and timely information (Jensen and Meckling, 1976). More frequent interim reporting allows leveraged firms to reduce information asymmetry, demonstrate compliance with debt covenants, and reassure creditors about financial performance and risk exposure. This finding is consistent with prior studies showing that highly leveraged firms tend to disclose more information in order to lower borrowing costs

and maintain access to external financing (Sengupta, 1998; Watson et al., 2002). Although some studies highlight potential endogeneity between leverage and disclosure decisions (Downar et al., 2019), the strong positive association observed in this study suggests that creditor monitoring remains an important driver of voluntary interim reporting in the UK post-deregulation environment.

In contrast, liquidity does not exhibit a statistically significant relationship with IRF, leading to the rejection of hypothesis H1d. This finding suggests that short-term financial flexibility does not directly influence firms' decisions to increase interim reporting frequency. One possible explanation is that liquidity information is already available through balance sheet disclosures or private communication channels, reducing the marginal informational value of more frequent interim reporting (Bushman et al. 2004).

Similarly, analyst following is not significantly associated with IRF, providing no support for hypothesis H1e. This result suggests that analyst monitoring does not strongly motivate firms to increase interim reporting frequency in the UK. While some studies argue that analyst coverage encourages disclosure by reducing information acquisition costs (Lang and Lundholm, 1998; Healy and Palepu 2001), other research suggests that analysts may act as substitutes for public disclosure by producing private information, particularly in voluntary reporting regimes (Yee, 2004). Evidence from the interim reporting literature also indicates that more frequent reporting may improve forecast accuracy without necessarily reducing forecast dispersion (Nöldeke, 2007). These mixed findings imply that the influence of analysts on voluntary reporting frequency is context dependent.

Ownership concentration is also not significantly related to IRF, leading to the rejection of hypothesis H1f. This finding is consistent with agency theory, which suggests that concentrated ownership structures reduce reliance on public disclosure mechanisms (Shleifer and Vishny, 1997). Large shareholders often have direct access to internal information and management, reducing the need for frequent public interim reporting. As a result, ownership concentration may substitute for market-based disclosure as a monitoring mechanism.

Finally, assets in place do not show a significant association with IRF, providing no support for hypothesis H1g. This suggests that asset tangibility or investment intensity

does not play a major role in determining interim reporting frequency. Information related to assets in place is generally stable and already reflected in annual reports and long-term disclosures, limiting the additional benefits of more frequent interim reporting (Myers, 1977).

Overall, the firm-level results indicate that voluntary interim reporting frequency in the UK is primarily driven by firm size, profitability, and leverage. These findings suggest that interim reporting remains an economically motivated governance choice rather than a purely discretionary practice, even in a regulatory environment where reporting frequency is no longer mandatory.

Table 4.10: Firm-Level determinants

VARIABLES	(1) Ordered Logit: Firm-Level Determinants
FirmSize	0.083***
	(3.354)
ROA	1.870***
	(2.848)
Leverage	2.083***
	(4.093)
Liquidity	0.006
	(0.109)
Analystfollowing	0.013
	(1.116)
Ownership	-0.003
	(-0.508)
Assetinplace	-0.004
	(-0.046)
year	0.040
	(1.106)
Industry	0.045
	(1.315)
Observations	1,989
Year FE	Yes
Industry FE	Yes
Pseudo R2	0.0383
Wald chi2	56.15

*Significance at the 10% level; ** significance at the 5% level; *** significance at the 1% level. Coefficients for each variable are reported, and z-statistics appear in brackets.

4.3.2 CEO characteristics and IRF

The previous section examined firm-level determinants of IRF in the UK context. This section focuses on the role of CEO characteristics as determinants of voluntary interim

reporting practices. Table 4.11 reports the results of two ordered logit regression models. Model A examines observable CEO attributes, including gender, tenure, duality, age, and education. Model B extends this analysis by incorporating CEO myopia to assess whether managerial short-term orientation explains additional variation in IRF beyond demographic and structural CEO characteristics. Firm-level control variables from the baseline specification are retained in both models, and year and industry fixed effects are included to control for unobserved temporal and sectoral heterogeneity.

Overall, the results indicate that CEO characteristics particularly CEO age, CEO duality, and CEO myopia play an important role in shaping interim reporting decisions in the UK's voluntary reporting environment.

CEO gender is negatively associated with IRF in both models; however, the coefficients are not statistically significant (Model A: $\beta = -0.355$, $z = -0.921$; Model B: $\beta = -0.397$, $z = -1.037$). Accordingly, Hypothesis H2a is not supported. Although prior research suggests that female executives may adopt more ethical or transparent reporting practices (Zalata et al., 2022), the results indicate that CEO gender does not exert a statistically meaningful influence on interim reporting frequency in the UK setting. This may reflect the relatively small proportion of female CEOs in UK listed firms or the dominance of firm-level and governance factors over individual gender effects.

CEO tenure is negatively associated with IRF in Model A; however, this relationship is not statistically significant ($\beta = -0.017$, $z = -1.057$). This finding suggests that the length of time a CEO has held their position does not have a meaningful impact on interim reporting frequency once other CEO attributes and firm-level characteristics are controlled for. Consequently, Hypothesis H2b is not supported. The result implies that managerial experience accumulated through tenure alone does not necessarily translate into stronger incentives for more frequent voluntary disclosure.

In contrast, CEO duality exhibits a strong negative and statistically significant association with IRF in both Model A ($\beta = -0.929$, $z = -4.045$) and Model B ($\beta = -1.008$, $z = -4.653$), providing robust support for Hypothesis H2c. This finding indicates that firms in which the CEO also serves as board chair are significantly less likely to engage in frequent interim reporting. From an agency theory perspective, CEO duality

concentrates decision-making authority and weakens board independence, thereby reducing the effectiveness of monitoring over managerial actions, including disclosure policies. As a result, CEOs with greater structural power may prefer more conservative reporting practices that limit external scrutiny. This evidence is consistent with prior studies linking CEO duality to lower transparency and weaker disclosure outcomes (Elsayed and Hassanein 2023).

CEO age is positively and statistically significantly associated with IRF in Model A (β = 0.041, z = 2.447), indicating that firms led by older CEOs are more likely to engage in more frequent interim reporting. However, because Hypothesis H2d predicts that younger CEOs are more likely to report more frequently, this hypothesis is not supported. Consistent with upper echelons theory, CEO age reflects accumulated experience, reputation concerns, and cognitive orientation, which influence strategic disclosure decisions (Hambrick and Mason, 1984). Older CEOs may be more risk-averse and reputation-conscious, and therefore more inclined to maintain regular communication with investors to preserve credibility and professional standing. This interpretation is also aligned with stewardship theory, which suggests that senior executives may prioritise organisational stability and long-term stakeholder trust (Serfling 2014).

CEO education is positively related to IRF in both models; however, the coefficients are not statistically significant (Model A: β = 0.630, z = 1.636; Model B: β = 0.555, z = 1.488). Accordingly, Hypothesis H2e is not supported. While upper echelons theory suggests that higher educational attainment may enhance executives' analytical capacity and openness to transparency, the results indicate that formal education alone does not materially influence voluntary interim reporting frequency in the UK context. This suggests that behavioural traits and governance structures may be more influential than educational background in shaping disclosure decisions.

CEO myopia, introduced in Model B, is negatively and statistically significantly associated with IRF (β = −0.487, z = −2.570). This result indicates that CEOs with a stronger short-term orientation are significantly less likely to engage in frequent interim reporting. As the observed relationship is opposite to the predicted direction, Hypothesis H2f is rejected. The finding suggests that myopic CEOs may deliberately limit reporting frequency to reduce market scrutiny, delay the disclosure of

unfavourable information, or retain discretion over short-term performance outcomes. This behaviour is consistent with agency-based arguments that short-term managerial incentives can discourage transparency, particularly in voluntary disclosure environments where reporting frequency is discretionary.

The firm-level control variables remain largely consistent with earlier findings. Profitability, measured by return on assets (ROA), is positively and statistically significantly associated with IRF in both models (Model A: β = 1.807, z = 2.787; Model B: β = 1.679, z = 2.682), as is leverage (Model A: β = 2.045, z = 3.961; Model B: β = 2.032, z = 3.933). These results suggest that more profitable and more highly leveraged firms face stronger monitoring pressures from investors and creditors, which increases incentives for more frequent interim disclosure. Liquidity does not exhibit a statistically significant association with IRF in either model.

Overall, the models demonstrate satisfactory explanatory power, with year and industry fixed effects included and statistically significant Wald chi-square statistics. Importantly, the inclusion of CEO characteristics—particularly CEO duality and CEO myopia—enhances the models' ability to explain variation in interim reporting frequency beyond firm-level economic determinants alone. These findings underscore the importance of managerial power and behavioural orientation in shaping voluntary disclosure decisions in the UK's post-deregulation reporting environment.

Table 4.11: CEO characteristics and IRF

VARIABLES	(1) Model A: Traits	(2) Model B: Myopia
CEOgender	-0.355	-0.397
	(-0.921)	(-1.037)
CEOage	**0.041****	
	(2.447)	
CEOtenure	**-0.017**	
	(-1.057)	
CEOduality	-0.929***	-1.008***
	(-4.045)	(-4.653)
CEOeducation	0.630	0.555
	(1.636)	(1.488)
CEOmyopia		**-0.487****
		(-2.570)
	(3.618)	(3.704)
ROA	1.807***	1.679***
	(2.787)	(2.682)
Leverage	2.045***	2.032***
	(3.961)	(3.933)

Liquidity	0.010	-0.008
	(0.185)	(-0.148)
year	0.052	0.059
	(1.329)	(1.500)
Industry	0.049	0.053
	(1.433)	(1.535)
	(1.458)	(1.602)
Observations	1,989	1,989
Year FE	Yes	Yes
Industry FE	Yes	Yes

*Significance at the 10% level; ** significance at the 5% level; *** significance at the 1% level. Coefficients for each variable are reported, and z-statistics appear in brackets.

4.3.3 Board-level governance and IRF

In the previous section, CEO-specific characteristics were explored to understand their influence on IRF among UK firms. This section now turns to board-level corporate governance mechanisms to assess their role in shaping IRF.

Table 4.12 reports the results of an ordered logit regression model examining the effects of board gender diversity, board independence, board size, and audit committee independence on IRF. Firm-level control variables are included, and year and industry fixed effects are applied to control for unobserved temporal and sectoral heterogeneity. Overall, the results indicate that board-level governance mechanisms play a selective role in influencing interim reporting frequency in the UK's post-2014 voluntary reporting environment. In particular, board independence and board size emerge as significant determinants of IRF, while board gender diversity and audit committee independence do not exhibit statistically significant effects. These findings suggest that different governance mechanisms do not have a uniform influence on voluntary reporting decisions. Instead, their effects appear to depend on the specific monitoring and decision-making functions performed by the board.

Board gender diversity is positively associated with interim reporting frequency; however, the coefficient is not statistically significant ($\beta = 0.012$, $z = 1.043$). Accordingly, Hypothesis H3a, which predicts a positive relationship between board gender diversity and interim reporting frequency, is not supported. This result suggests that gender diversity, in isolation, does not exert a direct influence on firms' decisions to increase interim reporting frequency in the UK context. This finding differs from the

positive relationship expected in Chapter 2 and from previous studies such as Dobija et al. (2022), García-Sánchez et al. (2019), Gul et al. (2011), and Liao et al. (2015), which associate female board representation with greater transparency and stronger disclosure practices. However, these studies mainly examine disclosure quality, financial reporting transparency, or other forms of voluntary disclosure rather than the specific decision of how frequently firms issue interim reports. Therefore, the benefits associated with gender-diverse boards may not necessarily translate into a direct increase in IRF. Chapter 2 indeed links gender diversity to transparency and accountability, while recognising that the influence of women directors may depend on their level of representation. From a critical mass perspective, the insignificant direct effect may also indicate that the influence of female directors depends on whether they achieve sufficient representation to affect board decisions meaningfully, rather than simply on incremental changes in the percentage of women on the board. This interpretation is particularly relevant to the later moderation analysis, which examines different thresholds of female representation. Thus, the insignificant direct effect should not necessarily be interpreted as evidence that board gender diversity is unimportant; rather, its influence may be conditional on the level of representation and the governance context in which female directors operate.

Board independence is positively and statistically significantly associated with interim reporting frequency ($\beta = 0.010$, $z = 2.029$), providing support for Hypothesis H3b. This finding indicates that firms with a higher proportion of independent directors are more likely to engage in more frequent interim reporting. The result is consistent with the agency theory argument developed in Chapter 2, according to which independent directors provide stronger monitoring of management and encourage greater transparency to reduce information asymmetry between managers and shareholders. Your literature review specifically argues that independent directors can encourage timely and transparent reporting because their separation from management enables more objective oversight.

The finding also consistent with prior empirical studies discussed in Chapter 2, including Eng and Mak (2003), Cheng and Courtenay (2006), Akhtaruddin and Hossain (2008), and Allegrini and Greco (2013), which generally report stronger voluntary disclosure among firms with greater board independence. In the context of

this study, the positive association is particularly meaningful because the FCA's removal of mandatory quarterly reporting increased firms' discretion over reporting frequency. Independent directors may therefore encourage firms to maintain frequent reporting even when it is no longer required, using voluntary disclosure as a mechanism for maintaining transparency and reducing information gaps. This interpretation is consistent with Chapter 2's argument that board independence may become particularly relevant when reporting frequency is discretionary. Pasted text(5) In contrast, board size exhibits a negative and highly statistically significant association with interim reporting frequency (β = −0.320, z = −7.436), leading to the rejection of Hypothesis H3c. Although the hypothesis predicted a positive relationship, the results indicate that firms with larger boards are less likely to engage in more frequent interim reporting. This finding is important because it does not support the resource dependence argument underlying H3c, which suggests that larger boards may provide more expertise, resources, and monitoring capacity and therefore encourage greater transparency. However, the negative relationship is consistent with other studies discussed in Chapter 2. For example, Yermack (1996) and Cheng (2008) suggest that smaller boards may be more effective because they face fewer coordination and communication problems. Similarly, Lim et al. (2007) finds no consistent relationship between board size and corporate disclosure.

The present finding suggests that, in the UK voluntary reporting context, the coordination problems associated with larger boards may be greater than the benefits of having more resources and expertise. As the number of directors increases, it may become more difficult to reach agreement on voluntary reporting decisions, which may also slow down the decision-making process. Since voluntary interim reporting requires firms to actively decide whether to provide information beyond the minimum reporting requirements, effective and timely board decision-making may be particularly important. However, this finding does not mean that larger boards provide weaker governance overall. Instead, it suggests that larger boards may find it more difficult to make timely collective decisions that support more frequent voluntary reporting.

Audit committee independence does not exhibit a statistically significant association with interim reporting frequency (β = 0.004, z = 0.610), leading to the rejection of Hypothesis H3d. This result is not consistent with the agency and resource dependence arguments discussed in Chapter 2, which suggest that independent audit committees can

improve financial reporting oversight and increase transparency. It also differs from previous studies, such as Klein (2002), Abbott et al. (2004), and Bédard et al. (2004), which find that audit committee independence is associated with higher reporting quality, lower earnings manipulation, and greater disclosure. Chapter 2 uses these studies to support the expected positive governance role of independent audit committees. However, one possible explanation for the different result in this study is that audit committee independence may have a stronger effect on the quality and reliability of financial reporting than on reporting frequency. The main role of the audit committee is to oversee the financial reporting process, internal controls, and audit quality. In contrast, the decision to issue additional interim reports may be a broader strategic decision involving the full board and senior management. Therefore, an independent audit committee may improve the quality of reported information without necessarily influencing how often the firm reports.

Another possible explanation is the high level of audit committee independence in the sample. As shown in Table 4.1, the average level of audit committee independence is approximately 92%, which indicates limited variation across UK firms. This high level of independence may reflect established UK corporate governance practices and may make it difficult to identify a separate effect of audit committee independence on voluntary IRF. Therefore, the insignificant result may be explained by both the specific role of the audit committee and the strong governance environment of UK listed firms.

