FISHING IN TROUBLED WATERS

THE EFFECTS OF BLOCKHOLDER OWNERSHIP AND INSTITUTIONAL TRANSPARENCY ON EARNINGS MANAGEMENT IN EUROPE

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Fishing in Troubled Waters: The Effects of Blockholder Ownership and Institutional Transparency on Earnings Management in Europe

Abstract:

Nearly every firm, of any size, have at least one large shareholder; also known as a blockholder. This paper examines how multiple blockholders influence earnings management in European firms, and if firms with multiple blockholders in less transparent countries will utilize earnings management to a higher degree compared to their counterparts in transparent countries. Using a sample of 1,082 companies we find that firms with multiple blockholders will utilize earnings management compared to firms with a single blockholder due to increased governance. Furthermore we also find, although inconclusive, results that suggest that firms with multiple blockholders that operate in less transparent countries will display larger magnitudes of aggressive/positive earnings management compared to firms with a single blockholder.

Keywords:

Blockholder, Earnings Management, Corruption, Transparency, Europe

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1. Introduction

Nearly every firm, of any size, have at least one large shareholder; also known as a blockholder.¹ Firms around the world are following a trend towards increasingly concentrated ownership structures and today the three largest institutional asset managers globally (BlackRock, Vanguard, and UBS) control a dollar amount equivalent to the entire 2017 US economy, or around 20 trillion euros. Holderness (2016) confirms this trend and find that firms around the world have experienced increasingly concentrated, or stable, ownership structures despite growing exponentially in real terms. This trend has been further accelerated during COVID-19, with a rejuvenated interest in the stock market causing investors to deposit over 724 billion euros into European equity funds in 2021.²



Graph 1: European fund industry's AUM over time, €bn

Increasing amounts of large ownership positions has several implications on the firms that they possess. A large ownership stake can result in conflicts between controlling and minority shareholders, which give way to increased costs and inefficiencies. One such conflict arises as a result of incentives for large shareholders to manipulate reported financials in order to gain private benefits. While all shareholders can partake in most of the gains from this practice, called earnings management, the costs can effectively be diluted among several large blockholders. Because of this dynamic, the decision to manipulate earnings or not will depend on a cost-benefit tradeoff. Existing literature on multiple blockholders and earnings management have not arrived at a definite conclusion on whether multiple large shareholders increase or decrease earnings management, but most do agree on the fact that large shareholders will influence earnings management in some direction.

This graph shows the total assets under management (AUM) in the European fund industry between the years 2003-2021. Vertical axis represents reported AUM in billions of euros. Source: Refinitiv Lipper

¹ In this paper, we use the terms "large shareholder" and "blockholder" interchangeably.

² Source: Refinitiv Lipper, Alpha Insights.

The degree to which earnings management is influenced by blockholders depends on several factors, among these geography. North (1990) show that firm-level decisions resulting from managerial discretion will depend upon prevailing institutions within a country. To that effect, it is reasonable to assume that the impact of multiple blockholders on earnings management will vary across countries in Europe. Europe consists of 44 countries, each a host to different unique cultures and values. An important piece of this puzzle, although undesirable, is corruption. Every country displays a degree of corruption and institutional transparency, or lack thereof, and corruption forms societal norms which in turn shapes the decisions of managers and shareholders (Zucker, 1983; Eden and Miller, 2004).

Earnings management also have serious implications: wrongfully increased valuations, misleading financial information and deterring of new investors. With background to this, this study aims to answer the following research questions:

- *i.* Does a relationship exist between the existence of multiple blockholders and exploitation of earnings management in firms listed on a European stock exchange?
- *ii.* Will multiple blockholders exploit the practice of earnings management to a larger degree in firms listed in a country with a high level of corruption and low levels of institutional transparency, compared to multiple blockholders in countries with low corruption and high levels of institutional transparency?

The purpose of this study is twofold. First, we explore what effect multiple blockholders have on earnings management in publicly listed firms in Europe. Second, we introduce and test the idea of large shareholders in corrupt countries utilizing earnings management to a higher degree than large shareholders in non-corrupt countries, which will have adverse implications for the countries in which these firms operate.

The remainder of this paper is organized as follows: Section 2 presents findings of prior studies of interest. Section 3 develops our hypotheses. Section 4 explains our data collection process, methodology and summary statistics. Section 5 presents our empirical results. Section 6 discusses our findings. Section 7 concludes our study.

1.1 Theoretical framework

Blockholder

Blockholder is an alternative term used for describing a large shareholder. Today, it is no under-exaggeration to state that almost every company have at least one blockholder. Several studies have found evidence of the aforementioned statement, including La Porta, Lopez-de-Silanes, Schleifner and Vishny (1998) who states that "dispersed ownership in large public companies is simply a myth". Edmans and Manso (2011) show that 70% of US firms have multiple blockholders, and similar studies on Europe indicate a magnitude of 40-50% (Laeven and Levine, 2007; Maury and Pajuste, 2005; Faccio and Lang, 2002).³ Moreover, the ownership positions of blockholders have found to be consistent over time. A study done by Barclay and Holderness (1989) concludes that once a large block of shares has been created, it is rarely dispersed. Similarly, Donelli, Larrain and Urzúa (2011) examines a sample of firms in Chile and concludes that despite fluctuations in the

³ Edmans and Manso (2011) use a limit of 5% to define what a blockholder is.

economy, large shareholders persisted over a 20-year period. In addition to the prevalence of blockholders in public firms, the behavior of these large shareholders has evolved over time. Today, blockholders are more likely to engage in aggressive and hostile actions compared to 30 years ago (Edmans and Holderness, 2017).

Large shareholders do not act in isolation. They interact with other shareholders, and the effect that a blockholder has on a firm depends upon the nature of the blockholder, as well as the nature of the other shareholders (Edmans and Holderness, 2017). One example of a conflict that arise between large shareholders and other shareholders, the free-rider problem, is highlighted by Berle and Means (1932). The two authors warns that the dispersion of ownership in US firms will lead to passive ownership. No longer does any single shareholder have an incentive to monitor the firm which they own, causing agency costs to arise between owners and management. These costs are disproportionally borne by the largest shareholders, while the benefit of monitoring is shared amongst all; smaller shareholders free ride of the back of blockholders.

In order to understand blockholders, it is necessary to discern in which ways a blockholder can exert influence. A blockholder can do so mainly through two methods: voice and exit. *Voice* is a measure of voting power and influence over management and other shareholders. Voice can be practiced through a multitude of ways, including direct influence through a seat on the board, proposals to management, discussion with management and aggressive questioning during earnings calls (McCahery, Sautner and Stark, 2016). It is important to note that often a large or controlling shareholder will occupy at least one position as a director or officer within the firm they own, which enables the blockholder to exert direct influence. *Exit* is used as leverage in order to influence management, as a sale of the blockholders position will likely trigger a fall in the share price of the firm, and this is especially prominent in firms with multiple blockholders is less efficient at utilizing voice but more so the threat of exit (Laeven and Levine, 2007). Not only the action itself of either voice or exit acts as tool of control, but simply the threat of these two are enough to exert influence.

Although the concept of blockholders has been previously studied, there is no definite rule of what constitutes a blockholder. There are mainly two different metrics used to measure the ownership of a shareholder: absolute value of the position held and the percentage of shares owned. The rationale of using total value is that the incentive to influence a firm will exponentially increase with the size of a shareholder's position. Furthermore, a very small ownership stake in a large company can correspond to a very large absolute value. In line with this, Dimson, Karakas and Li (2015) studies a case of an anonymous asset manager and find that the asset managers small ownership stake of 0.06% in a firm corresponded to a large position in absolute value, which allowed the asset manager to sway a decision of management to get their proposal through successfully. However, most prior research measures a blockholder by the percentage of shares owned. There are two arguments to be made in favor of using this measurement. First, firm performance will impact shareholders in proportion to percentage of the firm owned. Second, the influence of a shareholder stand in proportion to its voting power, which is determined by the amount of shares owned (Edmans and Holderness, 2017).⁴ In this study, we follow the methodology of Jiang, Ma and Wang (2020) and use the total percentage of shares outstanding owned to measure blockholder ownership.

⁴ The issue of voting power and ownership is further discussed in Section 4.

Much like the ambivalence around blockholder measurement, there is no consensus regarding at which limit an ordinary shareholder becomes a blockholder. There are mainly two different views that prior literature offers on when a shareholder is large enough to be called a blockholder. The first view is that of Schleifer and Vishny (1986), who argue that a blockholder is a shareholder with the majority of voting rights, i.e. >50%. However, majority shareholders are often subject to voting restrictions and therefore not always able to single-handedly control a company. The arguments against defining a blockholder as owning >50% of the votes are further strengthened by the findings of Holderness (2009), who find that ownership positions slightly above 50% are, in practice, uncommon. The opposing view is that the lower cutoff for a blockholder can be found somewhere within the range of 5-20%. The most common limits used in existing literature are 5% and 10%. In this paper we follow the methodology of Dlugosz, Rüdiger, Gompers and Metrick (2006) and define a blockholder as a shareholder that owns 5% or more of the shares in a company.