Among the control variables, firm size, profitability, and leverage are positively and statistically significantly associated with IRF, consistent with earlier findings. These relationships remain significant even after controlling for board governance, which provides further evidence that firm characteristics are important determinants of voluntary IRF. Larger firms may report more frequently because they face greater stakeholder attention and have more resources to support frequent reporting. More profitable firms may have stronger incentives to communicate their good performance to the market, which is consistent with signalling theory. Similarly, firms with higher leverage may report more frequently because they face greater monitoring and information demands from creditors, which is consistent with agency theory. Liquidity does not exhibit a significant association with IRF.

Overall, the findings suggest that the relationship between board governance and voluntary IRF is complex and cannot simply be explained in terms of strong or weak governance. Board independence appears to support more frequent reporting through

stronger monitoring, while larger boards are associated with lower reporting frequency. This negative relationship may be explained by greater coordination and decision-making difficulties, which may reduce the benefits of having more expertise and resources. In contrast, board gender diversity and audit committee independence do not have a significant direct effect on IRF in this model. These different findings are consistent with the integrated theoretical framework developed in Chapter 2, which views the theories as complementary and suggests that different governance mechanisms may influence reporting decisions in different ways.

Importantly, the absence of a direct effect for some governance characteristics does not mean that they have no role in reporting decisions. Instead, their influence may operate by affecting or constraining managerial behaviour. This may be particularly important for CEO myopia, as the effect of a CEO's short-term orientation on reporting decisions may depend on the structure and strength of board governance. Therefore, the following analysis examines whether board governance characteristics moderate the relationship between CEO myopia and voluntary interim reporting frequency.

Table 4.12: Board-Level Determinants and IRF

VARIABLES	(1) Ordered Logit: Board-Level Determinants
boardgender	0.012
	(1.043)
boardindep	0.010**
	(2.029)
boardsize	-0.320***
	(-7.436)
ACindependence	0.004
	(0.610)
Ownership	0.002
	(0.329)
FirmSize	0.060**
	(2.458)
ROA	1.491*
	(1.825)
Leverage	2.689***
	(4.729)
Liquidity	-0.007
	(-0.113)
year	-0.001
	(-0.026)
Industry	-0.002
	(-0.041)
Observations	1989
Year FE	Yes

Industry FE	Yes
Pseudo R2	0.114
Wald chi2	101.9

Notes: This table reports ordered logit estimates of the relationship between board-level governance characteristics and IRF for UK FTSE All-Share non-financial firms over 2015–2022. IRF is an ordinal variable coded from 1 to 4, with higher values indicating more frequent interim reporting. Boardgender measures the percentage of female directors; Boardindep measures board independence; Boardsize is the number of directors; and ACindependence measures the percentage of independent audit committee members. Firm-level controls, year fixed effects, and industry fixed effects are included. z-statistics are reported in parentheses. N = 1,989 firm-year observations. *Significance at the 10% level; **significance at the 5% level; *** significance at the 1% level. Coefficients for each variable are reported, and z-statistics appear in brackets.Detailed variable definitions are provided in Chapter 3.

4.4 The moderating effects of CEO myopia on corporate governance and IRF

In the previous sections, this study examined the direct effects of firm-level characteristics, CEO attributes, and board governance mechanisms on IRF among UK FTSE All-Share firms. Building on the theoretical framework and hypotheses developed in Chapter 2, this section extends the analysis by examining whether board governance mechanisms moderate the relationship between CEO myopia and IRF. Specifically, it examines whether the negative effect of CEO myopia on reporting frequency changes depending on board gender diversity and board size. This moderation approach is particularly relevant in a voluntary reporting environment, where managerial discretion is high and behavioural traits may play a central role in shaping disclosure decisions.

Previous research suggests that frequent reporting may increase short-term performance pressure and encourage managerial myopia (Kraft et al. 2018). Therefore, this study includes interaction terms between CEO myopia and board governance mechanisms to examine how managerial behaviour and governance oversight jointly influence voluntary IRF.

The moderation analysis is based on the integrated theoretical framework developed in Chapter 2. Upper echelons theory suggests that corporate decisions are influenced by executives' characteristics and cognitive orientations (Hambrick and Mason 1984), while agency theory highlights the role of governance mechanisms in monitoring managerial behaviour and limiting managerial discretion (Jensen and Meckling 1976). Together, these theories suggest that the effect of CEO characteristics on disclosure decisions may depend on the governance environment in which these decisions are made. This is particularly relevant in the UK after the removal of mandatory quarterly reporting, as firms have greater discretion over reporting frequency. As a result, both managerial characteristics and board oversight may play an important role in voluntary IRF decisions.

Table 4.13 reports the results of two ordered logit interaction models. Model (1) examines the moderating role of board gender diversity, while Model (2) focuses on board size. Both models include firm-level control variables as well as year and industry fixed effects, consistent with the baseline specifications employed in earlier analyses.

Across both models, CEO myopia has a strong and negative relationship with IRF. In Model (1), the coefficient for CEO myopia is −2.369 ($z = -5.335$, $p < 0.01$), while in Model (2) it is −4.028 ($z = -4.732$, $p < 0.01$). However, because both models include interaction terms, these coefficients should not be interpreted as the overall effect of CEO myopia. Instead, they show the effect of CEO myopia when the moderating variable is at its reference value. The negative coefficients therefore suggest that, under these conditions, myopic CEOs are associated with a lower likelihood of firms being in a higher IRF category.

This finding is interesting when compared with the mixed evidence discussed in Chapter 2. Previous studies have mainly examined whether frequent reporting itself creates short-term managerial behaviour. For example, Kraft et al. (2018) find that more frequent reporting can reduce corporate investment, while Ernstberger et al. (2017) and Fu et al. (2020) link greater reporting frequency with short-term managerial behaviour, including real activities manipulation and lower innovation. However, these studies mainly examine reporting frequency as a cause of managerial short-termism rather than CEO myopia as a factor influencing voluntary reporting frequency. The findings of this study provide evidence from the opposite direction. When reporting frequency is voluntary, myopic CEOs may choose to report less frequently under certain governance conditions. One possible explanation is that less frequent reporting reduces repeated market scrutiny and the frequency with which short-term performance is evaluated by external stakeholders.

This result also supports the relevance of upper echelons theory. Firms operating under the same UK regulatory environment may choose different reporting frequencies because managerial characteristics can influence how executives respond to the discretion created by deregulation. This is consistent with Hambrick and Mason (1984), who argue that strategic organisational decisions are partly influenced by the characteristics and cognitive orientations of senior executives.

Importantly, the interaction terms in both models show that board governance mechanisms moderate the relationship between CEO myopia and IRF. In Model (1), the interaction between CEO myopia and board gender diversity, measured using the critical mass indicator (CEOmyopia × Diversity2), is positive and statistically significant ($\beta = 2.001$, $z = 4.434$, $p < 0.01$). This positive interaction suggests that reaching the Diversity2 threshold weakens the negative relationship between CEO myopia and IRF. In other words, the negative relationship

between CEO myopia and reporting frequency becomes weaker when female directors reach the specified level of board representation. Therefore, H4a is supported.

This finding is particularly important because Diversity2 itself is not statistically significant (β = 0.206, z = 0.672), while its interaction with CEO myopia is strongly significant. This suggests that board gender diversity may be more important in influencing managerial behaviour than in directly determining reporting frequency. It also helps explain why the earlier board-level analysis found no significant direct effect of board gender diversity on IRF. Therefore, the absence of a direct effect does not mean that gender diversity is unimportant. Instead, its influence appears to become more important when CEO short-term orientation creates a greater need for board oversight.

This interpretation is consistent with the critical mass argument developed in Chapter 2. Critical mass theory suggests that female directors may have greater influence when their representation reaches a sufficient level to allow meaningful participation in board decisions rather than remaining token representation (Kanter 1987; Konrad et al. 2008; Torchia et al. 2011; Joecks et al. 2013). Previous studies also associate gender-diverse boards with greater transparency and reporting quality (Gul et al. 2011; Liao et al. 2015; García-Sánchez et al. 2019; Dobija et al. 2022). The findings of this study extend this literature by suggesting that board gender diversity may help constrain the reporting choices associated with CEO short-term orientation rather than simply increasing reporting frequency for all firms.

The finding is also consistent with agency theory because a sufficiently diverse board may provide stronger monitoring and challenge managerial reporting preferences when they do not meet broader shareholder information needs. From a resource dependence perspective, greater board diversity may also provide wider expertise, perspectives, and stakeholder awareness. This may strengthen the board's ability to respond to external information demands. Therefore, the result supports the integrated theoretical framework developed in Chapter 2, rather than suggesting that board gender diversity operates through only one theoretical mechanism.

Model (2) examines the moderating role of board size. The interaction between CEO myopia and board size is positive and statistically significant (β = 0.343, z = 4.023, $p < 0.01$). This positive interaction suggests that the negative relationship between CEO myopia and IRF becomes weaker as board size increases, providing support for H4b. Therefore, although larger boards are directly associated with lower IRF (β = −0.450, $p < 0.01$), they also appear to reduce the negative influence associated with CEO myopia.

These two findings may initially appear contradictory, but they reflect two different roles of board size. The negative direct coefficient suggests that larger boards may generally be associated with less frequent reporting because of coordination difficulties, slower decision-making, and communication costs. This explanation is consistent with Yermack (1996) and

Cheng (2008), who suggest that smaller boards may have efficiency advantages. In contrast, the positive interaction suggests that when a firm is led by a myopic CEO, the greater monitoring capacity and wider expertise of a larger board may help constrain CEO-driven reporting decisions. Therefore, larger boards may create coordination costs in general while also providing stronger monitoring when managerial short-termism is present.

This finding shows why governance mechanisms should not be considered only in terms of their direct effects. From an agency theory perspective, having more directors may increase managerial monitoring and make it more difficult for a myopic CEO to dominate reporting decisions. Upper echelons theory also supports this interpretation by suggesting that the influence of executive characteristics can depend on the organisational environment in which executives make decisions (Hambrick and Mason 1984). Therefore, larger boards may reduce the extent to which CEO short-term orientation affects reporting policy, even though larger boards are not generally associated with higher IRF. This finding supports H4b.

Regarding the control variables, firm size and leverage remain positively and statistically significantly associated with IRF. These results are consistent with the agency theory arguments developed in Chapter 2. Larger firms face greater information demands from a wider range of stakeholders, while firms with higher leverage face stronger monitoring from creditors. Board independence is negative and statistically significant in both interaction models. However, this result should be interpreted carefully because it suggests that independent directors do not necessarily support more frequent reporting. Instead, independent directors may focus on the relevance, quality, and costs of disclosure rather than simply increasing reporting frequency. The remaining control variables are not statistically significant in these interaction models.

Both models show similar explanatory power, with a pseudo-R^2 of 0.180 and a highly significant Wald chi-square statistic. Overall, the results support H4a and H4b. More importantly, the interaction results show that the relationship between CEO myopia and voluntary IRF depends on the governance environment. Board gender diversity at the specified critical mass threshold and larger board size both weaken the negative relationship between CEO myopia and IRF.

Overall, these findings provide support for the integrated theoretical framework developed in Chapter 2. Upper echelons theory helps explain why CEO myopia influences voluntary reporting decisions, while agency theory explains how board oversight may limit the influence of managerial preferences on reporting outcomes. Critical mass theory helps explain why board gender diversity becomes important when female representation reaches a meaningful level, while resource dependence theory highlights the additional expertise and perspectives that diverse boards can provide. Therefore, governance mechanisms should not be viewed only as direct determinants of disclosure. They may also influence reporting indirectly by

limiting managerial discretion. This is particularly important in the UK post-2014 environment, where the removal of mandatory quarterly reporting gave firms greater discretion over reporting frequency.

Finally, the moderation findings contribute to the literature reviewed in Chapter 2. Previous studies have mainly examined the direct effects of managerial characteristics or board governance on disclosure. Evidence on whether governance mechanisms affect the relationship between CEO myopia and voluntary reporting frequency remains limited. The findings of this study show that firms operating in the same regulatory environment may respond differently to CEO short-term orientation depending on their board structure. This provides a more detailed understanding of voluntary IRF than examining CEO and governance characteristics separately and directly addresses the research gap identified in Chapter 2.

Table 4.13: Moderating effects of CEO myopia on corporate governance

	(1)	(2)
VARIABLES	Board gender diversity * Myopia	Board Size * Myopia
CEOmyopia	**-2.369*** **	**-4.028*** **
	(-5.335)	**(-4.732)**
Diversity2	**0.206**	
	(0.672)	
CEOmyopia*Diversity2	**2.001*** **	
	(4.434)	
Boardsize		-0.450***
		(-8.830)
CEOmyopia* Boardsize		**0.343*** **
		(4.023)
FirmSize	0.086***	0.076***
	(3.277)	(2.914)
ROA	1.148	1.242
	(1.401)	(1.558)
Leverage	2.758***	2.678***
	(4.290)	(4.189)
Liquidity	-0.004	-0.005
	(-0.065)	(-0.085)
Ownership	-0.002	-0.003
	(-0.396)	(-0.565)
Boardindep	-0.381**	-0.417**
	(-1.984)	(-2.196)

Industry	0.024	0.007
	(0.610)	(0.174)
year	0.041	0.078*
	(0.938)	(1.886)
Observations	1,957	1,957
Industry FE	Yes	Yes
Year FE	Yes	Yes
Pseudo R2	0.180	0.180
Wald chi2	206.2	206.2

Notes: This table reports ordered logit estimates of the moderating effects of board governance on the relationship between CEO myopia and voluntary interim reporting frequency (IRF). Model (1) interacts CEOmyopia with Diversity2, a critical-mass indicator for boards with at least two female directors; Model (2) interacts CEOmyopia with Boardsize. IRF is coded from 1 to 4, with higher values indicating more frequent interim reporting. Firm-level controls and year and industry fixed effects are included. z-statistics are reported in parentheses. N = 1,957 firm-year observations. *Significance at the 10% level; ** significance at the 5% level; *** significance at the 1% level. Coefficients for each variable are reported, and z-statistics appear in brackets.

4.5 Robustness checks

4.5.1 Alternative estimation methods

To assess the robustness of the main findings and examine whether the results depend on the estimation method, this study re-estimates the firm-level model using three alternative specifications. These include a logit model using the binary measure of interim reporting frequency (IRF_Dummy), an OLS model using the ordinal IRF measure, and a firm FE model that controls for unobserved time-invariant firm characteristics. These models provide different tests of the baseline findings. The logit model examines whether the results remain when reporting frequency is classified as quarterly versus non-quarterly reporting, while the OLS model provides an alternative way of estimating IRF. The firm FE model provides a more demanding test because it examines changes within the same firm over time.

Table 4.14 presents the results of these robustness tests. Overall, the findings provide relatively strong support for the baseline results in the logit and OLS models, although the evidence is weaker in the firm FE model. Firm size remains positive and statistically significant in both the logit and OLS models, supporting the baseline ordered logit result. This finding is consistent with the agency and signalling arguments discussed in Chapter 2. Larger firms generally face greater market attention and monitoring and may therefore have stronger incentives to reduce information asymmetry through more frequent reporting. However, firm size becomes statistically insignificant in the FE model. Since the FE model focuses on changes within firms rather than differences between firms, this suggests that the positive relationship between firm size and IRF may be driven more by differences across firms than by changes in firm size over time.

Profitability (ROA) and leverage also remain positive and statistically significant in both the logit and OLS models. The positive relationship between profitability and IRF is consistent with signalling theory, as more profitable firms may have stronger incentives to communicate favourable performance to the market through frequent reporting. Similarly, the positive relationship between leverage and IRF is consistent with agency theory, because firms with higher debt levels may face greater monitoring and information demands from creditors. These results support the interpretations presented in the main analysis. However, neither profitability nor leverage remains statistically significant in the FE model, and their coefficients become negative. Therefore, the results do not provide full robustness across all estimation methods. Instead, the positive relationships for profitability and leverage are robust to alternative measures and estimation methods in the logit and OLS models, but not when the analysis is based only on within-firm changes over time.

Liquidity has a negative and statistically significant relationship with IRF in the logit model but remains insignificant in the OLS and FE models. This differs from the baseline ordered logit result, where liquidity was not statistically significant. The negative logit coefficient may suggest that firms with stronger liquidity positions have less need to use quarterly reporting to reassure external capital providers. However, because this relationship is not significant in the other models, the result should be interpreted cautiously. It suggests that the relationship between liquidity and voluntary IRF may depend on how IRF is measured and estimated.

Analyst following, ownership concentration, and assets in place remain statistically insignificant in the logit and OLS models, while assets in place is not estimated in the FE model. These results are broadly consistent with the baseline findings and provide little evidence that these variables independently influence voluntary IRF after controlling for the other firm-level characteristics.

Overall, the robustness analysis provides qualified rather than complete support for the baseline firm-level results. The positive effects of firm size, profitability, and leverage remain significant in both the logit and OLS models, providing further support for the agency and signalling explanations developed in Chapter 2. However, these relationships are not statistically significant in the firm FE model. Therefore, the main findings appear reasonably robust to alternative measures of IRF and estimation methods, but they are less robust when the analysis focuses only on changes within firms over time. This suggests that firm size, profitability, and leverage are particularly important in explaining differences in voluntary IRF across firms.

Table 4.14: Firm-Level determinants (robust)

VARIABLES	Logit_firm IRF_Dummy	Ols_firm IRF	Fe_firm IRF
FirmSize	0.097***	0.012***	0.000
	(0.025)	(0.004)	(0.001)
ROA	1.068***	0.145***	-0.064
	(0.406)	(0.053)	(0.041)
Leverage	0.923***	0.146***	-0.006
	(0.296)	(0.035)	(0.030)
Liquidity	-0.135***	-0.000	-0.009
	(0.028)	(0.004)	(0.008)
Analystfollowing	0.003	0.001	0.000
	(0.007)	(0.001)	(0.001)
Ownership	0.004	-0.000	-0.001
	(0.003)	(0.000)	(0.001)
Assetinplace	-0.012	-0.001	
	(0.048)	(0.007)	
Year	-0.077***	0.003	0.002
	(0.021)	(0.003)	(0.002)
Industry	-0.085***	0.002	
	(0.020)	(0.003)	
Constant	153.934***	-4.812	-1.223
	(41.936)	(5.982)	(3.956)
Observations	1,989	1,989	1,989
R-squared		0.024	0.006
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Obs	1989	1989	1989

Notes: Model (1) reports binary logistic regression estimates using IRF_Dummy, equal to 1 for voluntary quarterly reporting and 0 otherwise. Model (2) reports OLS estimates using IRF, and Model (3) reports firm fixed-effects estimates using IRF. All models include year effects, while industry effects are included where applicable. Standard errors are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Variable definitions are provided in Chapter 3.

Overall, the robustness checks provide strong support for the main findings reported earlier in this chapter. Across alternative estimation methods, firm size, profitability, and leverage consistently emerge as significant determinants of interim reporting behaviour, confirming the central role of firm-level economic characteristics in shaping voluntary disclosure decisions. Although some coefficients lose statistical significance in the FE specification likely due to limited within-firm variation over time the direction and magnitude of the estimates remain broadly consistent with the baseline ordered logit results. Taken together, these findings indicate that the study's conclusions are not driven by a specific modelling approach and remain robust to alternative specifications of the dependent variable and estimation technique. This strengthens confidence in the validity of the empirical results and supports the reliability of the hypotheses tested in this study.

Whereas table 4.15 presents the robustness tests for the CEO-level determinants of voluntary interim reporting frequency. While the main analysis uses IRF as an ordinal variable, additional tests are conducted using alternative measures and estimation methods. Specifically, Table 4.15 reports results from an ordered logit model using the original IRF measure, a binary logit model using IRF_Dummy, and a firm FE model that examines changes within firms over time. These alternative models help assess whether the main findings depend on how reporting frequency is measured or on unobserved firm-specific characteristics.

Overall, the robustness results provide partial support for the main CEO-level findings, although the strength of the evidence differs across the models. CEO tenure and CEO duality remain negative and statistically significant in both the ordered logit and binary logit models. CEO myopia also remains negative but is statistically significant only in the ordered logit model. In contrast, none of these CEO characteristics is statistically significant in the firm FE model. This suggests that the CEO-level findings are more robust to alternative measures of reporting frequency than to an estimation method that focuses only on changes within firms over time.

CEO tenure remains negatively associated with IRF and is statistically significant in both the ordered logit and binary logit models. This indicates that firms with longer-tenured CEOs are less likely to report more frequently. This finding is consistent with the upper echelons perspective discussed in Chapter 2, as longer CEO tenure may be associated with stronger commitment to existing reporting practices and less willingness to adopt more frequent voluntary reporting. Although CEO tenure becomes statistically insignificant in the FE model, the coefficient remains negative. Therefore, the negative relationship is supported by the ordered logit and binary logit results, but the evidence is weaker when only within-firm changes are considered.

Similarly, CEO duality has a negative and statistically significant relationship with IRF in both the ordered logit and binary logit models. This finding is consistent with agency theory because combining the CEO and chair roles may weaken independent board monitoring and give the CEO greater influence over voluntary reporting decisions. However, the coefficient becomes positive and statistically insignificant in the FE model. Therefore, the negative relationship between CEO duality and IRF is supported by the ordered logit and binary logit models but is not robust across all specifications.

CEO myopia is negatively associated with IRF across all specifications but is statistically significant only in the ordered logit model. The negative relationship is consistent with the theoretical argument developed in Chapter 2 that short-term-oriented CEOs may be less willing to report frequently because frequent voluntary reporting can increase market scrutiny and short-term performance pressure. However, CEO myopia is statistically insignificant in both the binary logit and FE models. Therefore, although the direction of the relationship is

consistently negative, the statistical evidence depends on the model used. The baseline finding for CEO myopia should therefore be interpreted as supportive but not fully robust across the alternative specifications.

Other CEO characteristics, including CEO gender, age, and education, do not show consistent statistical significance across the models. CEO gender and CEO age remain statistically insignificant in all three specifications. CEO education is also insignificant across the robustness models and changes direction in the FE model. These results provide little evidence that these CEO demographic characteristics independently explain voluntary IRF after controlling other firms and CEO characteristics.

Regarding the firm-level control variables, firm size, profitability, and leverage remain positive and statistically significant in the ordered logit and binary logit models. These findings are consistent with the agency and signalling explanations discussed earlier. Larger firms may face greater market attention and information demands, more profitable firms may have stronger incentives to communicate favourable performance, and firms with higher leverage may face greater monitoring from creditors. However, all three variables become statistically insignificant in the FE model, which is consistent with the results reported in table 4.14. Liquidity also shows different results across the models, becoming negative and statistically significant only in the binary logit model.

Overall, table 4.15 provides qualified rather than complete support for the CEO-level findings. The negative relationships of CEO tenure and CEO duality with IRF remain significant in both the ordered logit and binary logit models. The relationship between CEO myopia and IRF also remains negative across the models, although it is statistically significant only in the ordered logit model. In contrast, the FE model does not reproduce the significant CEO effects found in the other models. Therefore, the main CEO-level findings appear reasonably robust to alternative measures of reporting frequency but are less robust when the analysis focuses only on changes within firms over time. This interpretation avoids overstating the robustness of the results while showing that some important relationships, particularly those involving CEO tenure and CEO duality, remain consistent across alternative specifications.

Table 4.15: CEO characteristics and IRF (robust)

	(1)	(2)	(3)
VARIABLES	Ordered Logit	Logit	Fixed Effects
	IRF	IRF_Dummy	IRF
CEOgender	-0.441	0.041	-0.025
	(-1.181)	(0.177)	(-0.702)

CEOage	0.016	0.010	0.002
	(0.866)	(0.948)	(0.867)
CEOtenure	-0.039**	-0.020*	-0.002
	(-2.073)	(-1.724)	(-1.379)
CEOduality	-0.924***	-0.418**	0.013
	(-4.053)	(-2.546)	(1.110)
CEOeducation	0.547	0.017	-0.022
	(1.292)	(0.091)	(-1.495)
CEOmyopia	-0.580**	-0.053	-0.017
	(-2.260)	(-0.362)	(-0.994)
FirmSize	0.094***	0.100***	0.000
	(4.153)	(4.909)	(0.366)
ROA	1.705**	0.988**	-0.059
	(2.394)	(2.482)	(-1.472)
Leverage	2.117***	0.905***	-0.008
	(3.743)	(3.133)	(-0.247)
Liquidity	0.006	-0.134***	-0.009
	(0.125)	(-4.850)	(-1.054)
Analystfollowing	0.011	0.002	0.000
	(0.898)	(0.361)	(0.010)
Ownership	-0.002	0.005*	-0.001
	(-0.493)	(1.686)	(-0.672)
year	0.061	-0.076***	0.002
	(1.597)	(-3.537)	(1.137)
Industry	0.046	-0.085***	
	(1.252)	(-4.240)	
Constant		151.330***	-2.981
		(3.493)	(-0.692)
Observations	1,989	1,989	1,989
R-squared			0.010
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes

Notes: Model (1) reports ordered logit estimates using the ordinal IRF measure. Model (2) reports binary logit estimates using IRF_Dummy, equal to 1 for voluntary quarterly reporting and 0 otherwise. Model (3) reports firm fixed-effects estimates using IRF. Year and industry effects are included where applicable. z-statistics/t-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. Variable definitions are provided in Chapter 3.

In addition, Table 4.16 presents the robustness tests for the board-level determinants of voluntary interim reporting frequency. The analysis uses alternative specifications, including binary logit, OLS, and firm fixed-effects (FE) models, to examine whether the board-level findings depend on the measurement of IRF or the estimation method. Overall, the results provide mixed evidence for the robustness of the board-level determinants, with board gender diversity showing greater consistency across the models than the other governance variables. Board gender diversity remains positively associated with IRF across all three alternative specifications. The relationship is statistically significant in the binary logit model ($\beta = 0.013$, $p < 0.01$) and the firm FE model ($\beta = 0.001$, $p < 0.05$), although it is statistically insignificant in the OLS model. The positive coefficient across all three models provides some evidence that greater female representation on boards is associated with more frequent voluntary interim reporting. However, because the relationship is not statistically significant in all models, the result provides partial rather than complete robustness.

This finding is relevant to the theoretical discussion in Chapter 2. From a resource dependence perspective, greater board gender diversity may provide a wider range of perspectives, experience, and resources, which may support greater transparency. The result is also broadly consistent with critical mass theory, which suggests that female directors may have greater influence on board decisions when their representation becomes meaningful. However, the insignificant result in the OLS model indicates that the direct relationship between board gender diversity and IRF remains sensitive to the model used.

The results for board size are less consistent. Board size is positive and statistically significant in the binary logit model ($\beta = 0.137$, $p < 0.01$), but negative and statistically significant in the OLS model ($\beta = -0.030$, $p < 0.01$). In the firm FE model, the coefficient is positive but statistically insignificant. Since the direction of the relationship changes across the models, the effect of board size cannot be considered robust. Instead, the results suggest that the relationship between board size and voluntary IRF depends on how reporting frequency is measured and estimated.

These mixed results may reflect the different theoretical arguments about board size discussed in chapter 2. Agency and resource dependence theories suggest that larger boards may provide greater monitoring, expertise, and resources, which could encourage more frequent disclosure. In contrast, larger boards may also experience greater coordination and communication difficulties, which can reduce decision-making efficiency. The different results across the models therefore suggest that neither of these effects consistently dominates across the alternative specifications.

Board independence and audit committee independence also do not show consistent effects across the models. Board independence is statistically insignificant in the binary logit and FE models and only weakly significant in the OLS model. Its coefficient also changes from negative in the logit model to positive in the OLS and FE models. Audit committee independence remains statistically insignificant across all three specifications. Therefore, there is limited evidence that either board independence or audit committee independence has a stable direct effect on voluntary IRF. One possible explanation is that these governance mechanisms may have a stronger role in monitoring the quality and reliability of financial reporting than in determining how frequently firms voluntarily report.

Regarding the firm-level control variables, firm size, profitability, and leverage remain positive and statistically significant in both the binary logit and OLS models. These findings are broadly consistent with the earlier firm-level results and with the agency and signalling explanations discussed in Chapter 2. However, these variables again become statistically insignificant in the FE model. Liquidity is negative and statistically significant only in the binary logit model, suggesting that its relationship with IRF is also sensitive to the model used.

Overall, table 4.16 provides qualified rather than complete support for the board-level findings. Board gender diversity shows the most consistent relationship with IRF, as its coefficient remains positive across all three models and is statistically significant in two of them. In contrast, the relationship between board size and IRF changes across the models, while board independence and audit committee independence show little evidence of consistent effects. These findings suggest that the relationship between board governance and voluntary IRF is complex and may not operate only through direct effects. Some board characteristics may instead be more important in influencing or constraining managerial behaviour. This interpretation is consistent with the interaction analysis reported earlier in this chapter.

Table 4.16: Board-Level Determinants and IRF (robust)

VARIABLES	(1) Logit_board OLS_board Fix_board	(2) Logit_board OLS_board Fix_board	(3) Logit_board OLS_board Fix_board
boardgender	0.013***	0.001	0.001**
	(2.704)	(0.987)	(1.989)
boardindep	-0.003	0.001*	0.000
	(-0.777)	(1.914)	(0.315)
boardsize	0.137***	-0.030***	0.001
	(5.652)	(-7.881)	(0.270)
ACindependence	-0.001	0.001	0.001
	(-0.217)	(1.044)	(1.202)
Ownership	0.005*	0.000	-0.001

	(1.701)	(0.590)	(-0.998)
FirmSize	0.098***	0.011***	0.000
	(4.094)	(3.447)	(0.243)
ROA	0.815*	0.105*	-0.051
	(1.866)	(1.748)	(-1.637)
Leverage	0.988***	0.178***	0.004
	(3.096)	(5.070)	(0.123)
Liquidity	-0.126***	-0.002	-0.000
	(-3.886)	(-0.446)	(-0.064)
Observations	1989	1989	1989
R-squared		0.080	0.022
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes

Notes: Model (1) reports binary logit estimates using IRF_Dummy, which equals 1 for voluntary quarterly reporting and 0 otherwise. Model (2) reports OLS estimates using IRF, while Model (3) reports FE estimates using IRF. Year and industry effects are included where applicable. z-statistics/t-statistics are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Variable definitions are provided in Chapter 3.

4.5.2 Critical mass test of board gender diversity

Table 4.17 and Figure 4.2 present robustness tests examining the relationship between board gender diversity and IRF using three different threshold measures. These models examine whether the effect of female directors on IRF changes depending on the level of female representation on the board, as suggested by critical mass theory.

In Model (1), having at least one female director (Diversity1) is positively and statistically significantly associated with IRF (β = 1.079, t = 2.11). This suggests that even a minimum level of female representation may be associated with more frequent interim reporting. The relationship becomes stronger in Model (2), where the board has at least two female directors (Diversity2). The coefficient increases in both size and statistical significance (β = 1.317, t = 3.94), indicating a stronger positive relationship with IRF when boards have at least two female directors. This pattern is broadly consistent with Kanter's (1977) critical mass theory, which suggests that the influence of minority group members may become stronger as their representation increases. In this study, greater female representation may provide a wider range of perspectives and strengthen board monitoring, which may support more transparent reporting practices.

In contrast, Model (3), which examines boards with at least three female directors (Diversity3), shows a negative but statistically insignificant coefficient (β = −0.258, t = −0.85). This means that the positive relationship found at the lower thresholds does not continue when the threshold increases to three female directors. However, this result should not be interpreted as evidence that having three female directors reduces IRF because the coefficient is not statistically significant. Instead, there is no statistically reliable relationship at this threshold. One possible explanation is that after a certain level of female representation is reached, additional female directors may not produce further changes in reporting frequency. Alternatively, the relationship between board gender diversity and IRF may not be linear and may depend on the specific composition and characteristics of the board.

Overall, the critical mass analysis provides partial support for the argument that the influence of board gender diversity depends on the level of female representation. Positive and significant relationships are found for boards with at least one and at least two female directors, with the strongest evidence found at the two-director threshold. However, there is no significant relationship at the three-director threshold. Therefore, the findings do not suggest that increasing the number of female directors continuously increases voluntary IRF. Instead, they suggest that the relationship may be non-linear, with the influence of board gender diversity becoming more visible at particular levels of female representation. This provides a more detailed interpretation of critical mass theory in the context of voluntary interim reporting and may also help explain why the continuous measure of board gender diversity does not show a consistently significant direct effect in the main analysis.