Earnings management

Earnings management is a common practice that is prevalent in firms all over the world. Previous research has provided several different definitions of earnings management. One of the most widely used was termed by Healy & Wahlen (1999) and is defined as follows: "Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers." The definition by Healy and Wahlen (1999) focus on the role of management in misleading investors by altering the financial statements. An alternative to this view was presented by Sankar and Subramanyam (2001). They take an opposite approach, in which management can utilize earnings management to share their superior information on future performance in order to better inform investors and signal expected future cash flows. Sankar and Subramanyam (2001) define earnings management as follows: "The flexibility in the choice of accounting methods to indicate the management decision-making on future cash flows." In this study, we adopt the commonly used view of Healy and Wahlen (1999), and define earnings management as a tool through which management and powerful shareholders can manipulate financial statements in order to realize personal gains.

Furthermore, earnings management can broadly be divided into two different types: real and accruals-based. Real earnings management is the act of manipulating real business transactions with the ultimate goal of impacting cash flows and is most commonly employed in order to mislead stakeholders into thinking that certain forecasts have been met when they, in fact, have not been. Some non-exhaustive examples of real earnings management include increased sales volume, decreased prices and cut-down of discretionary expenses (Roychowdhury, 2006). In contrast, accruals-based earnings management is the act of manipulating accruals through aggressive use of accounting techniques and switching between accounting frameworks (Lo, 2008).

There are three common strategies that managers can employ when practicing earnings management: cookie-jar reserves, big bath and income smoothing. Cookie-jar reserves occur when a firm chooses to create reserves during a good financial year, to later recognize this reserve as profits when the firm is performing poorly. For example, a "cookie-jar" liability can be utilized to meet earning expectations, even though the firm underperformed. Big bath is an expression for purposely recognizing significant losses all at once during a bad financial year in order to artificially increase earnings in coming periods, creating the impression that the firm is performing better than it actually is. Finally, the strategy of income smoothing aims to decrease volatility in net income through timing revenues and expenses to display artificially stable earnings.

The incentives for firms to exploit earnings management are fundamentally driven by the fact that financial reports are a key piece in investors investment decision processes (Douglas, Carlsson-Wall and Hjelström, 2014). There are three main reasons for engaging in earnings management: capital market incentives, exceeding analyst expectations and contracting incentives (Dechow, Sloan and Sweeney, 1996). First, the value of a company is of extra importance during corporate transactions, and therefore there are increased incentives to utilize earnings management during acquisitions, mergers, and equity offerings. Second, it has been found that the forecast of analysts plays an increasingly important role in the performance of a firms shares (Brown and Caylor, 2005). By using earnings management to reach analysts' expectations, a firm can create an illusion of good performance and inflate its valuation. Lastly, a number of contracts in financial markets depend on the performance of a company. One such example are bond covenants, and through managing earnings a company can ensure that they do not breach these.

However, while the incentives to manage earnings are plenty there are also adverse effects. The main cost associated with earnings management is legal costs, for example litigation. Once detected, earnings management have significant negative financial and reputational implications for the practitioner (DuCharme, Malatesta and Sefcik, 2004; Dechow and Sweeney, 1996).

Corruption and institutional transparency

The organization Transparency International define corruption as "the abuse of entrusted power for private gain". Similarly, the United Nations describe corruption as "an insidious plague that has a wide range of corrosive effects on societies. It undermines democracy and the rule of law, leads to violations of human rights, distorts markets, erodes the quality of life and allows organized crime, terrorism and other threats to human security to flourish." (*Convention Against Corruption*, 2005). Acts of corruption include, among other, bribes, embezzlement and influence peddling (Kaufmann and Vicente, 2005). Furthermore, corruption can take place at many different levels of society, including both governments and corporations.

Corruption has been studied in several different contexts and has been shown to be correlated with two cultural dimensions, power distance and individualism/collectivism (Hofstede, 2001). Previous studies show that unethical behavior, such as corruption, is correlated with societal norms and therefore dependent on a country's values and culture (Ahmed, Chung, and Eichensehr, 2003; Trevino and Victor, 1992). This extends to corporations and their decision-makers, who are consequently more likely to display unethical and corrupt behavior if they are part of untransparent environments (Zucker, 1983; Eden and Miller, 2004). Of interest to this study, several studies have also been able to find a correlation between earnings management and corruption (Doupnik, 2008; Gray, Kang, Lin and Tang, 2015). A study by Oz and Yelkenci (2018) specifically show that corruption and earnings management in Europe are correlated.⁵

⁵ See appendix for illustration of global corruption levels, Exhibit 1.

2. Literature review

Jiang et al. (2020) study the prevalence of earnings management and multiple large shareholders in the Chinese market. They find a positive connection between increasing earnings management and multiple blockholders. Furthermore, they test this hypothesis looking at different kinds of blockholders. They find that firms with large shareholders of the same type, i.e. homogenous shareholders, will increase earnings management. Similarly, they find that earnings management increase when there is a larger ratio of large shareholders to the controlling shareholder, indicating that earnings management is indeed practiced more in firms with several blockholders. However, they also find that earnings management decreases when external governance is strong. Overall, the study carried out by Jiang et al. (2020) suggests that multiple blockholders enjoy larger benefits in relation to costs when managing earnings compared to a single blockholder.

The findings by Jiang et al. (2020) differs from those of Dou, Hope, Thomas and Zou (2016). Dou et al. (2016) examine the effect of blockholders and earnings management from a governance point of view. They instead find that blockholders cause managers to align their action with the interests of shareholders. The result of this, among other, is a decrease in earnings management.

However, a study by Cho, Chung and Liu (2019) find further evidence in favor of Jiang et al.'s (2020) findings. Cho et al. (2019) studies institutional blockholders influence on earnings management and earnings quality in the Korean market. They conclude that large shareholders fail to reduce earnings management in Korean firms.

In regard to corruption, a study by Oz and Yelkenci (2018) find evidence that legal origin and earnings management are correlated on a cross-country basis. Their study highlights two important aspects of legal origin, namely intensity of enforcement, which is related to corruption, and quality of accounting standards. Oz and Yelkenci (2018) highlights that earnings management will depend on the legal origins of the country of interest and varies between geographies.

Our contribution to the existing literature is threefold. First, our study contributes to an increased understanding of the effect that multiple blockholders have on earnings management. Previous studies have mostly focused on the effect of a single blockholder, however few studies focus on multiple blockholders even though most firms do indeed have more than one large shareholder. Furthermore, the majority of research on blockholders and earnings management focus on an agency-principal conflict between shareholders and management (Dou et al., 2016). In this study, in line with Jiang et al. (2020), we instead focus on the conflict that arise between multiple large shareholders and other shareholders due to the imbalance in power and skewed incentives to realize private gains at the expense of others. Second, we shed light on the influence of multiple blockholders and earnings management in Europe specifically. In general, previous research have focused on mainly the United States, due to extensive and readily available data, or emerging markets due to their unique market characteristics. However, the same attention has not been paid to Europe. Additionally, the studies that have been conducted on Europe focus on specific countries. Our study extends this reach and includes several European countries, and by doing so we are able to draw conclusions and compare across areas rather than focus on one isolated country. Lastly, we combine previous findings on corruption and earnings management with findings on blockholder ownership in order to introduce the idea that blockholders will exercise earnings management more aggressively in corrupt countries; a topic that, to our knowledge, have not yet been explored.

3. Hypotheses

We draw inspiration from Jiang et al. (2020) and employ a cost-benefit framework when formulating hypothesis 1a and 1b. There are several benefits related to manipulating earnings, the majority related to increasing the value of a shareholder's position either during a corporate transaction, artificially meeting analyst expectations and therefore inflating the share price as well as gaining access to more beneficial contract terms than would otherwise have been possible (Dechow et al., 1996). Blockholders will therefore leverage earnings management to extract private benefits at the expense of other shareholders (Bozec and Laurin, 2008; Cheung, Jing, Lu and Rau, 2009; Jiang, Lee and Yue, 2010). Furthermore, Dyck and Zingales (2004) show that detection of earnings management is rare. Overall, these findings indicate that benefits from earnings management will, for the most part, not be diminished by the number of large blockholders. However, costs associated with earnings management can be shared among several shareholders. When only one blockholder exists, this shareholder is likely to alone bear the cost of litigation and reputational damage while several blockholder will be able to divide the cost between themselves, therefore making earnings management less costly. This argument constitutes the cost-sharing view, and is the basis of our first hypothesis:

Hypothesis_{1a}: The presence of multiple blockholders will result in larger magnitudes of positive or negative earnings management, compared to a single blockholder