Table 4.17: Critical Mass of Board Gender Diversity and IRF

VARIABLES	(1) Diversity1	(2) Diversity2	(3) Diversity3
Diversity1	**1.116**** **(2.124)**		
Diversity2		**0.702***** **(2.816)**	
Diversity3			**-0.036** **(-0.155)**
boardsize	-0.325*** (-7.817)	-0.360*** (-8.222)	-0.309*** (-6.377)
boardindep	0.010* (1.900)	0.009* (1.776)	0.011** (2.092)
ACindependence	0.005 (0.632)	0.003 (0.360)	0.005 (0.683)

Ownership	0.001	0.003	0.001
	(0.201)	(0.535)	(0.123)
FirmSize	0.062**	0.061**	0.060**
	(2.536)	(2.499)	(2.496)
ROA	1.554*	1.522*	1.565*
	(1.916)	(1.865)	(1.925)
Leverage	2.618***	2.715***	2.671***
	(4.648)	(4.780)	(4.679)
Liquidity	-0.015	-0.004	-0.011
	(-0.237)	(-0.066)	(-0.176)
Observations	1989	1989	1989
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Pseudo R2	0.113	0.113	0.113
Wald chi2	102	102	102

*Significance at the 10% level; ** significance at the 5% level; *** significance at the 1% level. Coefficients for each variable are reported, and z-statistics appear in brackets.

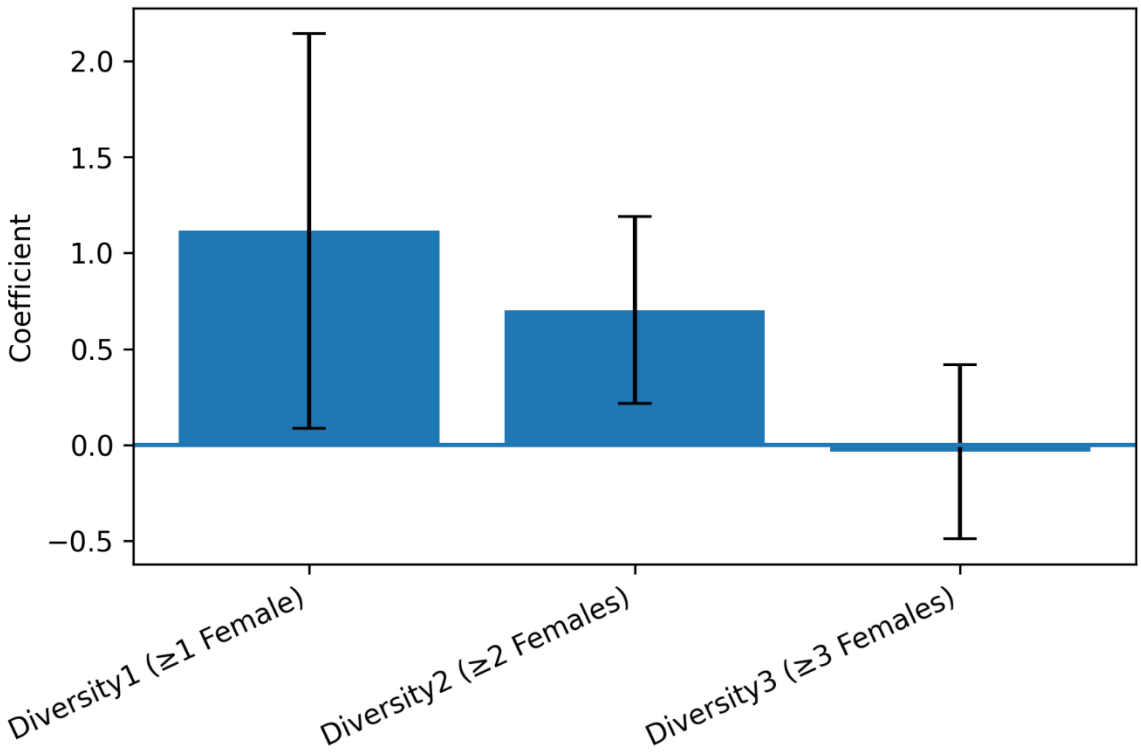


Figure 4.2: Critical mass effects of female directors on IRF

4.5.3 Interaction models with CEO myopia

Building on the critical mass analysis presented in Section 4.5.2, this section examines whether board gender diversity moderates the relationship between CEO myopia and IRF. Specifically, it examines whether gender-diverse boards can reduce the negative relationship between CEO myopia and reporting frequency. Table 4.18 presents three interaction models using different measures of board gender diversity. Model (1) uses the percentage of female directors on the board, Model (2) uses a critical mass indicator equal to one when the board has at least two female directors, and Model (3) uses a female presence dummy based on a minimum representation threshold. Using different measures helps assess whether the moderating effect depends on how board gender diversity is measured.

Across all three models, CEO myopia is negatively and statistically significantly associated with IRF. The coefficient is significant at the 1% level in Model (1) ($\beta = -2.324$, $z = -4.067$), Model (2) ($\beta = -2.369$, $z = -5.335$), and Model (3) ($\beta = -5.255$, $z = -3.718$). Because these models include interaction terms, the coefficients represent the relationship between CEO myopia and IRF when the relevant board diversity measure is at its reference value. Under these conditions, myopic CEOs are associated with a lower likelihood of firms being in higher IRF categories. This finding is consistent with upper echelons theory, which suggests that executives' characteristics and cognitive orientations can influence strategic organisational decisions (Hambrick and Mason, 1984). In the context of voluntary interim reporting, short-term-oriented CEOs may be less willing to report frequently because frequent reporting can increase external scrutiny and expose managerial performance to more regular market evaluation.

Importantly, the interaction terms between CEO myopia and board gender diversity are positive and statistically significant across all three models. In Model (1), the interaction between CEO myopia and the percentage of female directors is positive and significant ($\beta = 0.054$, $z = 3.066$). This indicates that the negative relationship between CEO myopia and IRF becomes weaker as the percentage of female directors increases. The finding therefore suggests that board composition can influence how strongly CEO characteristics affect reporting decisions. This is consistent with agency theory, which suggests that stronger board monitoring can limit managerial discretion and constrain managerial decisions that may not meet shareholders' information needs (Jensen and Meckling, 1976; Fama and Jensen, 1983).

The moderating effect is particularly clear in Model (2), where board gender diversity is measured using the critical mass threshold. The interaction between CEO myopia and the

presence of at least two female directors is positive and highly significant (β = 2.001, z = 4.434). This indicates that the negative relationship between CEO myopia and IRF becomes weaker when the board includes at least two female directors. The finding suggests that the governance role of female directors may become more important when their representation moves beyond a minimal level. This is broadly consistent with Kanter's (1977) critical mass perspective, which suggests that minority members may have greater opportunities to participate and influence group decisions as their representation increases. In this context, female directors may provide additional monitoring, different perspectives, and greater challenge to managerial decisions, thereby reducing the extent to which CEO short-term orientation influences voluntary reporting decisions.

Model (3) provides further evidence of this moderating relationship. The interaction between CEO myopia and the female presence dummy is positive and statistically significant (β = 4.633, z = 3.259). Although the size of interaction coefficients should not be directly compared across differently specified nonlinear models, the positive and significant interactions across all three measures provide consistent evidence that the relationship between CEO myopia and IRF depends on board gender composition. Therefore, the moderating result does not depend on only one measure of board gender diversity.

An important finding is that the board gender diversity measures are not statistically significant on their own, while their interactions with CEO myopia are significant. Board gender diversity is insignificant in Model (1) (β = −0.011, z = −1.096), Diversity2 is insignificant in Model (2) (β = 0.206, z = 0.672), and the female presence dummy is insignificant in Model (3) (β = −0.111, z = −0.151). This suggests that board gender diversity does not necessarily increase reporting frequency directly. Instead, its governance role may become more important when CEO short-term orientation is present. In other words, gender diversity may help limit the influence of CEO myopia on reporting decisions rather than directly increasing IRF. This may also explain why board gender diversity showed limited direct effects in the earlier board-level analysis but becomes important when considered together with CEO myopia.

These findings also provide a clear link between upper echelons theory, agency theory, and critical mass theory. Upper echelons theory helps explain why CEO myopia may influence voluntary reporting decisions, while agency theory helps explain how board monitoring may limit the influence of managerial preferences on these decisions. Critical mass theory provides an additional explanation for why the influence of female directors may depend on their level of representation on the board. Together, these theories suggest that voluntary interim reporting decisions are influenced by both managerial characteristics and the governance environment in which these decisions are made.

Regarding the control variables, firm size and leverage remain positive and statistically significant across all three models. This is consistent with the main findings and suggests that larger and more leveraged firms continue to have stronger incentives to report more frequently because they face greater visibility and monitoring pressures. CEO tenure and CEO duality also remain negative and statistically significant across the three models, which is consistent with the earlier CEO-level findings. Board size remains negative and highly significant, while board independence is also negatively associated with IRF. Therefore, the moderating effect of board gender diversity remains evident after controlling for other important firm, CEO, and board characteristics.

Overall, the interaction analysis provides consistent evidence that board gender diversity moderates the relationship between CEO myopia and voluntary IRF. Across all three measures of gender diversity, the interaction with CEO myopia is positive and statistically significant. This indicates that greater or meaningful female representation on the board weakens the negative relationship between CEO myopia and IRF. The findings do not suggest that gender-diverse boards always increase reporting frequency. Instead, board gender diversity appears to have a conditional governance role, becoming particularly important when CEO myopia may otherwise reduce voluntary reporting frequency. These findings provide further support for the moderating hypothesis and for the broader argument of this study that voluntary interim reporting decisions are jointly influenced by managerial characteristics and corporate governance structures.

Table 4.18: Robustness test for moderating effects of CEO myopia on corporate governance

	(1)	(2)	(3)
VARIABLES	%Female-Myopia	Diversity2-Myopia	Female Dummy-Myopia
CEOmyopia	**-2.324*** **	**-2.369*** **	**-5.255*** **
	(-4.067)	**(-5.335)**	**(-3.718)**
boardgender	**-0.011**		
	(-1.096)		
CEOmyopia*boardgender	**0.054*** **		
	(3.066)		
Diversity2		**0.206**	
		(0.672)	
Diversity2*CEOmyopia		**2.001*** **	
		(4.434)	
Femaledummy			**-0.111**

			(-0.151)
Femaledummy*CEOmyopia			**4.633*** **
			(3.259)
FirmSize	0.085***	0.086***	0.082***
	(3.318)	(3.277)	(3.242)
ROA	1.370*	1.148	1.286
	(1.698)	(1.401)	(1.597)
Leverage	2.732***	2.758***	2.950***
	(4.263)	(4.290)	(4.570)
Liquidity	-0.025	-0.004	0.004
	(-0.458)	(-0.065)	(0.078)
Analystfollowing	0.024*	0.025*	0.023*
	(1.773)	(1.881)	(1.682)
Ownership	-0.004	-0.002	-0.001
	(-0.800)	(-0.396)	(-0.200)
boardindep	-0.422**	-0.381**	-0.365*
	(-2.235)	(-1.984)	(-1.907)
boardsize	-0.353***	-0.414***	-0.361***
	(-8.603)	(-9.034)	(-8.729)
CEOtenure	-0.052**	-0.057***	-0.055***
	(-2.512)	(-2.750)	(-2.640)
CEOage	0.036*	0.033	0.039*
	(1.671)	(1.512)	(1.794)
CEOgender	-0.837**	-0.873**	-0.764**
	(-2.142)	(-2.241)	(-1.966)
CEOeducation	0.474	0.393	0.484
	(0.955)	(0.789)	(0.979)
CEOduality	-1.160***	-1.083***	-1.087***
	(-4.624)	(-4.317)	(-4.317)
Industry	0.026	0.024	0.014
	(0.669)	(0.610)	(0.369)
year	0.075	0.041	0.058
	(1.581)	(0.938)	(1.373)
Observations	1,956	1,957	1,957
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Pseudo R2	0.181	0.181	0.181
Wald chi2	207.4	207.4	207.4

Notes: This table reports ordered logit estimates of the moderating effect of board gender diversity on the relationship between CEO myopia and interim reporting frequency (IRF). Model (1) measures board gender diversity as the percentage of female directors; Model (2) uses Diversity2, a dummy equal to one when the board includes at least two female directors; and Model (3)

uses the female presence dummy. CEOmyopia is a binary measure as defined in Chapter 3. All models include firm-, CEO-, and board-level controls, together with year and industry fixed effects. z-statistics are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

4.5.4 Subsample analyses

4.5.4.1 Subsample analysis by firm size

Table 4.19 examines whether the relationship between CEO characteristics and voluntary IRF differs across firm size. The sample is divided into small, medium-sized, and large firms, with 663 firm-year observations in each group. Both ordered logit and OLS results are reported to examine whether the findings are consistent across estimation methods. This analysis is relevant to upper echelons theory because the influence of CEO characteristics on organisational decisions may depend on the organisational context in which CEOs exercise their discretion (Hambrick and Mason, 1984; Hambrick, 2007).

The results show that the influence of CEO characteristics differs across firm-size groups. For small firms, most CEO characteristics are statistically insignificant. However, CEO education is an important exception. CEO education is positive and statistically significant in the ordered logit model ($\beta = 13.414$, $p < 0.01$) and also positive and significant in the OLS model ($\beta = 0.056$, $p < 0.05$). The unusually large ordered logit coefficient should be interpreted cautiously. However, the positive relationship across both models suggests that CEO education may be particularly important for reporting decisions in smaller firms. From an upper echelon's perspective, individual CEO characteristics may have a greater influence in smaller firms, where organisational structures may be less complex and CEOs may have more direct involvement in reporting decisions (Hambrick and Mason, 1984).

For medium-sized firms, CEO duality is negatively and statistically significantly associated with IRF in the ordered logit model ($\beta = -1.694$, $p < 0.05$). A negative relationship is also found in the OLS model. This finding is consistent with agency theory, which suggests that combining the CEO and chair roles increases managerial power and may weaken board monitoring (Jensen and Meckling, 1976; Fama and Jensen, 1983). In the context of voluntary interim reporting, greater concentration of leadership power may reduce pressure on management to report more frequently.

This result is also consistent with the negative relationship between CEO duality and IRF found in the main analysis, although the subsample results suggest that the relationship is particularly evident among medium-sized firms.

For large firms, CEO tenure is negatively associated with IRF in the ordered logit model ($\beta = -0.080$, $p < 0.10$). However, this relationship is only weakly significant and should therefore be interpreted cautiously. The negative direction is consistent with the main CEO-level results. From an upper echelons perspective, longer-tenured CEOs may become more established in their positions and have greater influence over organisational policies. They may therefore be less willing to change existing reporting practices or adopt more frequent voluntary reporting. However, the weak statistical significance suggests that this relationship is not equally strong across the alternative specifications.

CEO myopia is not statistically significant in any of the firm-size subsamples, although its coefficient remains negative in the ordered logit models. This differs from the significant negative relationship found in the full-sample analysis. One possible explanation is that dividing the sample into three groups reduces the number of observations in each group and therefore reduces the statistical power of the analysis. The results may also suggest that the effect of CEO myopia is more visible in the full sample rather than being concentrated within a particular firm-size group. Therefore, the subsample findings should be interpreted as showing differences across firm sizes rather than contradicting the main finding.

The firm-level control variables also show some differences across firm-size groups. Leverage is positive and statistically significant for large firms in the ordered logit model ($\beta = 4.685$, $p < 0.05$), while analyst following is positively associated with IRF among medium-sized firms at the 10% significance level. The stronger relationship between leverage and IRF among large firms is consistent with agency theory, as large firms with higher debt levels may face greater monitoring and information demands from creditors, creating stronger incentives for frequent reporting. Ownership concentration is negatively associated with IRF among large firms at the 10% level, although this weak relationship should be interpreted cautiously.

Overall, the subsample analysis suggests that the importance of CEO and firm characteristics differs across firm-size groups. CEO education appears to be

particularly relevant for small firms, CEO duality for medium-sized firms, and CEO tenure and leverage for large firms. These findings are consistent with upper echelons theory, which suggests that the influence of managerial characteristics may depend on the organisational context in which executives operate (Hambrick and Mason, 1984; Hambrick, 2007). The findings for CEO duality and leverage are also consistent with agency theory, particularly in relation to managerial power and external monitoring. Overall, the results show the importance of considering differences between firms when examining the determinants of voluntary interim reporting frequency.