However, studies have also found evidence of decreased earnings management as a result of multiple blockholders. When blockholders monitor through the threat of voice and exit, managers will have less opportunities to utilize earnings management in order to realize personal gains and act against the interests of shareholders (Gomez and Novaes, 2005; Attig, Guedhami and Mishra, 2008). Therefore, it follows that multiple blockholders instead should decrease the amount of earnings management in a firm, which constitutes the governance view. Based on this, our second hypothesis is as follows:

Hypothesis_{1b}: Multiple blockholders will increase governance and therefore decrease the magnitude of positive or negative earnings management in a firm, compared to a single blockholder

Our second set of hypotheses aims to explore what, if any, effect that corruption and institutional transparency have on firms with multiple blockholders in regard to earnings management. Hypothesis 2a is based on prior research that show that once corruption becomes part of an individual's everyday life and belief system, it will play an important role in decisions that she makes (Doh, Rodriguez, Uhlenbuck, Collins and Eden, 2003). The result of societal exposure to corruption is a greater tolerance and acceptance of one's own corrupt behavior (Zyglidopoulos and Fleming, 2008). Furthermore, firms operating in corrupt countries have several reasons for exercising earnings management, including hiding bribes and altering profit in order to minimize the risk of extortion (Bishara, 2011; Rose-Ackerman, 2002). In short, these findings suggests that managers and shareholders in corrupt countries will be more susceptible to the act of manipulating earnings and have greater incentives to do so compared to firms in non-corrupt countries, which constitutes our third hypothesis:

Hypothesis_{2a}: Firms with multiple blockholders in a country with a high level of corruption will take advantage of lacking institutional transparency and increase the magnitude of positive or negative earnings management, compared to firms with a single blockholder

However, hypothesis 2a does not necessarily hold true. Yeh and Hwang (2000) find that culture and beliefs rarely change over time. Hence, even though a country has a high degree of corruption this does not necessarily influence managers and shareholders. Our fourth, and last, hypothesis express that corruption, although harmful, does not cause blockholders to utilize earnings management to a higher degree than blockholders in non-corrupt countries:

Hypothesis_{2b}: Blockholders in corrupt countries will not take advantage of low institutional transparency, and firms with multiple blockholders in corrupt countries will therefore not display higher levels of positive or negative earnings management compared to firms with a single blockholder

4. Data and methodology

4.1 Years and countries

We chose to limit our study to the years between 2010 and 2019. The reason for this is that we capture a relatively large number of years, while simultaneously excluding years in which extraordinary market activity endured. Just prior to 2010, global markets were experiencing the aftershock of the US housing crisis. Similarly, the start of 2020 saw the emergence of the COVID-19 virus. Both of these events greatly disrupted financial markets, and therefore also the ownership structure of many listed companies. Furthermore, the financial performance of companies during these crises did not accurately reflect average market conditions, and we therefore choose to exclude them.

The starting point when selecting countries to include in our study was the member countries of the European Union (EU). In addition to these, we added Russia, Switzerland and the United Kingdom (UK) to our sample. The rationale for adding the United Kingdom is that they were a member of the EU during the time period that we are limiting our study to. We added both Russia and Switzerland due to their large role in the European economy. We believe that our study will not be able to accurately reflect the European landscape if we were to exclude these three countries. There are two reasons that we chose the EU as our starting point. First, all members of the EU are required to prepare their financial statements in accordance with International Financial Reporting Standards (IFRS) since 2002 (Council Directive 1606/2002/EC, 2002). Therefore, reported financials of all EU-listed firms follow identical accounting rules which ensures comparability across our sample.⁶ Second, the aggregate economies of EU member countries constitute the second largest economy in the world in nominal terms, only beat by the United States. The nominal GDP of the EU was around 16 trillion euros in 2021, which represented about 17% of global GDP.⁷ By choosing the EU as our starting point, we capture a majority of European GDP while at the same time ensuring that all financial statements are prepared in accordance with identical rules.

⁶ We have removed all firms in non-EU countries (Russia and Switzerland) that do not follow IFRS to ensure total comparability.

⁷ Source: International Monetary Fund.

4.2 Firms and financial data

When constructing our sample of firms, we began with all companies currently listed on an exchange in one of our sample countries. Furthermore, we required that all firms must still be active today and then used FactSet to download all financial information required. Our initial screen resulted in a selection of 10,100 companies. First, we removed all firms that did not have complete financials for the years 2008-2020 or that have a broken fiscal year, which narrows our sample to 2,151 firms.⁸ Next, we followed the methodology of Jiang et al. (2020) and eliminated all firms belonging to the financial sector as they are subject to unique regulations, which removed 2% of our initial sample.⁹ We then removed all firms that were listed on an exchange post end-of-year 2009, as a firm has to have been listed during the entirety of our time period in order to allow for anyone to buy shares. This step removed 5% of the initial sample. Next, we eliminated all firms in our sample that do not follow IFRS regulations, which decreased our initial sample by 12%. Following the methodology of Kothari, Leone and Wasley (2005), we excluded all firms that are part of a sector or country with less than 10 firms included, which decreased our initial sample by 3%. In the next step, we removed all firms that have preferential shares and/or multiple classes of shares that grant different amounts of votes. We do this as we want to ensure that all shares in a firm grant the same voting power, and thereby enable us to measure a blockholders voting power by using the percentage of shares owned. This step removed 6% of our initial sample. Finally, we removed all firms that were missing data on ownership for the entirety of our time period, as well as all firms that did not have at least one blockholder during every year of our chosen period. These steps removed 12% and 10% of our initial sample, respectively. We arrived at a sample of 1,082 firms and 10,820 firm-year observations across 17 countries and 18 industries as shown in Table $1.^{10}$

4.3 Ownership data

Properly constructing a blockholder dataset requires careful consideration. Dlugosz et al. (2006) highlights the many dangers when collecting and processing blockholder data and have created a database with clean blockholder data for US firms.¹¹ Unfortunately, no such database exists for Europe. Therefore, we constructed our own dataset following the methodology presented by Dlugosz et al. (2006).

We began this process by downloading shareholder data for each firm included in our final sample through FactSet. We obtained the 50 largest shareholders, ranked in order of percentage of shares owned, for each firm between the years 2019-2010. There are two main problems that follow with downloaded ownership data: overlaps in holdings and preferred shares (Dlugosz et al., 2006). The bounds at which a shareholder within the European Economic Area is required to disclose their ownership in a company is regulated in accordance with the Transparency Directive (Council Directive 2001/34/EC, 2001). The European Securities and Market authority asserts that the lower bound is set at 5% or lower for all countries within the EU.¹² Our ownership data from FactSet

⁸ We require all firm to have complete financial data for 2020 as we use cash flow from operations in 2020, and require data for 2008-2009 as 2 of our variables include three-year lagged standard deviation. ⁹ "Initial sample" refers to our sample of firms after removing all firms missing financial data, i.e. our

sample of 2,151 firms.

¹⁰ A detailed table on the firm selection process can be found in the appendix, Exhibit 2.

¹¹ Database: *Blockholders (2004)*, available at Wharton Research Data Services.

¹² Detailed information on reporting limits can be found in the appendix, Exhibit 3.

displayed some of the issues highlighted by Dlugosz et al. (2006). A number of companies reported a total percentage ownership above 100%. We believe the reason for this is incorrectly collected data and double counting, or a recent merger or acquisition. To mitigate this issue, we manually adjust holdings for all firms displaying abnormally large total holdings or other irregularities. We addressed the issue of preferential shares when filtering firms to arrive at our sample.

Despite our best effort to clean the data, we recognize that potential flaws might persist. For example, although FactSet displays the ultimate parent entity for each shareholder we assume that some shareholders own shares through multiple entities, some not included in the FactSet database. Correctly categorizing these entities and consolidating all shareholder positions would require a lengthy, manual process. Furthermore, there are cases where our obtained data excludes an existing shareholder. Although we have manually checked many of these cases, there are likely some that are overlooked and would require rigorous cross-checking between databases in order to remedy.

Countries	Ν	Sectors	Ν
Austria	23	Commercial Services	79
Belgium	35	Communications	20
Croatia	12	Consumer Durables	53
Denmark	14	Consumer Non-durables	64
Finland	27	Consumer Services	68
France	138	Distribution Services	40
Germany	161	Electronic Technology	80
Greece	24	Energy Minerals	25
Italy	64	Health Services	16
Netherlands	26	Health Technology	63
Poland	49	Industrial Services	68
Portugal	19	Non-Energy Minerals	47
Russia	31	Process Industries	93
Spain	45	Producer Manufacturing	130
Sweden	41	Retail Trade	40
Switzerland	39	Technology Services	94
United Kingdom	334	Transportation	51
		Utilities	51
Total	1,082	Total	1,082

Table 1: Number of firms per country and sector

This table shows how the firms included in our sample (N = number of firms) are divided over countries and sectors. 17 countries and 18 sectors are represented in our sample.

4.4 Quantifying earnings management

A study done by Lo (2008) find that firms are conscious of the trade-off between costs and benefits of earnings management, and only select to practice it when the risk of detection is low which makes it hard to detect and quantify. In line with most previous research, we use accrual-based models to measure earnings management (Jones, 1991; Dechow et al., 1995; McNichols, 2002; Kothari et al., 2005). The fundamental concept that these models are based upon is the idea that discretionary accruals (DA) are a sign of earnings management and equal to the difference between actual accruals (TA) and normal accruals (NTA), as shown in the following equation:

$$DA = TA - NTA$$

Furthermore, accrual-based models have been shown to detect earnings management quite well, documented in earlier research by Kighir, Omar and Mohamed (2014) and Healy and Wahlen (1999). We have chosen to use the accrual-based models Modified Jones Model (Dechow et al., 1995) and McNichols Model (McNichols, 2002) to quantify earnings management. Both models scale variables with lagging assets to mitigate heteroskedasticity problems and increase comparability (Kotari et al., 2005).

Modified Jones Model

In the original Jones model (1991), earnings management is estimated by the residual term $\varepsilon_{i,t}$ through the following cross-sectional regression:

$$\frac{TA_{j,t}}{A_{j,t-1}} = \beta_0 + \beta_1 \frac{1}{A_{j,t-1}} + \beta_2 \frac{\Delta REV_{j,t}}{A_{j,t-1}} + \beta_3 \frac{PPE_{j,t}}{A_{j,t-1}} + \varepsilon_{j,t}$$
(i)

where $TA_{j,t} = NIBE_{j,t} - CFFO_{j,t}$ and stands for total accruals for firm j in year t, $NIBE_{j,t}$ stands for net income before extraordinary items and preferred shares for firm j in year t,

 $CFFO_{j,t}$ stands for cash flow from operation for firm j in year t,

 $A_{j,t-1}$ stands for total assets for firm j in year t-1 (e.g. opening balance of the year), $\Delta REV_{j,t}$ stands for change in revenue for firm j in year t,

 $PPE_{j,t}$ stands for total property, plant, and equipment (gross) for firm j in year t, and $\varepsilon_{j,t}$ stands for the residual term for firm j in year t, which also acts as the proxy for earnings management.

This model (i) is used for estimating discretionary accruals per sector on a yearly basis. The left-hand side of the equation represents total accruals while the right-hand side represent normal accruals, which therefore makes the residual term represent the discretionary accruals that are manipulated by management. In the original Jones Model, revenues and gross property, plant and equipment are assumed to be non-discretionary. Dechow et al. (1995) suggests a modification of the original Jones Models (i) way of calculating normal accruals, and instead proposes the following change to the non-discretionary part of the original Jones Model:

$$\frac{NTA_{j,t}}{A_{j,t-1}} = \hat{\beta}_1 \frac{1}{A_{j,t-1}} + \hat{\beta}_2 \frac{\Delta REV_{j,t} - \Delta REC_{j,t}}{A_{j,t-1}} + \hat{\beta}_3 \frac{PPE_{j,t}}{A_{j,t-1}} + \varepsilon_{j,t}$$
(ii)

where $\hat{\beta}$ stands for the estimated coefficients from the original Jones model (i). The proposed modification is the new term $\Delta REC_{j,t}$, which stands for the change in account receivables in firm j and year t. This new variable is subtracted from the change in revenues, as revenues can to some extent be manipulated by management. The model (ii) assumes that revenues can be altered, but only by credit sales, as opposed to cash sales, and therefore subtracts the change in account receivables to mitigate this. The new residual term $\varepsilon_{j,t}$ act as the proxy for earnings management in this case also and is throughout this paper referred to as EM_MJ . To go from the original Jones Model (i) to Modified Jones Model (ii), we add the residual term estimated from the original Jones Model (i) to $\hat{\beta}_2 * \Delta REC_{i,t}/A_{i,t-1}$.

McNichols Model

McNichols (2002) suggests an alternative to the original Jones Model (i), which is to include cash flow terms to mitigate issues where residuals are correlated with past, current, and future cash flows. Including cash flows in the model has proven to increase the explanatory power compared to the original Jones Model (i) and Modified Jones Model (ii) (McNichols, 2002):

$$\frac{TA_{j,t}}{A_{j,t-1}} = \beta_0 + \beta_1 \frac{CFFO_{j,t-1}}{A_{j,t-2}} + \beta_2 \frac{CFFO_{j,t}}{A_{j,t-1}} + \beta_3 \frac{CFFO_{j,t+1}}{A_{j,t}} + \beta_4 \frac{\Delta REV_{j,t}}{A_{j,t-1}} + \beta_4 \frac{PPE_{j,t}}{A_{j,t-1}} + \varepsilon_{i,t} \quad \text{(iii)}$$

where the change from the original Jones model (i) is to remove the term $1/A_{j,t-1}$ and add the cash flow term *CFFO* which stands for cash flows from operations. We introduce *CFFO* for previous, current, and next year into the regression and scale them by lagged assets.

Accrual-based model considerations

In order to use Modified Jones and McNichols models, we need to divide all firms into sector groups. We use FactSet's proprietary Revere Business Industry Classification (RBICS).¹³

There are two different approaches to estimating total accruals (TA): the balance sheet approach and the cash flow approach. The balance sheet approach was used in the early stages of these models but have since been proven to have shortcomings and incorrectly estimating discretionary accruals in cases where firms undergo non-operational activities, e.g. acquisition, mergers, or divestments (Collins and Hribar, 2002). To mitigate these issues, we use the cash flow approach.

Furthermore, there are two different approaches to which data points to use: timeseries or cross-sectional. The times-series approach uses firm observations before the event-year in order to estimate non-discretionary accruals (Jones, 1991). The shortcomings of this approach are the required large sample size for each firm and issues with survivorship bias due to a lack of datapoints for companies which don't survive long

¹³ Breakdown of RBICS can be found in the appendix, Exhibit 4.

enough (Subramanyam, 1996). We have chosen to use the cross-sectional approach, which use firm observations within the same industry at a specific point in time, to mitigate the issues with a time-series approach. However, we keep in mind that a cross-sectional approach assumes that all firms within an industry have the same estimates for coefficients of non-discretionary accruals, which can cause misclassification of discretionary accruals (Peasnell, Pope and Young, 2000).

Earnings management can take on both negative and positive values (Bergstresser and Philippon, 2006). In contrast to Jiang et al. (2020), we are interested in both the magnitude as well as the direction of earnings management in order to be able to fully answer our hypotheses. We therefore run two regressions at every stage, testing both absolute and non-absolute non-discretionary accruals as the dependent variable.

4.5 Quantifying corruption

There are several different measures that can be used in order to measure levels of corruption. In this study, we have chosen to use the Corruption Perceptions Index (CPI) created by Transparency International.¹⁴ Transparency International is one of the leading institutions that research corruption, and the CPI follows a rigorous methodology that has existed since 1995 (*Corruption Perceptions Index*, 2021). Using CPI allows us to estimate levels of corruption for countries in Europe while ensuring that the scores are comparable over time.

4.6 Multivariate regression: baseline

To study the effect that multiple blockholders have on the magnitude of earnings management in firms, we will use the following multivariate regression:

$$|EM_{j,t}| = \alpha_{j,t} + \beta_1 BLOCK_MULTI_{j,t} + \beta_2 TRANSPARENCY_I + \gamma' Controls + COUNTRY_i + INDUSTRY_i + YEAR_t + \varepsilon_{j,t}$$
(iv)

In addition, we use the following regression to study multiple blockholders effect on the direction (positive/negative) of earnings management:

$$EM_{j,t} = \alpha_{j,t} + \beta_1 BLOCK_MULTI_{j,t} + \beta_2 TRANSPARENCY_I + \gamma' Controls + COUNTRY_i + INDUSTRY_i + YEAR_t + \varepsilon_{i,t}$$
(v)

The difference between equation (iv) and (v) is the dependent variable $EM_{j,t}$ which represents earnings management measured in absolute and non-absolute terms. The independent variable of interest for our study is $BLOCK_MULTI_t$, which is a dummy variable that equals 1 if the firm has two or more blockholders (\geq 5% ownership), and otherwise 0 (Table 2). Another independent variable we examine is $TRANSPARENCY_I$, which takes on the value given by the Corruption Perceptions Index for each year.