Table 4.19: CEO characteristics and IRF across firm size subsamples

VARIABLES	(1) Ologit: Small	(2) Ologit: Medium	(3) Ologit: Large	(4) OLS: Small	(5) OLS: Medium	(6) OLS: Large
CEOgender	-1.583	-0.693	1.104	-0.183	-0.064	-0.064
	(1.083)	(0.788)	(0.739)	(0.162)	(0.082)	(0.082)
CEOage	0.027	-0.003	0.007	0.001	0.001	0.001
	(0.061)	(0.050)	(0.068)	(0.003)	(0.005)	(0.005)
CEOtenure	-0.038	-0.061	-0.080*	-0.002	-0.006	-0.006
	(0.057)	(0.073)	(0.047)	(0.003)	(0.007)	(0.007)
CEOduality	1.097	-1.694**	0.271	0.040	-0.250**	-0.250**
	(1.108)	(0.684)	(1.160)	(0.032)	(0.125)	(0.125)
CEOeducation	13.414***	-0.057	0.919	0.056**	-0.023	-0.023
	(0.600)	(0.770)	(0.614)	(0.025)	(0.067)	(0.067)
CEOmyopia	-0.065	-1.194	-0.619	-0.007	-0.111	-0.111
	(0.706)	(0.778)	(0.897)	(0.031)	(0.079)	(0.079)
ROA	0.915	2.337	2.327	0.055	0.274	0.274
	(0.922)	(1.578)	(2.233)	(0.056)	(0.181)	(0.181)
Leverage	3.611	2.233	4.685**	0.145	0.270*	0.270*
	(2.568)	(1.634)	(2.298)	(0.091)	(0.154)	(0.154)
Liquidity	0.193	-0.012	0.013	0.008	-0.004	-0.004
	(0.346)	(0.151)	(0.166)	(0.010)	(0.015)	(0.015)
Analystfollowing	0.001	0.033*	0.006	-0.000	0.003	0.003
	(0.021)	(0.020)	(0.019)	(0.001)	(0.002)	(0.002)
Ownership	0.008	0.013	-0.026*	0.000	0.001	0.001
	(0.010)	0.021	(0.015)	(0.001)	(0.002)	(0.002)
year	0.149	-0.009	0.054	0.008*	-0.002	-0.002
	(0.099)	(0.067)	(0.083)	(0.005)	(0.007)	(0.007)
Industry	-0.019	0.055	-0.042	-0.001	0.009	0.009
	(0.131)	(0.122)	(0.095)	(0.007)	(0.014)	(0.014)
Observations	663	663	663	663	663	663
R-squared				0.054	0.097	0.097

Notes: This table reports ordered logit and OLS estimates of the relationship between CEO characteristics and interim reporting frequency (IRF) across small, medium-sized, and large firm subsamples. All models include the reported firm-level control variables, together with year and industry effects. Standard errors are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 4.20 examines whether the relationship between board governance mechanisms and voluntary IRF differs across firm-size groups. This analysis helps determine whether the influence of governance mechanisms depends on the organisational context. Agency theory suggests that governance mechanisms can reduce information asymmetry and strengthen the monitoring of management (Jensen and Meckling, 1976; Fama and Jensen, 1983). However, their influence may differ across firm sizes because firms vary in organisational complexity, information needs, and coordination requirements.

For small firms, board size is negative and statistically significant in both the ordered logit and OLS models. The ordered logit coefficient is negative and significant at the 1% level ($\beta = -0.569$), while the OLS coefficient is also negative and significant ($\beta = -0.045$, $p < 0.01$). These consistent results suggest that larger boards among small firms are associated with less frequent voluntary interim reporting. Although larger boards may provide more expertise and monitoring, they may also create greater coordination and communication difficulties, as discussed in Chapter 2. These difficulties may reduce the efficiency of board decision-making. Such coordination costs may be particularly important for smaller firms, where the additional benefits of having more directors may be limited.

For medium-sized firms, the results show a different pattern. Board independence is negatively and significantly associated with IRF in the ordered logit model ($\beta = -1.710$, $p < 0.05$). Board size is insignificant in the ordered logit model but negative and significant in the OLS model ($\beta = -0.040$, $p < 0.01$). The negative relationship between board independence and IRF differs from the positive monitoring effect generally expected under agency theory. One possible explanation is that independent directors may focus more on the quality, reliability, and credibility of financial reporting than on increasing reporting frequency. Therefore, stronger board oversight in a voluntary reporting environment does not necessarily lead to more frequent interim reporting. Effective governance may improve the quality and discipline of reporting without requiring firms to report more often.

Leverage is also an important determinant of IRF among medium-sized firms. It is positive and statistically significant in both the ordered logit ($\beta = 6.239$, $p < 0.05$) and OLS ($\beta = 0.320$, $p < 0.05$) models. This finding is consistent with agency theory and the full-sample results reported earlier in this chapter. Higher leverage may increase agency conflicts between shareholders and creditors and lead to greater monitoring

by creditors. As a result, firms may have stronger incentives to provide information more frequently. The findings therefore suggest that creditor-related reporting incentives may be particularly important for medium-sized firms.

For large firms, the OLS results show negative relationships between board independence ($\beta = -0.097$, $p < 0.05$) and audit committee independence ($\beta = -0.002$, $p < 0.05$) and IRF. These findings differ from the general agency theory expectation that greater independence should encourage greater disclosure. However, one possible explanation is that larger firms usually have more developed governance and reporting systems. Independent directors and audit committees may therefore focus more on reporting quality, credibility, and regulatory compliance than on increasing reporting frequency. Thus, the negative relationships do not necessarily mean that greater independence reduces transparency. Instead, independent governance mechanisms may focus on other aspects of reporting rather than frequency. However, these findings should be interpreted cautiously because they are not consistently significant across all specifications.

Across all firm-size groups, board gender diversity does not have a statistically significant direct relationship with IRF. This is broadly consistent with the main board-level analysis, where board gender diversity did not show a consistent direct effect. However, this result should be considered together with the interaction analysis reported in Section 4.5.3, where board gender diversity significantly moderates the relationship between CEO myopia and IRF. Together, these findings suggest that board gender diversity may be more important in influencing how CEO characteristics affect reporting decisions than in directly increasing reporting frequency. This interpretation is also consistent with the critical mass analysis, which suggests that the influence of female directors may depend on their level of representation on the board.

Overall, the firm-size subsample analysis shows that board governance mechanisms do not influence voluntary IRF in the same way across all firms. Board size appears to be particularly important for small firms, while board independence and leverage are more relevant in some of the other size groups. These differences support the broader argument that the influence of governance mechanisms depends on the organisational context. From an agency theory perspective, the costs and benefits of governance and monitoring may differ according to firm complexity and external financing pressures. The findings for board size also suggest that the coordination costs of larger boards may sometimes outweigh their monitoring benefits. Overall, the

subsample results complement the main analysis by showing that the relationship between board governance and voluntary IRF is context-dependent rather than the same for all firms.

Table 4.20: Board level determinants and IRF across firm size subsamples

VARIABLES	(1) Ologit: Small	(2) Ologit: Medium	(3) Ologit: Large	(4) OLS: Small	(5) OLS: Medium	(6) OLS: Large
boardgender	0.00426	0.00186	0.00186	0.000351	4.67e-06	0.000285
	(0.0265)	(0.0386)	(0.0386)	(0.00114)	(0.00241)	(0.00335)
boardindep	-0.417	-1.710**	-1.710**	-0.0168	-0.00937	-0.0973**
	(0.624)	(0.746)	(0.746)	(0.0326)	(0.0539)	(0.0439)
boardsize	-0.569***	-0.139	-0.139	-0.0451***	-0.0400***	-0.00604
	(0.166)	(0.108)	(0.108)	(0.0117)	(0.0152)	(0.00965)
ACindependence	-0.00707	-0.0352	-0.0352	0.000901	0.00172	-0.00216**
	(0.0176)	(0.0225)	(0.0225)	(0.000946)	(0.00192)	(0.00107)
Ownership	0.0162	-0.0298	-0.0298	0.00105*	0.00148	-0.00210
	(0.0122)	(0.0186)	(0.0186)	(0.000589)	(0.00198)	(0.00187)
ROA	-0.158	2.469	2.469	0.000842	0.352	0.0664
	(1.210)	(2.597)	(2.597)	(0.0562)	(0.215)	(0.126)
Leverage	1.393	6.239**	6.239**	0.0560	0.320**	0.274*
	(2.578)	(2.963)	(2.963)	(0.0837)	(0.159)	(0.155)
Liquidity	0.173	-0.0196	-0.0196	0.00157	-0.00692	-0.00136
	(0.417)	(0.125)	(0.125)	(0.0121)	(0.0147)	(0.00893)
year	0.155	0.0764	0.0764	0.00563	-0.00814	0.00341
	(0.127)	(0.105)	(0.105)	(0.00554)	(0.00901)	(0.00882)
Industry	-0.110	0.00110	0.00110	-0.00150	0.0116	-0.00215
	(0.124)	(0.133)	(0.133)	(0.00577)	(0.0137)	(0.00592)
/cut1	304.2	147.2	147.2			
	(256.9)	(211.6)	(211.6)			
/cut2		157.6	157.6			
		(211.8)	(211.8)			
Constant				-9.188	18.35	-4.710
				(11.16)	(17.96)	(17.76)
Observations	639	657	657	639	657	657
R-squared				0.218	0.086	0.090

Notes: This table reports ordered logit and OLS estimates of board-level determinants of interim reporting frequency (IRF) across small, medium-sized, and large firm subsamples. The models include board gender diversity, board independence, board size, audit committee independence and the reported firm-level control variables, together with year and industry effects. Standard errors are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Overall, the firm-size subsample analyses show that the determinants of voluntary IRF differ across firm-size groups. The influence of CEO characteristics and board governance mechanisms is not the same for all firms, suggesting that reporting decisions depend partly on the organisational context in which managers and boards operate. These findings complement the full-sample results by showing that the relationships identified in the main analysis may vary across different types of firms. Consistent with upper echelons theory, the

influence of CEO characteristics appears to depend on the organisational context. Similarly, the governance findings are consistent with agency theory, which suggests that monitoring effectiveness and agency costs may differ across organisational settings (Hambrick and Mason, 1984; Fama and Jensen, 1983). Overall, the subsample results show that voluntary interim reporting is a context-dependent decision influenced by firm characteristics, CEO attributes, and governance structures.

4.5.4.2 Subsample analysis by industry

To examine whether the determinants of voluntary IRF differ across industries, the sample is divided into manufacturing and non-manufacturing firms based on industry classification. Separate ordered logit models are estimated for each group to examine whether reporting behaviour differs across sectors. This analysis recognises that firms in different industries may face different financing needs, operating conditions, information environments, and external monitoring pressures. Therefore, from agency and signalling perspectives, the benefits and costs of frequent reporting may differ depending on the industry in which the firm operates (Jensen and Meckling, 1976; Spence, 1973).

Table 4.21 presents the results for the firm-level determinants of IRF across the two industry groups. Several findings are similar across the two subsamples. For manufacturing firms, firm size ($\beta = 0.079$, $p < 0.10$), profitability ($\beta = 1.999$, $p < 0.10$), and leverage ($\beta = 2.441$, $p < 0.01$) are positively and significantly associated with IRF. The positive relationship between firm size and IRF is consistent with the argument developed in Chapter 2 that larger firms face greater public attention and information demands, which may increase their incentives to report more frequently. The positive relationship between profitability and IRF is consistent with signalling theory, as more profitable firms may have stronger incentives to communicate favourable performance to the market. Similarly, the positive relationship between leverage and IRF is consistent with agency theory because firms with higher debt levels may face greater monitoring and information demands from creditors.

Liquidity, however, is negatively and significantly associated with IRF among manufacturing firms ($\beta = -0.288$, $p < 0.01$). This finding differs from the positive relationship originally expected and should therefore be interpreted cautiously. One possible explanation is that manufacturing firms with lower liquidity may face greater short-term financing pressures and may therefore have stronger incentives to provide frequent information to external capital providers. More frequent reporting may help reduce information asymmetry about the firm's

short-term financial position. However, because the direction differs from the expected relationship, the finding suggests that the effect of liquidity on voluntary IRF may depend on the industry context.

For non-manufacturing firms, profitability ($\beta = 2.239$, $p < 0.01$) and leverage ($\beta = 2.110$, $p < 0.01$) are also positively and significantly associated with IRF. The consistency of these relationships across both industry groups provides further support for the full-sample findings. The profitability result is consistent with signalling theory, while the leverage result is consistent with agency theory and the role of creditor monitoring. Firm size is also positive and statistically significant ($\beta = 0.081$, $p < 0.05$), suggesting that the relationship between firm size and frequent reporting is not limited to manufacturing firms.

An important difference between the two industry groups is the relationship between liquidity and IRF. Unlike the manufacturing subsample, liquidity is positively and significantly associated with IRF among non-manufacturing firms ($\beta = 0.120$, $p < 0.05$). This positive relationship is more consistent with signalling theory, as firms with stronger liquidity positions may be more willing to report frequently to communicate their stronger financial position to the market. The opposite relationships found across the two industry groups suggest that the effect of liquidity on reporting frequency depends on the firm's operating environment. Therefore, the results do not support one general relationship between liquidity and IRF across all industries. Analyst following, ownership concentration, and assets in place remain statistically insignificant across both industry groups. This suggests that the insignificant relationships found for these variables in the main analysis are not mainly caused by differences between manufacturing and non-manufacturing firms. Instead, their limited influence on voluntary IRF appears to be similar across both groups.

Overall, the industry subsample analysis shows that some determinants of voluntary IRF are relatively consistent across industries, while others depend on the industry context. Firm size, profitability, and leverage generally remain positively associated with IRF, providing further support for the agency and signalling explanations developed in Chapter 2. In contrast, liquidity has opposite relationships with IRF across manufacturing and non-manufacturing firms. This suggests that firms operating under different financing and operating conditions may have different incentives to report frequently. Overall, the findings complement the full-sample analysis by showing that voluntary interim reporting decisions are influenced not only by firm characteristics but also by the industry context in which firms operate.

Table 4.21: Sectoral differences in the determinants of interim reporting frequency

VARIABLES	(1) Manufacturing IRF	(2) Non-manufacturing IRF
FirmSize	0.079*	0.081**
	(0.042)	(0.033)
ROA	1.999*	2.239***
	(1.114)	(0.813)
Leverage	2.441***	2.110***
	(0.927)	(0.619)
Liquidity	-0.288***	0.120**
	(0.104)	(0.061)
Analystfollowing	0.027	0.001
	(0.019)	(0.016)
Ownership	0.016	-0.005
	(0.010)	(0.006)
Assetinplace	-0.106	0.078
	(0.106)	(0.114)
Observations	989	1000

Notes: This table reports ordered logit estimates of the firm-level determinants of IRF for manufacturing and non-manufacturing firms. IRF is an ordinal measure, with higher values indicating more frequent interim reporting. FirmSize is the natural logarithm of total assets; ROA measures profitability; Leverage is total debt divided by total assets; Liquidity is current assets divided by current liabilities; Analystfollowing is the number of analysts following the firm; Ownership represents the percentage of closely held shares; and Assetinplace is defined as in Chapter 3. Standard errors are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Regarding to CEO characteristics across industries, table 4.22 presents ordered logit and OLS estimates of the relationship between CEO characteristics and IRF for manufacturing and non-manufacturing firms separately. The results provide further evidence that the influence of CEO characteristics on voluntary reporting decisions differs across industries. This is consistent with upper echelons theory, which suggests that organisational decisions are influenced by executives' characteristics and cognitive orientations, but that the extent of this influence may depend on the context in which decisions are made (Hambrick and Mason, 1984; Hambrick, 2007).

For manufacturing firms, CEO education is positive and statistically significant in both the ordered logit ($\beta = 2.335$, $p < 0.01$) and OLS models ($\beta = 0.069$, $p < 0.01$). This suggests that CEOs with the educational characteristics captured by the study's education measure are associated with more frequent voluntary interim reporting in manufacturing firms. From an upper echelons perspective, education may reflect differences in managerial knowledge, cognitive abilities, and information processing, which can influence strategic reporting decisions (Hambrick and Mason, 1984). Better-educated CEOs may therefore place greater importance on transparency and recognise the benefits of communicating financial information more frequently to external stakeholders.