To remove omitted variables bias, we include control variables. In accordance with earlier research from Warfield, Wild and Wild (1995), Dechow and Dichev (2002), Kothari et al. (2005) and Hribar and Craig Nichols (2007) we have included the following control variables: *ROA* is the firm's net income during the fiscal year divided by the total assets, *SIZE* is the natural logarithm of total assets, *TOBINQ* is the market value of equity plus total book value of liabilities divided by the book value of total assets, *LEV* represent

¹⁴ The scale of CPI changed in 2012. To mitigate this, we scaled 2010-2011 to match remaining years.

total debt divided by total assets. Additionally, *STDSA* and *STDCF* represent the standard deviation of sales and operating cash flow, respectively. *AGE* stands for the years the firm has been listed (Table 2). Earlier studies have shown that audit opinion and earnings management are correlated and that auditors have a conservative outlook against high (Bartov, Gul and Tsui, 2000; Francis and Krishnan, 1999; Bradshaw and Sloan, 2001). We therefore add *AUDIT_OP*, which will distinguish between unqualified opinions and other opinions on the financial statements. We also introduce $YEAR_t$ for each calendar year t to remove time effects and *INDUSTRY_j* to remove industry-fixed effects. Given that geographical area can affect earnings management, we also add *COUNTRY_j* to mitigate these effects (Oz and Yelkenci, 2018).

First, our baseline regression will use the entire dataset of firm-year observations to test if there exists an effect on magnitude and direction of earnings management in firms with multiple blockholders compared to firms with a single blockholder. Thereafter, we divide a selection of countries into two groups based on transparency and run our next set of regressions, to test the impact of corruption.

4.7 Multivariate regression: corruption

To study the possible effects that corruption have on earnings management in the context of multiple blockholders, we divide our sample countries into two groups: HIGH TRANSPARENCY and LOW TRANSPARENCY. In order to capture the effect of corruption with the least possible amount of noise, we divide our sample countries into top 25% and bottom 25% of average transparency scores over the period 2010-2019 (Exhibit 5). This division results in HIGH TRANSPARENCY including Sweden, Finland, Denmark and Switzerland while LOW TRANSPARENCY includes Russia, Croatia, Greece and Italy. The sample size of each group is 152 and 142 firms respectively, and the average transparency score over the period 2010-2019 for each group is 88 and 40 respectively.¹⁵ The variables used are identical to the baseline regression, in order to ensure comparability (Table 2).

In order to test the impact on magnitude that corruption might have, we use the following regression:

$$|EM_{j,t}| = \alpha_{j,t} + \beta_1 BLOCK_MULTI_{j,t} + \beta_2 TRANSPARENCY_i + \gamma' Controls + COUNTRY_i + INDUSTRY_i + YEAR_t + \varepsilon_{i,t}$$
(vi)

Similarly, we use the following regression to test the direction of earnings management based on corruption:

$$EM_{j,t} = \alpha_{j,t} + \beta_1 BLOCK_MULTI_{j,t} + \beta_2 TRANSPARENCY_i + \gamma' Controls + Country_i + INDUSTRY_i + YEAR_t + \varepsilon_{i,t}$$
(vii)

¹⁵ We perform the same test using all countries in our sample and find suggestive yet inconclusive results. This is likely due to the fact that countries with a transparency score in the middle 50% have far greater numbers of firms and including too many countries with different transparency scores creates noise.

Variable name	Description					
BLOCK_MULTI	Dummy variable that equals 1 if the firm has two or more shareholders with $\geq 5\%$ ownership, and equals 0 if the firm has only one blockholder					
EM_MJ	Non-absolute value of discretionary accruals as estimated in the Modified Jones model					
EM_MJ_AB	Absolute value of discretionary accruals as estimated in the Modified Jones model					
EM_MCN	Non-absolute value of discretionary accruals as estimated in the McNichols model					
EM_MCN_AB	Absolute value of discretionary accruals as estimated in the McNichols model					
ACE	Numbers of years the firm has been listed					
AGE	Numbers of years the firm has been listed					
ROA	Net income divided by ending balance of total assets					
SIZE	The natural logarithm of book value of total assets					
TOBINQ	Market value of equity plus total assets minus book value of equity divided with book value of equity					
LEV	Total debt divided by total assets					
STDSA	The standard deviation of sales divided by total assets, based on three years					
STDCF	The standard deviation of operating cash flow divided by total assets, based on last three years					
OWNERSHIP	The percentage of shares held by the largest shareholder					
AUDOP	Dummy variable that equals 1 if the report got a standard qualified opinion (unqualified), and otherwise 0					
TRANSPARENCY	Score from the "Corruption Perception Index" for which the firm has its legal origin					
This table shows the description for each variable used in this paper. For our regressions, see equation (iv), (v), (vi) and (vii)						

 Table 2: Description of variables

4.8 Summary statistics

Table 3 presents the summary statistics for our sample of firm-year observations. The mean of *BLOCK_MULTI* is close to 0.8 in value, which means that approximately 80% of the firm-year observation in our sample have multiple blockholders. We note that this is roughly in line with Edman and Manso (2011), who find that about 70% of firms in the US have at least two blockholders at a cutoff of 5%. Of all our firm-year observations, 20% have one blockholder, 27% have two, 20% have three, 14% have four and 19% have five or more blockholders.

Furthermore, we see that the mean of EM_MJ_AB and EM_MCN_AB is around 6% for both models, which we note is somewhat lower compared to the findings of Jiang et al. (2020) and Chen, Firth, Gao and Rui (2011) of 9%. We also see that *EM_MJ* have a slightly higher standard deviation compared to *EM_MCN*. One possible benefit of the higher variance of *EM_MJ* is that it possibly makes the impact on earnings management that multiple blockholders have easier to interpret.

OWNERSHIP displays a high variance of 22%, which is a likely a result of the large spread where the minimum value is 5% and the maximum nearly 100%. On average, the top shareholder in our sample firms own 33% of the shares. This is an indicator of high ownership concentration; however, the high variance renders this interpretation somewhat weak.

The average *TRANSPARENCY* of the firms in our sample is roughly 72, with values at the 1st and 3rd quartiles at 69 and 81 respectively. This indicates that most of the firms in our sample have a relatively high score on the CPI. However, the high number of firms from high-transparency countries such as the United Kingdom and Germany likely skew the mean towards a high value.

Table 5. Summary statistics								
Variable name	Ν	Mean	Median	Std. dev	Min	Max	Q25%	Q75%
BLOCK_MULTI	10,820	0.795	1.000	0.403	0.000	1.000	1.000	1.000
EM_MJ	10,820	0.000	0.002	0.318	-20.621	14.761	-0.032	0.031
EM_MJ_AB	10,820	0.062	0.031	0.312	0.000	20.621	0.014	0.061
EM_MCN	10,820	0.000	0.002	0.224	-10.162	9.058	-0.025	-0.028
EM_MCN_AB	10,820	0.056	0.027	0.217	0.000	10.162	0.012	0.051
AGE	10,820	18.831	17.915	8.469	1.153	34.997	12.083	26.054
ROA	10,820	0.031	0.042	0.522	-49.427	2.779	0.012	0.080
SIZE	10,820	20.113	19.991	2.084	13.826	26.481	18.671	21.444
TOBINQ	10,820	1.804	1.311	2.390	0.156	79.515	1.021	1.900
LEV	10,820	0.216	0.186	0.362	0.000	15.084	0.067	0.304
STDSA	10,820	0.105	0.067	0.129	0.000	3.204	0.034	0.129
STDCF	10,820	0.043	0.028	0.069	0.000	2.127	0.015	0.050
OWNERSHIP	10,820	33.082	27.057	21.981	5.000	98.380	14.448	50.324
AUDOP	10,820	0.995	1.000	0.073	0.000	1.000	1.000	1.000
TRANSPARENCY	10,820	71.974	77.000	14.240	21.000	94.000	69.000	81.000

Table 3: Summary statistics

This table shows the summary statistics for each of the variables used in our regression. We show the number of observations (N), mean, median, standard deviation (Std. dev), minimum value (Min), maximum value (Max), as well as the 1st and 3rd quartiles (Q25% and Q75% respectively). Note that a value of >1 for LEV is possible due to a negative value of retained earnings, and a negative value for ROA is often due to a combination of negative values of retained earnings with a negative net income.

5. Empirical Results

5.1 Baseline regressions

The results from the regression on magnitude of earnings management are displayed in Table 4, where we have controlled for firm characteristics, industry effect, year effect, country effect and heteroskedastic standard error.¹⁶ Firstly, we see that Modified Jones have a slightly larger negative *BLOCK_MULTI* coefficient compared to McNichols. Both models predict a decline of earnings management in firms with multiple blockholders, compared to firms with a single blockholder. The magnitude of the coefficients varies slightly, and we find that the Modified Jones coefficient is significant at a 10% level. Using Modifed Jones model, we see that the presence of several blockholders leads to an decrease in earnings management of 1.6%, while McNichols model only show a decrease of 0.3%.

Next, we find that both Modified Jones and McNichols predict that the level of transparency in a country is negatively correlated with the amount of earnings management. The coefficient from Modified Jones is slightly lower, but both are negative. However, none is significant at any level.

The independent variable coefficients *ROA* and *SIZE* have a negative signs at a 1% level in both of models, which indicates that a highly profitable firm, as well as larger firms, are practicing less earnings management. In addition, *TOBINQ* shows a positive sign in both models at a 1% significance level which show that firms with a high share

¹⁶ See appendix for Breuch-Pagan test, Exhibit 6.

price will utilize earnings management. This is in line with previous findings by Warfield et al. (1995), Dechow and Dichev (2002), Kothari et al. (2005) and Hribar and Craig Nichols (2007). However, we find opposing results for *LEV* and *STDCF* to the aforementioned studies as we find that firms with highly volatile cash flows and high leverage partake in less earnings management. Overall, both Modified Jones and McNichols yields similar results when looking at the coefficients of interest.

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		Modified Jones				McNie	chols	
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value
BLOCK_MULTI	-0.016*	0.009	-1.375	0.086	-0.003	0.006	-0.249	0.402
AGE	0.007	0.000	0.739	0.460	-0.006	0.000	-0.605	0.545
ROA	-0.622***	0.028	-13.507	0.000	-0.443***	0.013	-14.506	0.000
SIZE	-0.052***	0.003	-2.937	0.003	-0.037***	0.001	-2.740	0.006
TOBINQ	0.122***	0.002	6.547	0.000	0.102***	0.002	5.197	0.000
LEV	-0.063***	0.014	-3.866	0.000	-0.082***	0.010	-5.159	0.000
STDSA	0.000	0.027	0.026	0.979	0.016*	0.015	1.819	0.069
STDCF	-0.052***	0.069	-3.454	0.001	-0.037***	0.039	-3.005	0.003
OWNERSHIP	-0.014	0.000	-1.417	0.156	0.001	0.000	0.099	0.921
AUDOP	0.000	0.008	0.031	0.975	-0.003	0.007	-1.167	0.243
TRANSPARENCY	-0.053	0.001	-1.409	0.159	-0.008	0.001	-0.192	0.848
INDUSTRY		Ye	es			Ye	es	
COUNTRY		-				-		
YEAR	Yes				Yes			
Observations	10,820				10,820			
Adjusted R ²		0.4	30		0.285			

Table 4: Multiple blockholders and magnitude of earnings management

This table shows the standardized coefficients (Coeff.), the robust heteroskedastic standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R^2 from our regression using absolute values as the dependent variable. P-values are shown for two-sided T-tests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. Industry, country, and year fixed effect display "Yes" when the majority of dummies are significant at the 10% level. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

Next, we look at the results from the baseline regression testing the direction of earnings management, presented in Table 5. Similar to the previous regression, we observe a negative correlation between multiple blockholders and earnings management compared to firms with a single blockholder. Once again, Modified Jones yields a larger, negative variable compared to McNichols now at a 1% significance level. This indicates that the

presence of multiple blockholders will manipulate financial results downwards with an effect of 2.6% and 0.3% respectively.

Another observation is that we here see a positive correlation between *ROA* and earnings management in both models at a 1% significance level, as well as a negative correlation between *TOBINQ* and earnings management.

TRANSPARENCY also differs from previous regression and now show a negative sign in both models. This indicates that firm in highly transparent countries engage in negative earnings management rather than positive.

Another point to note is that the adjusted R^2 for both of our regression and for both models take on a value ranging from 0.198 to 0.430 which is higher than findings from Jiang et al. (2020).

The results from both of our regressions show that the existence of multiple blockholders will decrease the magnitude of earnings management and skew the direction of earnings management towards smaller earnings. These findings are consistent with the governance view of hypothesis 1b and contradict hypothesis 1a. However, we cannot confirm that these findings apply to the entire population with certainty.

		Modified Jones				McNicl	hols		
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value	
BLOCK_MULTI	-0.026***	0.009	-2.357	0.009	-0.003	0.006	-0.282	0.389	
AGE	0.028***	0.000	2.855	0.004	0.004	0.000	0.372	0.710	
ROA	0.642***	0.019	20.446	0.000	0.453***	0.008	22.930	0.000	
SIZE	-0.102***	0.003	-5.662	0.000	-0.036***	0.001	-2.566	0.010	
TOBINQ	-0.093***	0.003	-4.715	0.000	-0.109***	0.002	-5.449	0.000	
LEV	0.045***	0.014	2.874	0.004	0.072***	0.008	5.449	0.000	
STDSA	-0.010	0.027	-0.922	0.357	-0.002	0.015	-0.263	0.792	
STDCF	0.075***	0.071	4.918	0.000	0.069***	0.040	5.613	0.000	
OWNERSHIP	-0.029***	0.000	-2.970	0.003	0.010	0.000	0.850	0.396	
AUDOP	0.003	0.010	1.079	0.281	0.002	0.008	0.738	0.461	
TRANSPARENCY	-0.133***	0.001	-3.433	0.001	-0.001	0.001	-1.172	0.241	
INDUSTRY		-				-			
COUNTRY		Yes				-			
YEAR	Yes				Yes				
Observations		10,820				10,820			
Adjusted R ²		0.40	7			0.19	8		

Table 5: Multiple blockholders and direction of earnings management

This table shows the standardized coefficients (Coeff.), the robust heteroskedastic standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R^2 from our regression using non-absolute values as dependent variable. P-values are shown for two-sided T-tests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. Industry, country, and year fixed effect display "Yes" when the majority dummies are significant at the 10% level. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

5.2 Corruption regressions

Next, we present the findings from our regressions examining if corruption has any impact on multiple blockholders and earnings management. In contrast to Table 4 and Table 5, we here only show the coefficient for *BLOCK_MULTI* and *TRANSPARENCY*, along with numbers of observations and the adjusted R². The reason for this is that we are primarily interested in comparing how these two variables change compared to our results in the baseline regressions. Results when clustering standard errors can be found in the appendix, Exhibit 7.

Table 6 show the results from the regression on our *HIGH TRANSPARENCY* group, testing the impact corruption has on the magnitude of earnings management in firms with multiple blockholders. First, we see that both Modified Jones and McNichols yields negative coefficients for *BLOCK_MULTI*. This is in line with our regression for the entire sample and suggests that firms with multiple blockholders in transparent countries will exercise less earnings management. However, in contrast to earlier regressions we do not get significant results on any level.

Looking at *TRANSPARENCY*, we get different signs from our two models. Modified Jones yields a negative sign, in line with the results from our previous regressions. However, McNichols yields a positive sign. Due to the difference in signs, we are not able to draw any real conclusion regarding the impact of transparency in highly transparent countries.

	Modified Jones				McNichols				
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value	
BLOCK_MULTI	-0.081	0.058	-1.100	0.136	-0.037	0.034	-0.869	0.192	
TRANSPARENCY	-0.031	0.003	-1.098	0.272	0.005	0.003	0.178	0.859	
Observations		1,470				1,470			
Adjusted R ²	0.073				0.111				

Table 6: (HIGH) Multiple blockholders and magnitude of earnings management

This table shows the standardized coefficients (Coeff.), the robust heteroskedastic standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R^2 from our regression using absolute values as dependent variable. P-values are shown for two-sided T-tests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

Next, we test the direction of earnings management in firms with multiple blockholders for our *HIGH TRANSPARENCY* group. Modified Jones shows a negative sign for BLOCK_MULTI on a significance level of 10%. This result is in line with our previous regressions, meaning that countries with a high level of institutional transparency will exercise earnings management that lower results rather than increases it. However, McNichols yields a positive sign which makes the actual result difficult to interpret.

Furthermore, we again get inconclusive signs when looking at *TRANSPARENCY*. Once again, Modified Jones results in a negative sign and McNichols in a positive sign. As a result of the conflicting signs of our coefficients, we are not able to draw any conclusions.

	Modified Jones				McNichols			
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value
BLOCK_MULTI	-0.109*	0.060	-1.492	0.068	0.013	0.036	0.290	0.614
TRANSPARENCY	-0.013	0.003	-0.436	0.663	0.027	0.003	1.011	0.312
Observations	1,470				1,470			
Adjusted R ²	0.041				0.015			

Table 7: (HIGH) Multiple blockholders and direction of earnings management

This table shows the standardized coefficients (Coeff.), the robust heteroskedastic standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R^2 from our regression using absolute values as dependent variable. P-values are shown for two-sided T-tests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

Next, we turn to the *LOW TRANSPARENCY* group, and look at the result from the regression to test the magnitude of earnings management, displayed in Table 8. First, we see that both models show a positive *BLOCK_MULTI* coefficient. In line with previous results, Modified Jones show a slightly larger variable. However, we also note that none of the coefficients are significant at any level. These results are inconclusive; however, they suggest that in countries with high levels of corruption multiple blockholders will increase levels of earnings management.

Observing the *TRANSPARENCY* coefficient, we see that both models result in negative signs, although non-significant. These results suggest that higher transparency is correlated with decreased levels of earnings management.