This finding is particularly interesting because the main analysis does not show a consistently positive relationship between CEO education and IRF. The industry analysis therefore suggests that the influence of CEO education may depend on the industry context. In manufacturing firms, CEO knowledge and human capital may play a greater role in reporting decisions. However, this interpretation should be treated cautiously because the results show an association but do not identify the specific mechanism through which CEO education affects reporting frequency.

Other CEO characteristics, including CEO myopia and CEO tenure, are statistically insignificant among manufacturing firms. This suggests that the negative relationships found for CEO tenure and myopia in the main analysis are not evident in the manufacturing subsample. One possible explanation is that reporting decisions in manufacturing firms may be more strongly influenced by firm-level economic and operating factors than by individual CEO characteristics. This is also consistent with the firm-level industry analysis, where profitability and leverage are significant determinants of IRF among manufacturing firms.

In contrast, for non-manufacturing firms, CEO tenure is negative and statistically significant in both the ordered logit ($\beta = -0.111$, $p < 0.05$) and OLS models ($\beta = -0.011$, $p < 0.10$). This is consistent with the negative relationship found in the main analysis and with the argument developed in Chapter 2 that longer-tenured CEOs may become more established in their positions and less willing to change existing reporting practices. From an upper echelons perspective, CEO tenure may influence managerial experience, cognitive orientation, and willingness to change established organisational practices (Hambrick and Mason, 1984). The findings therefore suggest that CEO tenure is more relevant to voluntary reporting decisions among non-manufacturing firms.

CEO myopia is also negatively associated with IRF among non-manufacturing firms in both the ordered logit ($\beta = -1.161$, $p < 0.10$) and OLS models ($\beta = -0.117$, $p < 0.10$), while it is insignificant among manufacturing firms. This difference provides further support for the behavioural argument developed in Chapter 2. Short-term-oriented CEOs may be less willing to report frequently when frequent reporting increases external scrutiny and exposes managerial performance to more regular market evaluation. The finding is consistent with upper echelons theory because it suggests that managerial orientation can influence voluntary reporting decisions. However, the results also show that this influence differs across industries.

CEO gender, age, and duality are not statistically significant in either industry group. This suggests that these CEO characteristics do not have a clear influence on IRF within either subsample. In contrast, the different results for CEO education, tenure, and myopia show that some CEO characteristics may become more important depending on the industry in which the firm operates.

Regarding the firm-level controls, profitability is positive and statistically significant in both industry groups, while leverage and liquidity are mainly significant among non-manufacturing firms. These findings show that CEO characteristics operate alongside firm-level economic factors in influencing voluntary reporting decisions.

Overall, table 4.22 shows that the relationship between CEO characteristics and voluntary IRF differs across industries. CEO education is positively associated with IRF among manufacturing firms, while CEO tenure and CEO myopia are negatively associated with IRF among non-manufacturing firms. These findings extend the full-sample results by showing that CEO characteristics do not influence reporting decisions in the same way across all industries. Consistent with upper echelons theory, managerial characteristics are relevant to voluntary reporting behaviour, but their influence depends partly on the industry and organisational context in which CEOs make their decisions.

Table 4.22: Industry based subsample analysis of CEO Characteristics and IRF

	(1) Ologit: Manufacturing	(2) Ologit: Non-manufacturing	(3) OLS: Manufacturing	(4) OLS: Non-manufacturing
CEOgender	1.032	-1.096	0.023	-0.112
	(0.799)	(0.715)	(0.041)	(0.084)
CEOage	0.040	-0.008	0.003	-0.002
	(0.055)	(0.054)	(0.004)	(0.005)
CEOtenure	0.038	-0.111**	0.002	-0.011*
	(0.069)	(0.053)	(0.004)	(0.006)
CEOduality	-1.265	-1.014	-0.098	-0.119
	(0.843)	(0.891)	(0.089)	(0.117)
CEOeducation	2.335***	-0.295	0.069***	-0.023
	(0.744)	(0.824)	(0.026)	(0.077)
CEO Myopia	0.107	-1.161*	0.008	-0.117*
	(0.594)	(0.700)	(0.036)	(0.065)
FirmSize	0.122	0.126	0.012	0.017
	(0.108)	(0.089)	(0.013)	(0.014)
ROA	2.199*	2.002*	0.120	0.157
	(1.132)	(1.181)	(0.096)	(0.110)
Leverage	1.977	2.357*	0.054	0.197*
	(1.782)	(1.306)	(0.103)	(0.101)
Liquidity	-0.100	0.291*	-0.012	0.027**
	(0.177)	(0.153)	(0.018)	(0.013)
Observations	989	1000	989	1000
R-squared			0.067	0.089

*Significance at the 10% level; ** significance at the 5% level; *** significance at the 1% level. Coefficients for each variable are reported, and z-statistics/t-statistics appear in brackets.

In addition, the analysis is further extended to examine whether the relationship between board governance mechanisms and IRF differs between manufacturing and non-manufacturing firms. This comparison is important because the influence of governance

mechanisms may depend on the industry and organisational environment in which boards operate. From an agency theory perspective, boards play an important monitoring role by limiting managerial discretion and reducing information asymmetry between managers and shareholders. However, the effectiveness of different board characteristics may vary across industries. Table 4.23 presents the ordered logit and OLS results for the manufacturing and non-manufacturing subsamples.

The results show that board governance variables are more relevant to IRF among non-manufacturing firms. In this group, board independence is positively and significantly associated with IRF in the ordered logit model ($\beta = 0.021$, $p < 0.05$), while the OLS coefficient is also positive and weakly significant ($\beta = 0.002$, $p < 0.10$). This suggests that greater board independence is associated with more frequent voluntary interim reporting among non-manufacturing firms. From an agency theory perspective, independent directors may provide stronger monitoring of management and encourage greater transparency to reduce information asymmetry and agency conflicts. This monitoring role may be particularly important in the post-2014 UK reporting environment, where firms have greater discretion over how frequently they provide interim information.

This result is also important when compared with the full-sample findings. Rather than suggesting that board independence has the same effect across all firms, the subsample results show that its positive relationship with IRF is mainly found among non-manufacturing firms. This suggests that the influence of board independence on voluntary reporting may depend on the industry context in which the board operates.

Board size is also negatively and significantly associated with IRF among non-manufacturing firms in both the ordered logit ($\beta = -0.450$, $p < 0.01$) and OLS models ($\beta = -0.039$, $p < 0.01$). This is consistent with the negative relationship found in the main analysis. Although larger boards may provide more expertise and resources, they may also experience greater coordination and communication difficulties and slower decision-making. These problems may reduce the board's ability to support timely and frequent voluntary reporting. This finding is consistent with the arguments discussed in Chapter 2 concerning both the benefits and potential costs of larger boards.

Leverage is also positively associated with IRF among non-manufacturing firms in both models (ordered logit: $\beta = 3.743$, $p < 0.01$; OLS: $\beta = 0.240$, $p < 0.05$). This finding is consistent with agency theory and the earlier firm-level results. Firms with higher leverage may face greater monitoring and information demands from creditors and other capital providers. More frequent interim reporting may therefore help reduce information asymmetry and support external monitoring.

In contrast, the board governance variables are generally insignificant among manufacturing firms. Board gender diversity, board independence, board size, and audit committee independence do not have statistically significant relationships with IRF in either the ordered logit or OLS model. This does not mean that governance mechanisms are unimportant in manufacturing firms. Instead, the results suggest that these particular board characteristics do not independently explain differences in reporting frequency within the manufacturing subsample.

This finding can also be considered together with the firm-level industry results reported in table 4.21, where profitability and leverage are positively associated with IRF among manufacturing firms. Taken together, the results suggest that financial characteristics show more consistent relationships with reporting frequency in manufacturing firms than the board governance variables examined in this study. However, these findings show associations and should not be interpreted as evidence that financial characteristics directly cause reporting frequency or are more important than governance mechanisms.

Board gender diversity and audit committee independence are statistically insignificant in both industry groups. The insignificant direct effect of board gender diversity is consistent with the earlier findings, which suggest that gender diversity may be more important as a moderating governance mechanism than as a direct determinant of IRF. In particular, the interaction analysis shows that board gender diversity weakens the negative relationship between CEO myopia and IRF. Similarly, the insignificant effect of audit committee independence may reflect the possibility discussed earlier that audit committees focus more on financial reporting quality, reliability, and compliance than on determining how frequently firms voluntarily report.

Overall, the findings show that the influence of board governance mechanisms on IRF differs across industries. From an agency theory perspective, the significant relationships of board independence and board size with IRF among non-manufacturing firms suggest that the effectiveness of board monitoring may depend on the organisational and industry context in which firms operate.

Table 4.23: Industry based subsample analysis of Board Governance Mechanisms and Voluntary IRF

	(1) Ologit: Manufacturing	(2) Ologit: Non-manufacturing	(3) OLS: Manufacturing	(4) OLS: Non-manufacturing
Board Gender Diversity (%)	0.005	0.016	0.000	0.001
	(0.019)	(0.030)	(0.001)	(0.002)
boardindep	0.008	0.021**	0.000	0.002*
	(0.016)	(0.010)	(0.001)	(0.001)
Board Size	-0.083	-0.450***	-0.007	-0.039***

	(0.153)	(0.125)	(0.011)	(0.010)
Audit Committee Independence (%)	-0.010	0.013	-0.001	0.001
	(0.025)	(0.018)	(0.001)	(0.002)
Ownership	0.024	-0.002	0.002	0.000
	(0.023)	(0.015)	(0.001)	(0.001)
FirmSize	0.117	0.051	0.014	0.010
	(0.096)	(0.075)	(0.014)	(0.007)
ROA	2.197	1.819	0.117	0.130
	(1.614)	(1.462)	(0.124)	(0.137)
Leverage	2.373	3.743***	0.088	0.240**
	(1.936)	(1.335)	(0.108)	(0.102)
Liquidity	-0.238	0.184	-0.022	0.018
	(0.202)	(0.173)	(0.020)	(0.013)
Observations	989	1000	989	1000
Pseudo R-sq.				
R-squared			0.061	0.159

Notes: This table reports ordered logit and OLS estimates of board-level determinants of IRF for manufacturing and non-manufacturing firm subsamples. IRF is the ordinal measure of interim reporting frequency, with higher values indicating more frequent reporting. Board Gender Diversity is the percentage of female directors on the board; Boardindep measures board independence; Board Size is the number of directors; and Audit Committee Independence is expressed as a percentage. Ownership, FirmSize, ROA, Leverage, and Liquidity are included as firm-level controls. Standard errors are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

In conclusion, the industry subsample analyses reported in Tables 4.21–4.23 show that the determinants of voluntary IRF differ between manufacturing and non-manufacturing firms. At the firm level, profitability and leverage are positively associated with IRF in both industry groups, while liquidity shows different relationships across the two groups. At the CEO level, CEO education is positively associated with IRF among manufacturing firms, while CEO tenure and myopia are negatively associated with IRF among non-manufacturing firms. At the board level, significant governance effects are mainly found among non-manufacturing firms, where board independence is positively associated with IRF and board size is negatively associated with reporting frequency.

Taken together, these findings suggest that voluntary interim reporting is influenced by firm characteristics, CEO attributes, and board governance, but the importance of these factors differs across industries. This is consistent with the theoretical framework of the study. Agency theory helps explain differences in monitoring and disclosure incentives across firms, while upper echelons theory helps explain why the influence of CEO characteristics may depend on the industry context in which CEOs make reporting decisions. Overall, the findings support the use of industry controls in the main analysis and show that the determinants of voluntary IRF do not operate in the same way across different industry settings.

4.5.4.3 COVID-19 period and industry specific effects

To examine whether IRF changed during the COVID-19 period and to assess the robustness of the study's main findings to pandemic-related shocks, additional analyses are conducted comparing the pre-COVID period (2015–2019) with the post-COVID period (2020–2022). In addition, ordered logit regression models incorporating a COVID-19 dummy variable and industry controls are estimated to evaluate whether the pandemic exerted an independent effect on interim reporting behaviour after controlling for firm-, CEO-, and board-level characteristics.

Table 4.24 presents a comparison of the mean and variance of IRF before and after the onset of the COVID-19 pandemic. The results show a modest increase in average IRF from 1.915 in the pre-COVID period to 1.933 in the post-COVID period. However, this difference is not statistically significant based on the two-sample t-test ($t = -1.34$, $p = 0.181$), suggesting that firms did not uniformly increase interim reporting frequency in response to the pandemic.

By contrast, the variance of IRF is slightly higher in the post-COVID period, and the robust variance test indicates that this difference is statistically significant at the 10% level ($F = 3.07$, $p = 0.080$). This finding suggests increased dispersion in interim reporting practices following the outbreak of COVID-19, indicating that firms responded heterogeneously to the crisis. While some firms appear to have increased reporting frequency, potentially to reduce uncertainty and reassure investors, others maintained or reduced their reporting intensity. Such divergence is consistent with the view that crisis periods amplify firm-specific disclosure strategies rather than generating a uniform reporting response across firms.

Table 4.24: Mean and variance comparison of IRF: pre-COVID (2015–2019) vs. post-COVID (2020–2022)

Test	Pre-COVID (2015–2019)	Post-COVID (2020–2022)	Difference / F	p-value
Mean IRF (t-test)	1.915 (N=1107)	1.933 (N=882)	-0.018 (t=-1.34)	0.181
Variance IRF (robvar W0)	0.298	0.300	F=3.07	0.080*

Notes: This table compares IRF between the pre-COVID period (2015–2019) and the 2020–2022 period. IRF is the ordinal measure of interim reporting frequency, with higher values indicating more frequent reporting. The difference in mean IRF is assessed using a two-sample t-test, while differences in dispersion are assessed using a robust test for equality of variances. * Indicates statistical significance at the 10% level.

To examine whether IRF changed during the COVID-19 period and whether the main findings were affected by the pandemic, additional analyses compare the pre-COVID period (2015–2019) with the COVID/post-onset period (2020–2022). In addition, ordered logit models including a COVID-19 dummy variable and industry controls are estimated to examine whether the pandemic period is associated with IRF after controlling for firm-, CEO-, and board-level characteristics.

Table 4.24 compares IRF between the two periods. The results show a small increase in average IRF from 1.915 in the pre-COVID period to 1.933 during 2020–2022. However, this difference is not statistically significant (t = −1.34, p = 0.181). This suggests that firms did not generally increase their reporting frequency following the onset of COVID-19. This finding is important because the greater uncertainty created by the pandemic may have increased firms' incentives to communicate more frequently with investors. However, the insignificant difference suggests that these incentives did not result in an overall increase in reporting frequency across the sample.

In contrast, the variation in IRF differs between the two periods, with the robust variance test showing significance at the 10% level (F = 3.07, p = 0.080). This suggests that firms respond differently following the onset of COVID-19 rather than following the same reporting pattern. Some firms may have increased their reporting frequency because of greater uncertainty and stakeholder demand for information, while others may have maintained or reduced their reporting frequency. From a signalling perspective, some firms may have used more frequent reporting to reassure investors during this period of uncertainty. From an agency perspective, differences in monitoring and information asymmetry may also have influenced firms' reporting decisions. Overall, the findings suggest that the COVID-19 shock did not lead to the same reporting response across all firms.