	Modified Jones				McNichols			
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value
BLOCK_MULTI	0.022	0.005	0.667	0.748	0.027	0.008	0.908	0.818
TRANSPARENCY	-0.057	0.001	-0.347	0.729	-0.198	0.003	-0.974	0.330
Observations	1,310				1,310			
Adjusted R ²	0.183				0.147			

Table 8: (LOW) Multiple blockholders and magnitude of earnings management

This table shows the standardized coefficients (Coeff.), the robust heteroskedastic standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R^2 from our regression using absolute values as dependent variable. P-values are shown for two-sided T-tests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

Table 9 shows the results from our regression testing the impact that corruption has on the direction of earnings management when multiple blockholders are present, in our *LOW TRANSPARENCY* group. Again, both Modified Jones and McNichols yield similar results with slight variations in the size of the coefficients. We see that in countries with high corruption, having multiple blockholders will positively influence the direction of earnings management, meaning that firms will manipulate earnings in a way such as to show better results. However, similar to Table 8, these results are only suggestive as none are significant at any level.

TRANSPARENCY, on the other hand, yields similar results as in Table 8. We see that an increase in TRANSPARENCY will result in the direction of earnings management to decrease. This is in line with previous results from our regressions, which also show that high TRANSPARENCY leads to a tendency of exercising earnings management that decreases the firms results.

	Modified Jones				McNichols			
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value
BLOCK_MULTI	0.017	0.006	0.550	0.709	0.036	0.009	1.107	0.866
TRANSPARENCY	-0.082	0.001	-0.540	0.589	-0.155	0.003	-0.699	0.484
Observations		1,3	10		1,310			
Adjusted R ²	0.268				0.026			

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					()	

This table shows the standardized coefficients (Coeff.), the robust heteroskedastic standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R^2 from our regression using absolute values as dependent variable. P-values are shown for two-sided T-tests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

Overall, the findings from our corruption regressions suggests, but cannot conclude, that firms with multiple blockholders who operate in corrupt countries will engage in a greater magnitude of earnings management and manipulate earnings to increase results, compared to firms with only one blockholder. This finding is further strengthened by the fact that we get results that suggests close to the opposite for non-corrupt countries, where firms with multiple blockholders somewhat appears to engage in less earnings management compared to firms with a single blockholder. These results suggests that hypothesis 2a holds true, although we cannot draw any conclusive results.

5.3 Robustness tests

Change in blockholder limit

To test the robustness of the baseline regressions that we run in this study, we implement several robustness tests. First, we change the threshold for a blockholder from 5% to 10%, and then to 20% for our baseline regressions. The reason for doing so is that we cannot be certain that our limit of 5% is correct. Edmans and Holderness (2017) points out that

the limits used in blockholder studies are often not backed by empirical findings. In reality, the percentage ownership that a shareholder would have to own in order to exercise enough influence to be categorized as a blockholder will vary on a firm-by-firm basis, dependent on both industry, country and other shareholders.

The two new thresholds that we use are the same as Jiang et al. (2020) employed, in order to show that our result will not depend on the cutoff used. First, we exclude all firms with observations without any blockholder using the new threshold of 10% (20%). Next, we replace *BLOCK_MULTI* in our regressions with the new variable *ROBUST10_BLOCK* (*ROBUST20_BLOCK*) which is a dummy that takes the value of 1 if the observation has two or more shareholders who own at least 10% (20%) of shares outstanding, otherwise $0.^{17}$ When changing the thresholds, we do not get significant results on most of the coefficients¹⁸. However, if we observe the signs of the coefficients we get results that suggest that multiple blockholders will lead to decreased levels of earnings management, which supports the findings of our baseline regressions. Furthermore, we see that, although non-significant, the results suggest that multiple blockholders will skew the direction of earnings management towards lower values which also confirms our findings in the baseline regressions. Results in the appendix, *Exhibit* 8.

Clustering standard errors

Following the methodology of Petersen (2009), we cluster standard errors. As we are using panel data, we cluster the standard errors on a firm level. We thereafter run both of our baseline regressions as well as our corruption regressions again. The results can be seen in the appendix, Exhibit 9.

Looking at the results, the p-value for the coefficient *BLOCK_MULTI* decreases slightly when applying clustered standard error. Comparing Table 4 with Exhibit 9 we also notice that the coefficient becomes non-significant for *BLOCK_MULTI*, even though it is close to a 10% significance level in the Modified Jones model. On the other hand, multiple blockholders seems to still impact earnings management, but on a lower significance level of 5%. As expected, no changes were observed in significance levels for McNichols model.

Pearson correlation matrix

To investigate possible correlations between our variables, we construct a Pearson correlation matrix for our dependent, primary independent and firm characteristics variables. The reason for this is to see if there is a potential problem with collinearity or multicollinearity. In Exhibit 10 we see that correlations are not high enough to be considered an issue for our independent variables. To remove any issues of non-continuous variables hindering a linear relationship from being established, we also performed a Spearman's rank-order correlation test which yielded similar results to the Pearson correlation matrix.

¹⁷ For more details on *BLOCK_MULTI*, see Table 2.

¹⁸ Except for 20% limit for Modified Jones, where we get significant results that support our baseline regressions

6. Discussion and analysis

6.1 Earnings management in Europe

The results from our first regression, shown in Table 4, suggests that there is a negative correlation between multiple blockholders and magnitude of earnings management, compared to firms with a single blockholder. These findings indicate that hypothesis 1b and the governance view hold true. This finding is in line with Dou et al. (2016) who propose that blockholders will increase monitoring of firms and therefore hinder managerial decisions that go against the interest of shareholders. Our findings confirm this view in a European setting, as blockholders in general seem to either actively decrease earnings management or stop it from increasing further. Judging from our findings, several blockholders seem to provide better governance compared to a single shareholder.

We do not find any results that suggest that hypothesis 1a and the cost-sharing view holds true in Europe, opposite to Jiang et al. (2020). There are several reasons that Europe seem to display increasing levels of governance with multiple blockholders compared their study. Europe and China, the country of interest in Jiang et al.'s (2020) study, differ significantly in both legal systems and investor sentiment. One possible explanation for the different results is that the expected costs associated with earnings management are more severe in Europe, be it monetary or reputational. Another explanation could be investor sentiment. Public companies are severely scrutinized by investors and have financial incentives to appeal to current and potential investors. A study by the Chartered Financial Analyst Institute found that knowledge of ESG is limited in China (*ESG Integration in China*, 2019). This could imply that the costs associated with a negative ESG association is larger in Europe compared to China, and therefore deters European blockholders from manipulating earnings.

Our second regression, presented in Table 5, suggests that the presence of multiple blockholders will affect the direction of earnings management negatively. This implies that firms with multiple blockholders will overall be more conservative in their accounting practices compared to single blockholder firms. This finding is in line with Thomsen, Pedersen and Kvist (2006). Thomsen et al. (2006) studies blockholders and firm performance in the EU and US and arrives at the conclusion that blockholders decrease accounting returns in Continental Europe.

Overall, we find results that suggest that multiple blockholders will increase governance in European firms and reduce the magnitude of earnings management as well as make earnings management more conservative, compared to firms with a single blockholder.

6.2 Blockholders in corrupt countries

Our regressions for the LOW TRANSPARENCY group, presented in Table 8 and Table 9, find that there seems to be a positive correlation between multiple blockholders and both magnitude as well as direction of earnings management in corrupt countries; this somewhat confirms hypothesis 2a. The results indicates that individuals might indeed be influenced by their environment and more likely to act unethically in corrupt countries, which is similar to the findings by Hoffman, Frederick and Schwartz (2013) who show that people become less sensitive to perform morally corrupt actions themselves once exposed to corruption. Furthermore, our results also suggest that firms in corrupt countries do have stronger incentives to manage earnings, much like the findings by Bishara (2011) and Rose-Ackerman (2002). Another possible explanation for this phenomenon is a decrease in costs associated with manipulating earnings, either through

weak external governance or the possibility of bribes. Our results do, however, not agree with Rose-Ackerman (2002) in that we find that firms will increase, rather than decrease, their earnings.

Our regressions for the HIGH TRANSPARENCY group presented in Table 6 and Table 7 were less conclusive. The results suggest that multiple blockholders in transparent countries will decrease the magnitude of earnings management, which is in line with the governance view. However, we were not able to draw any conclusions regarding the direction of earnings management from our tests.

Overall, we do not find any conclusive results regarding how blockholders will act in corrupt environments. We do, however, find results that points towards that firms with multiple blockholders in corrupt countries will both engage in larger magnitudes of earnings management as well as more aggressively manipulate earnings in a positive direction compared to firms with a single blockholder.