Table 4.25: COVID-19 and industry effects on IRF

	(1)	(2)
VARIABLES	covid_model	industry_model
covid_dummy	-0.034	
	(-0.098)	
FirmSize	0.081***	0.081***
	(3.174)	(3.184)
ROA	1.376*	1.381*
	(1.779)	(1.786)
Leverage	2.777***	2.774***

	(4.625)	(4.623)
Liquidity	-0.023	-0.023
	(-0.373)	(-0.377)
Analystfollowing	0.023*	0.023*
	(1.671)	(1.681)
Ownership	-0.004	-0.004
	(-0.686)	(-0.684)
CEOgender	-0.754*	-0.754*
	(-1.783)	(-1.783)
CEOage	0.036*	0.036*
	(1.751)	(1.750)
CEOtenure	-0.051***	-0.051***
	(-2.632)	(-2.631)
CEOduality	-1.088***	-1.088***
	(-3.974)	(-3.973)
CEOeducation	0.552	0.551
	(1.172)	(1.170)
CEOmyopia	-0.752***	-0.752***
	(-3.030)	(-3.029)
boardgender	0.003	0.003
	(0.271)	(0.269)
boardsize	-0.344***	-0.344***
	(-8.986)	(-8.984)
boardindep	-0.443**	-0.444**
	(-2.285)	(-2.294)
ACindependence	0.004	0.004
	(0.639)	(0.638)
year	0.077	0.071
	(0.980)	(1.321)
Industry	0.025	0.025
	(0.672)	(0.672)
Observations	1,955	1,955
Industry FE	Yes	Yes
Year FE	Yes	Yes
Pseudo R2	0.166	0.166
Wald chi2	204.9	204.9

Notes: This table reports ordered logit estimates of the determinants of interim reporting frequency (IRF). COVID_dummy equals 1 for observations during 2020–2022 and 0 for observations during 2015–2019. IRF is the ordinal measure of interim reporting frequency, with higher values indicating more frequent reporting. Firm-, CEO-, and board-level characteristics are included as explanatory variables. z-statistics are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

To further examine whether COVID-19 is associated with interim reporting frequency after controlling for other factors, Table 4.25 presents ordered logit results that include a COVID-19 dummy variable together with firm-, CEO-, and board-level controls.The coefficient on the COVID-19 dummy is statistically insignificant ($\beta = -0.034$, $z = -0.098$). This provides no evidence that the COVID-19 period had a significant independent relationship with IRF after controlling for the other explanatory variables. This result is consistent with the mean comparison reported in Table 4.24 and suggests that the pandemic was not associated with a general increase or decrease in reporting frequency across firms.

Importantly, including the COVID-19 dummy does not substantially change the main findings. Firm size, profitability, and leverage remain positive and statistically significant. These findings are consistent with the theoretical arguments developed earlier in the thesis. From a signalling perspective, more profitable firms may have stronger incentives to communicate favourable performance to the market. From an agency theory perspective, larger and more leveraged firms may face greater external monitoring and information demands. The fact that these relationships remain significant suggests that these economic incentives for voluntary reporting continued to be important during the COVID-19 period.

In contrast, CEO tenure, CEO duality, and CEO myopia remain negative and statistically significant. The continued negative relationship between CEO myopia and IRF is particularly relevant to upper echelons theory, as it suggests that managerial characteristics remain important in explaining reporting decisions even after controlling for the COVID-19 period. Similarly, the negative relationship between CEO duality and IRF is consistent with agency theory, as greater concentration of managerial power may weaken board monitoring and reduce incentives for frequent voluntary reporting.

Board size and board independence also remain negatively associated with IRF. The negative relationship between board size and IRF is consistent with the main findings and may reflect the coordination and communication difficulties associated with larger boards. The negative relationship between board independence and IRF also supports the earlier finding that greater board independence does not necessarily lead to more frequent reporting. Instead, independent directors may focus on other aspects of reporting, such as its quality, reliability, and relevance, rather than simply increasing reporting frequency.

4.6 Conclusion

This chapter examined the determinants of voluntary IRF among UK FTSE All-Share non-financial firms following the removal of mandatory quarterly reporting in 2014. The results show that firm-level characteristics, particularly firm size, profitability, and leverage, are the most consistent determinants of more frequent interim reporting. In contrast, liquidity, analyst following, ownership concentration, and assets in place show limited or model-sensitive effects. These findings are broadly consistent with agency and signalling theories. Larger and more profitable firms may have stronger incentives to communicate information to the market, while firms with higher leverage may face greater monitoring and information demands from creditors. Overall, the findings suggest that voluntary IRF is more strongly associated with firms' economic characteristics and external monitoring pressures than with liquidity or other information-related characteristics.

At the CEO level, CEO tenure, CEO duality, and CEO myopia are negatively associated with IRF in the main analysis, although the strength of these relationships varies across alternative specifications. The negative relationships of CEO duality and CEO myopia are particularly important because they suggest that managerial power and short-term orientation can influence voluntary reporting decisions when managers have greater discretion over reporting frequency. These findings are consistent with agency theory and upper echelons theory, which highlight the importance of managerial incentives, power, and individual characteristics in corporate decision-making. Other CEO characteristics, including gender, age, and education, show less consistent effects across the different models. Overall, the results indicate that managerial characteristics and leadership structure can influence firms' voluntary reporting decisions in addition to firm-level economic factors.

At the board level, board size is negatively associated with IRF, suggesting that the coordination and communication difficulties of larger boards may reduce their ability to support frequent voluntary reporting. The evidence for board independence is more sensitive to model

specification and therefore does not provide consistent support for its expected monitoring role. Board gender diversity also does not show a consistent direct relationship with IRF. However, its importance becomes clearer when it is considered together with CEO myopia and when alternative critical mass measures are examined. Audit committee independence also shows limited evidence of a direct relationship with IRF. These findings suggest that board governance characteristics do not necessarily influence reporting frequency directly, and their effects may depend on the managerial and organisational context in which they operate.

Importantly, the moderation analysis shows that board gender diversity and board size weaken the negative relationship between CEO myopia and IRF. The negative relationship between CEO myopia and IRF becomes weaker as female representation on the board increases, with particularly clear evidence when the board includes at least two female directors. This finding is broadly consistent with critical mass theory, which suggests that female directors may have greater influence on board decisions when their representation becomes meaningful rather than symbolic. Similarly, although board size has a negative direct relationship with IRF, its positive interaction with CEO myopia suggests a more complex role. Larger boards may experience greater coordination difficulties, but they may also provide greater monitoring capacity that limits the influence of a myopic CEO on reporting decisions. These findings show that governance mechanisms can influence disclosure not only directly but also by limiting the effect of managerial characteristics on reporting decisions.

The subsample analyses provide further evidence that the determinants of IRF depend on the organisational context. The results differ between firm-size groups and between manufacturing and non-manufacturing firms. This suggests that firm size and industry setting influence the importance of economic, managerial, and governance factors. Firm-level financial characteristics remain important across industries, while some CEO and board characteristics are more relevant industry groups. These findings show the importance of considering differences across firms and industries when examining voluntary reporting behaviour.

The COVID-19 analysis shows no statistically significant change in the average level of IRF following the onset of the pandemic. Although there is some evidence of greater variation in firms' reporting behaviour during 2020–2022, the main determinants of IRF remain broadly similar. This suggests that firms did not respond to the pandemic by uniformly increasing or decreasing their reporting frequency. Instead, voluntary reporting decisions continued to reflect underlying economic, managerial, and governance characteristics.

The robustness tests provide further evidence on the stability of the main findings, although the results are not consistent across all models. Several relationships remain significant when alternative estimators and measures of IRF are used, while some become weaker or

statistically insignificant under firm fixed-effects estimation. This may partly reflect the limited changes in some explanatory variables within firms over time. Therefore, the robustness tests provide qualified rather than complete support for the main findings. This cautious interpretation avoids overstating the consistency of the results while showing that several of the main relationships are not limited to a single model specification.

In summary, this chapter shows that voluntary IRF in the UK is influenced by a combination of firm characteristics, CEO attributes, and board governance mechanisms. These factors do not operate independently or in the same way across all firms. Managerial characteristics interact with governance structures, while their influence also varies across firm size and industry context. The findings therefore provide a more detailed understanding of voluntary reporting behaviour following the removal of mandatory quarterly reporting in the UK. They also highlight the importance of both economic incentives and corporate governance in shaping managerial reporting decisions in a voluntary reporting environment. Next chapter 5 concludes the thesis by synthesising the key findings, outlining the study's theoretical and practical implications, acknowledging its limitations, and identifying avenues for future research.

Chapter 5 : Conclusion, limitations and areas for future research

5.1 Overview

The primary objective of this study is to investigate the determinants of voluntary interim reporting frequency in the UK following the removal of mandatory quarterly reporting in 2014. The study examines voluntary IRF from a multi-level perspective by considering firm-level characteristics, CEO behavioural and personal characteristics, and corporate governance mechanisms. Particular attention is given to CEO myopia and to whether board governance mechanisms moderate the relationship between managerial short-term orientation and voluntary reporting frequency.

This chapter brings together the main findings of the study and considers what they collectively reveal about voluntary interim reporting decisions in a deregulated reporting environment. Rather than repeating the individual empirical results presented in Chapter 4, the chapter synthesises the evidence to identify the broader economic, managerial, governance, and institutional factors associated with reporting frequency. It also considers the theoretical implications of the findings and how firm-level incentives, managerial behaviour, and governance oversight jointly contribute to explaining voluntary reporting decisions.

The remainder of the chapter is organised as follows. Section 5.2 provides an integrated discussion of the main findings and their theoretical interpretation. Section 5.3 discusses the practical and policy implications of the findings. Section 5.4 considers the limitations of the study and identifies directions for future research. Finally, Section 5.5 concludes the chapter by drawing together the overall findings and insights of the thesis.

5.2 Integrated Discussion of Findings

This section integrates the principal findings of the study to explain how firm-level characteristics, CEO attributes, and corporate governance mechanisms jointly shape voluntary interim reporting frequency (IRF) in the UK following the Financial Conduct

Authority's (FCA) removal of mandatory quarterly reporting in 2014. Rather than considering the results separately by hypothesis or empirical model, the findings are considered together to identify the broader economic, managerial, governance, and institutional factors underlying reporting decisions in a deregulated environment.

Overall, the findings indicate that voluntary IRF is not determined by a single group of factors but reflects the combined influence of economic incentives, managerial behaviour, and governance oversight. At the firm level, firm size, profitability, and leverage emerge as the most consistent determinants of reporting frequency. Considered together, these findings suggest that removing mandatory quarterly reporting did not remove the underlying economic incentives for firms to provide frequent information. Larger firms face greater market visibility and information demand, profitable firms have stronger incentives to communicate favourable performance, and more highly leveraged firms face greater monitoring demands from creditors. In contrast, the weaker or model-sensitive findings for several other firm characteristics suggest that not all conventional disclosure determinants are equally important when reporting frequency is voluntary. The overall pattern therefore indicates that monitoring pressures and signalling incentives continue to influence reporting decisions even in the absence of a mandatory quarterly reporting requirement.

Firm-level incentives, however, provide only part of the explanation. The findings also show that managerial characteristics influence how firms exercise the discretion created by deregulation. In particular, the negative relationship between CEO myopia and IRF suggests that short-term managerial orientation may discourage frequent voluntary reporting. The evidence relating to CEO duality similarly indicates that greater concentration of managerial power may reduce firms' willingness to provide frequent interim information. At the same time, the less consistent findings for other CEO characteristics suggest that managerial influence does not arise simply from demographic characteristics. Rather, characteristics related to managerial orientation, experience, and decision-making power appear to be more relevant to voluntary reporting behaviour. This pattern is consistent with upper echelons theory because it suggests that corporate reporting decisions partly reflect the characteristics and preferences of senior executives, particularly when managers have greater discretion over reporting frequency.

The governance findings add a further dimension to this interpretation. Although several governance mechanisms do not show consistent direct effects on IRF, the moderation results indicate that their importance may lie partly in how they condition managerial discretion. This is particularly evident in the findings for board gender diversity. While gender diversity does not show a consistent direct relationship with reporting frequency, the interaction analysis indicates that greater or meaningful female representation weakens the negative association between CEO myopia and IRF. This suggests that board diversity may be more important in constraining managerial short-termism than in independently increasing reporting frequency. The critical mass analysis further indicates that the influence of female directors is not simply a linear function of increasing representation, with the strongest evidence emerging at particular levels of representation. More broadly, these findings demonstrate that the influence of CEO behaviour on voluntary disclosure depends partly on the governance environment in which managerial decisions are made.

Taken together, the findings support the integrated theoretical framework developed in Chapter 2. Agency theory helps explain why information asymmetry, external monitoring, managerial power, and governance oversight matter for voluntary reporting. Signalling theory helps explain why firms with stronger performance may have incentives to communicate information more frequently to the market. Upper echelons theory extends these economic explanations by recognising that managerial characteristics influence how executives respond to external incentives and reporting discretion. Resource dependence and critical mass theories further explain how board composition and representation may influence the board's ability to monitor and challenge managerial preferences.

Legitimacy and institutional theories provide an additional perspective by explaining why voluntary reporting decisions remain embedded within a wider market and regulatory environment even after deregulation. The removal of mandatory quarterly reporting did not remove investor expectations, established reporting practices, professional norms, or pressures for corporate transparency. Firms may therefore continue frequent reporting not only because of direct economic benefits but also because such reporting is consistent with established market expectations and accepted reporting practices. These external pressures operate alongside firm-

specific incentives and managerial discretion, helping to explain why deregulation does not necessarily result in firms abandoning frequent interim reporting.

The theories therefore operate at different but related levels. Agency and signalling theories explain important economic incentives for disclosure; legitimacy and institutional theories explain the wider external environment in which reporting choices are made; upper echelons theory explains how managerial characteristics influence firms' responses to these pressures; and resource dependence and critical mass theories explain how board structures may shape or constrain managerial reporting choices. The findings therefore support the use of a multi-theoretical framework rather than relying on a single explanation of voluntary disclosure behaviour.

A central insight emerging from the study is that deregulation changes the context in which reporting decisions are made rather than removing the incentives for disclosure. Once quarterly reporting is no longer mandatory, firms have greater discretion over reporting frequency, making managerial and governance factors more relevant to the reporting decision. External monitoring, signalling incentives, and institutional expectations may continue to encourage frequent disclosure, while managerial short-termism can operate in the opposite direction. Governance mechanisms can, in turn, condition the extent to which these managerial preferences influence reporting choices. Voluntary IRF in the UK post-2014 environment can therefore be understood as the outcome of the interaction between external information demands, managerial discretion, and corporate governance oversight.

Overall, the study provides an integrated answer to the research questions by showing that voluntary IRF is neither exclusively firm-driven, CEO-driven, nor governance-driven. Instead, reporting frequency reflects the combined influence of these different levels within the wider institutional environment. This interpretation helps explain why some traditional firm-level determinants remain important following deregulation, why managerial behaviour becomes relevant when firms have greater reporting discretion, and why governance mechanisms may influence disclosure both directly and by conditioning the relationship between managerial behaviour and reporting decisions. The following section considers the practical and policy implications arising from these findings

5.3 Implications of the Findings

The findings of this study have important implications for practice and policy in the context of voluntary interim reporting following regulatory deregulation.

5.3.1 Practical implications

The findings have practical implications for corporate boards, senior executives, investors, and analysts. For boards of directors, the results highlight the importance of governance oversight when firms have discretion over the frequency of interim reporting. In particular, the moderating role of board gender diversity suggests that meaningful female representation may strengthen the board's ability to constrain the influence of managerial short-termism on voluntary reporting decisions. The critical mass findings further suggest that the effectiveness of board diversity may depend on the level of female representation rather than simply the presence of female directors. Boards may therefore benefit from considering not only formal board composition but also whether their governance structures enable directors to exercise meaningful influence over reporting decisions.

For senior executives, the findings highlight the relevance of managerial behaviour and leadership structure to voluntary reporting decisions. The negative relationships between CEO myopia, CEO duality, and interim reporting frequency suggest that short-term managerial orientation and concentrated leadership power may be associated with less frequent voluntary disclosure. Firms seeking to maintain transparent reporting practices in a voluntary environment may therefore benefit from governance arrangements that provide effective oversight of managerial discretion and encourage reporting decisions that take account of the information needs of external stakeholders.

For investors and analysts, the findings suggest that reporting frequency may provide useful information when considered alongside firm characteristics, managerial attributes, and governance structures. In an environment where quarterly reporting is voluntary, differences in reporting frequency may reflect not only firms' economic circumstances but also differences in managerial behaviour and governance oversight. Investors and analysts may therefore benefit from considering the wider

organisational and governance context when evaluating firms' voluntary interim reporting practices.

5.3.2 Policy and regulatory implications

From a policy perspective, the findings provide insights into voluntary reporting behaviour following the removal of mandatory quarterly reporting. The evidence indicates that firms continue to differ systematically in their reporting frequency according to economic, managerial, and governance characteristics. This suggests that greater regulatory flexibility does not remove the incentives and pressures that shape corporate disclosure decisions; instead, it gives firms greater discretion over how frequently they provide interim information.

For regulators and standard setters, the findings highlight the potential importance of corporate governance in supporting transparency when reporting frequency is voluntary. In particular, the evidence that governance mechanisms can condition the relationship between CEO myopia and reporting frequency suggests that internal oversight may complement the wider regulatory framework. However, given that the study identifies associations rather than establishing causal effects, the findings should not be interpreted as implying that particular governance arrangements can substitute fully for reporting regulation. Rather, they suggest that the effectiveness of voluntary reporting regimes may depend partly on the governance environment within individual firms. Regulators may therefore wish to consider the interaction between reporting flexibility and internal governance when evaluating the operation of voluntary periodic reporting frameworks.

5.4 Summary of empirical findings

This section synthesises the empirical findings of the study and provides an integrated overview of the determinants of voluntary IRF among UK FTSE All-Share non-financial firms in the post-2014 deregulation period. Drawing on a comprehensive panel dataset covering 2015-2022, the analysis demonstrates that voluntary interim reporting behaviour in the UK reflects a combination of firm-level economic incentives, CEO

behavioural characteristics, and board-level governance mechanisms, rather than being driven by any single factor in isolation.

At the firm level, the results consistently indicate that economic importance and external monitoring pressures remain central determinants of voluntary interim reporting frequency. Firm size exhibits a strong and positive association with IRF across all baseline and robustness models, suggesting that larger firms continue to report more frequently even after quarterly reporting became voluntary. This finding reflects the greater public visibility, investor scrutiny, and reputational concerns faced by large firms, which increase the demand for timely and regular disclosure. Similarly, firm profitability is positively associated with interim reporting frequency, consistent with signalling theory. More profitable firms appear more willing to disclose information frequently to signal financial strength, reduce information asymmetry, and maintain investor confidence. Leverage also shows a robust positive relationship with IRF, indicating that firms with higher debt levels face stronger monitoring by creditors and therefore have greater incentives to provide frequent interim disclosures to reassure debt holders and mitigate agency costs.

In contrast, several firm-level characteristics commonly examined in the disclosure literature do not exhibit significant explanatory power in the UK voluntary reporting context once other controls are included. Liquidity, analyst following, ownership concentration, and assets-in-place are not consistently related to interim reporting frequency. These findings suggest that, following deregulation, voluntary interim reporting decisions are less influenced by short-term financial flexibility or the presence of information intermediaries and are instead driven by more fundamental economic and monitoring considerations. Overall, the firm-level results confirm that voluntary interim reporting frequency is not random but remains systematically related to firms' economic characteristics and monitoring environments.

At the managerial level, the study provides clear evidence that CEO characteristics and behavioural traits play an important role in shaping voluntary interim reporting decisions. CEO duality exhibits a strong negative and statistically significant association with IRF, indicating that firms in which the CEO also serves as board chair are less likely to engage in frequent interim reporting. This finding is consistent with agency theory, which predicts that concentrated managerial power weakens board

oversight and allows executives greater discretion over disclosure policies. In a voluntary reporting regime, such discretion appears to be associated with more conservative reporting behaviour and reduced transparency.

CEO age is positively associated with interim reporting frequency, suggesting that older CEOs are more likely to support frequent disclosure. This result aligns with upper echelons theory and stewardship arguments, which suggest that older executives may be more risk-averse, reputation-conscious, and concerned with maintaining organisational stability and stakeholder trust. By contrast, CEO tenure does not show a significant relationship with IRF, indicating that experience accumulated through tenure alone does not necessarily translate into stronger disclosure incentives once other firm and governance factors are considered. Similarly, CEO gender and CEO education do not show robust direct effects on interim reporting frequency, suggesting that these characteristics do not independently drive disclosure decisions in the UK post-deregulation setting.

The most pronounced managerial effect identified in the study relates to CEO myopia. The results show a strong and negative association between CEO myopia and interim reporting frequency, indicating that short-term oriented CEOs are significantly less likely to engage in frequent interim disclosure. This finding supports agency-based arguments and the managerial myopia literature, which suggest that executives with a short-term focus may avoid frequent reporting to reduce market scrutiny, delay the release of unfavourable information, or retain greater discretion over short-term performance outcomes. The evidence highlights CEO myopia as a key behavioural constraint on transparency in voluntary disclosure environments.

At the board level, the findings demonstrate that governance mechanisms influence voluntary interim reporting in a nuanced and selective manner. Board independence is positively and significantly associated with IRF, indicating that firms with a higher proportion of independent directors are more likely to engage in frequent interim reporting. This result supports the monitoring role of independent directors and suggests that, in the absence of mandatory reporting requirements, independent boards act as an important substitute for regulatory enforcement by promoting transparency and reducing information asymmetry.

In contrast, board size exhibits a negative and highly significant relationship with interim reporting frequency. Firms with larger boards are less likely to report frequently, consistent with governance research highlighting coordination difficulties, slower decision-making processes, and reduced monitoring effectiveness in larger boards. This finding underscores the importance of board efficiency rather than size alone in shaping disclosure outcomes. Board gender diversity does not display a significant direct association with IRF, suggesting that diversity alone may be insufficient to influence reporting frequency, particularly if female representation remains below a level required to exert meaningful influence. Audit committee independence is also not significantly related to interim reporting frequency, implying that audit committees may focus primarily on reporting quality and compliance rather than on the timing or frequency of interim disclosures.

A central contribution of the study lies in its examination of moderation effects between CEO myopia and board-level governance mechanisms. The interaction results provide strong evidence that governance structures condition the relationship between managerial behaviour and disclosure outcomes. Board gender diversity, measured using a critical mass threshold, significantly weakens the negative effect of CEO myopia on interim reporting frequency. This finding indicates that once a meaningful level of female representation is achieved, boards are better able to challenge managerial discretion and constrain the disclosure-reducing behaviour of myopic CEOs. Similarly, board size is found to moderate the relationship between CEO myopia and IRF, further demonstrating that governance structures shape how managerial behavioural traits translate into disclosure decisions.

The robustness analyses, including alternative model specifications and additional tests, confirm the stability of the main findings. Although some effects weaken under fixed-effects estimation due to limited within-firm variation, the direction and economic interpretation of the results remain consistent. Taken together, the empirical evidence demonstrates that voluntary interim reporting frequency in the UK post-2014 environment is a strategic outcome shaped by the interaction of firm-level incentives, managerial behaviour, and board-level governance mechanisms. Importantly, the findings show that governance mechanisms influence not only reporting outcomes, but also the way in which managerial behavioural traits shape disclosure decisions.

This integrated perspective provides a strong foundation for the concluding discussion of the study's contributions, implications, and avenues for future research.

Finally, Table 5.1 summarises the hypotheses tested in this study and their corresponding empirical outcomes. The table consolidates evidence across firm-level characteristics, CEO attributes, and board-level governance mechanisms, offering a clear overview of which theoretical predictions are supported in the UK's post-2014 voluntary interim reporting environment. Overall, the results provide strong support for hypotheses grounded in agency theory, signalling theory, and upper echelons theory, particularly those relating to economic incentives, managerial power, and board monitoring effectiveness. In contrast, hypotheses associated with demographic CEO attributes and symbolic governance characteristics receive limited empirical support. This pattern suggests that voluntary interim reporting frequency is shaped less by surface-level characteristics and more by underlying incentive structures, behavioural traits, and the distribution of decision-making power within the firm.

Table 5.1: Summary of hypotheses tests

Category	**Hypothesis**	**Statement**	**Result**
Firm-Level Characteristics and IRF	H1a	Larger firms are more likely to engage in voluntary interim reporting to reduce information asymmetry and meet stakeholder demands.	Accepted
	H1b	More profitable firms are more likely to engage in voluntary interim reporting to signal financial strength and attract investment.	Accepted
	H1c	Firms with higher leverage are more likely to engage in voluntary interim reporting to reassure creditors and mitigate potential agency costs.	Accepted
	H1d	Firms with higher liquidity are more likely to voluntarily disclose interim financial information more frequently in the UK.	Rejected
	H1e	Firms with greater analyst following are more likely to voluntarily disclose interim financial information more frequently in the UK.	Rejected
	H1f	Firms with higher ownership concentration are less likely to voluntarily disclose interim financial information frequently in the UK.	Rejected
	H1g	Firms with higher assets-in-place are less likely to engage in voluntary interim reporting due to lower perceived benefits in reducing information asymmetry.	Rejected
CEO Characteristics and IRF	H2a	Firms led by female CEOs are more likely to disclose interim reports frequently than those led by male CEOs.	Rejected

Category	Hypothesis	Statement	Result
	H2b	Firms with CEOs of shorter tenure are more likely to report interim financial information more frequently in the UK.	Rejected
	H2c	Firms with CEO duality are less likely to report interim financial information frequently in the UK.	Accepted (Negative)
	H2d	Firms led by younger CEOs are more likely to voluntarily disclose interim financial information frequently in the UK.	Rejected
	H2e	Firms led by more highly educated CEOs are more likely to report interim financial information frequently in the UK.	Rejected
	H2f	Firms led by myopic CEOs are more likely to report interim financial information frequently in the UK.	Rejected
Board-Level Governance and IRF	H3a	Firms with higher board gender diversity are more likely to report interim financial information more frequently in the UK.	Rejected
	H3b	Firms with a higher proportion of independent directors are more likely to report interim financial information more frequently in the UK.	Accepted
	H3c	Firms with larger boards are more likely to report interim financial information more frequently in the UK.	Rejected
	H3d	Firms with more independent audit committees are more likely to report interim financial information more frequently in the UK.	Rejected
Moderation Effects: CEO Myopia and Governance	H4a	Board gender diversity weakens the negative relationship between CEO myopia and voluntary interim reporting frequency.	Accepted
	H4b	Board size weakens the negative relationship between CEO myopia and voluntary interim reporting frequency.	Accepted

Note: "Accepted (Negative)" indicates a statistically significant relationship in the opposite direction to that hypothesised. Moderation hypotheses (H4a–H4b) are tested using interaction terms between CEO myopia and board-level governance variables in ordered logit models with year and industry fixed effects.

5.5 Limitations and suggestions for future research

Although this study provides evidence on the determinants of voluntary interim reporting frequency (IRF) among UK non-financial firms following the removal of mandatory quarterly reporting in 2014, several limitations should be acknowledged. These limitations also provide opportunities for future research to develop a broader understanding of voluntary interim reporting in deregulated reporting environments.

First, IRF is measured using an ordinal variable based on the frequency of interim reports issued within a financial year. Although this measure captures meaningful differences in reporting frequency, it does not capture differences in the content, quality, timeliness, or informativeness of individual interim disclosures. Firms reporting at the same frequency may differ considerably in the amount and type of information they provide. Future research could therefore combine reporting frequency with content-based or textual measures, such as narrative tone, forward-looking information, earnings guidance, or disclosure readability. This would provide a more complete understanding of both the frequency and quality of voluntary interim reporting.

Second, the study examines a selected set of observable CEO characteristics, including CEO myopia, age, tenure, gender, education, and duality. Although these variables capture important aspects of managerial characteristics and decision-making power, they cannot fully capture the psychological, incentive-based, and career-related factors that may influence executives' disclosure decisions. In particular, CEO myopia is measured using observable characteristics as a proxy for short-term managerial orientation rather than through a direct measure of managerial preferences. Future research could therefore consider alternative measures of CEO myopia and additional managerial characteristics, such as compensation incentives, equity ownership, career concerns, and risk preferences, where appropriate data are available.

Third, the governance analysis focuses mainly on structural board characteristics, including board size, independence, gender diversity, and audit committee independence. These measures provide information about board composition but do not fully capture how boards operate in practice. Governance effectiveness may also depend on factors such as meeting frequency, director expertise, boardroom interactions, information flows, and directors' ability to challenge management. Future research could incorporate measures of board processes and director expertise. Qualitative approaches, including interviews with directors, audit committee members, corporate secretaries, or senior executives, could also provide further insight into how decisions concerning voluntary interim reporting are made within firms.

Fourth, the study focuses on FTSE All-Share non-financial firms in the UK during the post-2014 period. The UK provides a particularly relevant setting because firms have discretion over routine interim reporting frequency while continuing to operate within an established disclosure and corporate governance framework. However, differences in regulatory systems, governance arrangements, ownership structures, enforcement, and capital-market characteristics may limit the extent to which the findings can be generalised to other jurisdictions. Future research could therefore conduct cross-country comparisons, particularly across jurisdictions with different approaches to periodic reporting, to examine whether the relationships identified in the UK are also observed in other institutional environments.

Fifth, the study focuses primarily on the determinants of voluntary IRF rather than its subsequent economic consequences. Future research could examine whether firms that continue to report more frequently following deregulation experience different capital-market outcomes from firms that reduce their reporting frequency. Relevant outcomes could include analyst following, market liquidity, cost of capital, investment behaviour, and market valuation. Such research could provide further evidence on whether frequent voluntary reporting generates measurable economic benefits or partly reflects established reporting practices following the removal of mandatory quarterly reporting.

Finally, although the study employs alternative model specifications and a range of robustness tests, the observational nature of the data means that potential endogeneity cannot be completely eliminated. Possible sources include omitted variables, reverse causality, simultaneity, and measurement error. Accordingly, the reported relationships should primarily be interpreted as empirical associations rather than definitive causal effects. Future research could employ research designs that provide stronger causal identification where appropriate and feasible, such as credible natural experiments, instrumental-variable approaches based on valid instruments, or other identification strategies designed to address specific sources of endogeneity.

Overall, these limitations do not reduce the relevance of the study but define the boundaries within which its findings should be interpreted. They also identify several opportunities to extend the research through richer measures of reporting behaviour and managerial characteristics, more detailed analysis of board processes, cross-

country comparisons, examination of the economic consequences of voluntary reporting, and research designs that provide stronger causal identification.

5.6 Conclusion

This thesis examined the determinants of voluntary interim reporting frequency (IRF) among UK FTSE All-Share non-financial firms following the removal of mandatory quarterly reporting in 2014. By considering firm-level characteristics, CEO attributes, and board governance mechanisms within a multi-level framework, the study provides an integrated understanding of the factors associated with firms' reporting frequency when greater reporting discretion is available.

Taken together, the findings show that voluntary IRF cannot be explained by a single set of determinants. Instead, reporting frequency reflects the combined influence of economic incentives, managerial behaviour, governance oversight, and the wider institutional environment. Firm-level economic and monitoring pressures remain important following deregulation, while managerial characteristics influence how executives exercise the discretion available to them. The governance findings further indicate that board mechanisms may influence reporting decisions not only directly but also by conditioning the relationship between managerial behaviour and disclosure choices. This is particularly evident in the relationship between CEO myopia and board governance, highlighting the importance of considering managerial and governance characteristics jointly rather than as independent influences on voluntary reporting.

More broadly, the findings suggest that the removal of mandatory quarterly reporting changed the context in which reporting decisions are made rather than removing the underlying incentives for disclosure. Firms continue to face information demands from investors and creditors, external monitoring pressures, established market expectations, and governance oversight even when reporting frequency is no longer prescribed. Greater regulatory flexibility therefore increases the importance of understanding how firms exercise their reporting discretion and why firms operating within the same regulatory environment may choose different reporting frequencies.

The findings also demonstrate the value of examining voluntary interim reporting through an integrated theoretical perspective. Agency and signalling theories help explain the economic, monitoring, and information-related incentives underlying disclosure decisions. Upper echelons theory highlights the role of managerial characteristics in shaping those decisions, while resource dependence and critical mass theories help explain how board characteristics may influence governance and constrain managerial behaviour. Legitimacy and institutional theories place these firm-level decisions within the wider market, social, and regulatory environment. Together, these perspectives show that voluntary reporting decisions arise from the interaction between external pressures and internal corporate decision-making rather than from either source in isolation.

Overall, the central conclusion of this thesis is that voluntary interim reporting in the UK post-2014 environment is a strategic corporate decision shaped by firm-level incentives, managerial discretion, governance oversight, and institutional pressures. Deregulation provides firms with greater flexibility over reporting frequency, but firms continue to operate within a wider environment of market expectations, monitoring demands, and governance constraints. The findings therefore show that understanding voluntary reporting frequency requires consideration of both the incentives facing firms and the managerial and governance processes through which reporting decisions are made. In this way, the thesis provides a broader understanding of how firms exercise reporting discretion and maintain corporate transparency when the frequency of interim reporting is voluntary.

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