6.3 Limitations

This study is subject to a number of different limitations. First, it is possible that the ownership data used in this study does not fully reflect reality. Acquiring a completely clean set of data would require a very lengthy and rigorous process. Second, we run the risk of selection bias in choice of firms and countries. We based our selection process on elimination firms with incomplete information. By doing this, we indirectly get a selection of firms with the most accessible data which could have implications for our results. Likewise, we eliminated countries with too few firms. Again, it is possible that by doing so we eliminated smaller countries with characteristics and unique blockholder dynamics that would impact the outcome of the tests we run. Furthermore, the number of firms from each country in our sample is unbalanced. Large and transparent countries such as United Kingdom are overrepresented, while smaller and more non-transparent countries are underrepresented which has an impact on our findings, especially in regard to corruption. Third, we use CPI as a proxy of corruption. There are not many prior studies that have used this index, and any inherent flaws in the ranking process will likely have affected our results. Finally, this study is limited to testing if there are any correlation between multiple blockholders and earnings management and runs the risk of reverse causality. However, findings by Dyck and Zingales (2004) show that earnings management is hard to detect, which makes it unlikely that firms that inherently manage earnings would attract blockholders, and not vice versa.

7. Conclusion

In this study we explore what effect multiple blockholders have on earnings management in publicly listed firms in Europe, and we introduce and test the idea of firms with multiple blockholders in non-transparent countries utilizing earnings management to a higher degree than their counterparts in transparent countries. Our results suggests that i) firms with multiple blockholders will utilize earnings management less and will practice more conservative/negative earnings managements, compared to firms with a single blockholder, and ii) that firms with multiple blockholder that are listed in corrupt countries will have a larger magnitude of earnings management and practice more aggressive/positive earnings management, compared to firms listed in corrupt countries with a single blockholder.

These findings are in line with the governance view and Dou et al. (2016), who find that blockholder increase firm governance and will decrease the likelihood of

management making decisions that are not in the best interest of the shareholders. However, our findings stand in contrast to Jiang et al. (2020) and Cho et al. (2019) who find a that multiple blockholders will increase earnings management in the Chinese and Korean markets.

Overall, we confirm that the governance view of multiple blockholders and earnings management hold true for Europe. Furthermore, we find results that, although inconclusive, suggests that firms with multiple blockholders in corrupt countries will, similar to the idiom *"fishing in troubled waters"*, be incentivized by and take advantage of low institutional transparency and high corruption in order to engage in larger magnitudes of aggressive earnings management in comparison to firms with a single blockholder.

7.1 Future research

The result of this study opens up for future possible research in three ways. First, we suggest that the governance view holds true for Europe. This statement can be further tested by including all of Europe. Second, it has been shown that the type of blockholder will impact interactions between shareholders. Therefore, the results of this study could be further extended by considering the heterogeneity of blockholders. Lastly, our findings on blockholders in non-transparent countries can be further tested with a more rigorous proxy for corruption in order to arrive at conclusive results.

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Appendix



Exhibit 1: Transparency Map 2019

This illustration shows the level of global corruption in 2019 according to Transparency International. Scale in lower left-hand corner. Source: Transparency International.

1Downloaded data for all still active firms listed in one of our selected countriesFactSet10,1002Removed all firms with missing or incomplete data and broken fiscal year for the period 2008- 2020FactSet7,949-2,1513Removed all firms that are part of the Financial sector according to RBICSFactSet4022,1114Removed all firms that are part publicly traded before 2010FactSet10252,0095Removed all firms that do did not prepare their financial statements in accordance with IFRS during the years 2008-2020FactSet250121,7596Removed all firms part of a propare their financial statements in accordance with IFRS during the years 2008-2020FactSet7031,6898Removed all firms with preferred shares or dual-class shares granting different voting powerFactSet259121,2929Removed all firms that had 0 blockholders during at least n year between the years 2010- 2010FactSet210101,082	Step	Description	Source	N removed	% removed	Total size
2Removed all firms with missing or incomplete data and broken fiscal year for the period 2008- 2020FactSet7,949-2,1513Removed all firms that are part of the Financial sector according to RBICSFactSet4022,1114Removed all firms that was not publicly traded before 2010FactSet10252,0095Removed all firms that do did not prepare their financial statements in accordance with IFRS during the years 2008-2020FactSet250121,7596Removed all firms with preferred removed all firms with preferred res or dual-class shares granting different voting powerFactSet13861,5518Removed all firms with missing or incomplete ownership dataFactSet210101,08210Removed all firms that had 0 blockholders during at least n year between the years 2010- 2010FactSet210101,082	1	Downloaded data for all still active firms listed in one of our selected countries	FactSet	-	-	10,100
3 Removed all firms that are part of the Financial sector according to RBICS FactSet 40 2 2,111 4 Removed all firms that was not publicly traded before 2010 FactSet 102 5 2,009 5 Removed all firms that do did not prepare their financial statements in accordance with IFRS during the years 2008-2020 FactSet 250 12 1,759 6 Removed all firms part of a country or sector with less than 10 firms in total FactSet 70 3 1,689 8 Removed all firms with preferred shares or dual-class shares granting different voting power 9 Removed all firms that had 0 FactSet 259 12 1,292 10 Removed all firms that had 0 FactSet 210 10 1,082 10 Removed all firms that had 0 FactSet 210 10 1,082	2	Removed all firms with missing or incomplete data and broken fiscal year for the period 2008- 2020	FactSet	7,949	-	2,151
 4 Removed all firms that was not publicly traded before 2010 5 Removed all firms that do did not prepare their financial statements in accordance with IFRS during the years 2008-2020 6 Removed all firms part of a prepare their financial statement fract Set for the years 2008-2020 6 Removed all firms part of a prepare their financial statement fract Set for the years 2008-2020 6 Removed all firms part of a prepare their financial statement fract Set for the years 2008-2020 8 Removed all firms with preferred prepare the prepare their financial statement fract Set for the years 2008-2020 9 Removed all firms with missing prepare the pr	3	Removed all firms that are part of the Financial sector according to RBICS	FactSet	40	2	2,111
 5 Removed all firms that do did not FactSet 250 12 1,759 prepare their financial statements in accordance with IFRS during the years 2008-2020 6 Removed all firms part of a FactSet 70 3 1,689 country or sector with less than 10 firms in total 8 Removed all firms with preferred FactSet 138 6 1,551 shares or dual-class shares granting different voting power 9 Removed all firms that had 0 FactSet 259 12 1,292 or incomplete ownership data 10 Removed all firms that had 0 FactSet 210 10 1,082 blockholders during at least n year between the years 2010-2010 	4	Removed all firms that was not publicly traded before 2010	FactSet	102	5	2,009
 6 Removed all firms part of a country or sector with less than 10 firms in total 8 Removed all firms with preferred FactSet 138 8 Removed all firms with preferred FactSet 138 9 Removed all firms with missing FactSet 259 12 1,292 or incomplete ownership data 10 Removed all firms that had 0 FactSet 210 10 Removed all firms that had 0 FactSet 210 10 Removed all firms that had 0 FactSet 210 10 Removed all firms that had 0 FactSet 210 	5	Removed all firms that do did not prepare their financial statements in accordance with IFRS during the years 2008-2020	FactSet	250	12	1,759
 8 Removed all firms with preferred FactSet 138 6 1,551 shares or dual-class shares granting different voting power 9 Removed all firms with missing or incomplete ownership data 10 Removed all firms that had 0 FactSet 210 10 1,082 blockholders during at least n year between the years 2010-2010 	6	Removed all firms part of a country or sector with less than 10 firms in total	FactSet	70	3	1,689
 9 Removed all firms with missing or incomplete ownership data 10 Removed all firms that had 0 FactSet 210 10 1,082 10 blockholders during at least n year between the years 2010-2010 	8	Removed all firms with preferred shares or dual-class shares granting different voting power	FactSet	138	6	1,551
10 Removed all firms that had 0 FactSet 210 10 1,082 blockholders during at least n year between the years 2010- 2010	9	Removed all firms with missing or incomplete ownership data	FactSet	259	12	1,292
2019	10	Removed all firms that had 0 blockholders during at least n year between the years 2010- 2019	FactSet	210	10	1,082
11Final sample of firmsFactSet1,082	11	Final sample of firms	FactSet	-	-	1,082

Exhibit 2: Sample Selection Process

This table shows the process undertaken when arriving at our final sample of firms included in this study. Percentage of forms removed (% removed) is in relation to the sample in step 2, i.e. 2,151 firms.

Country	Enforcing Authority	Min. %
Austria	Financial Market Authority (FMA)	3
Belgium	Financial Services and Markets Authority (FSMA)	5
Croatia	Croatian Financial Services Supervisory Agency (HANFA)	5
Denmark	The Danish FSA	5
Finland	Finanssivalvonta (FIN-FSA)	5
France	Autorité des marchés financiers (AMF)	5
Germany	Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin (Federal Financial Supervisory Authority)	3
Greece	Hellenic Capital Market Commission	5
Italy	Commissione Nazionale per le Società e la Borsa (Consob)	3
Netherlands	Stichting Autoriteit Financiële Markten (AFM)	3
Poland	Polish Financial Supervision Authority (KNF)	5
Portugal	Comissão do Mercado de Valores Mobiliários	2
Russia	Central Bank of Russia (CBR)	5
Spain	Comisión Nacional del Mercado de Valores (CNMV)	3
Sweden	Finansinspektionen (Swedish Financial Supervisory Authority)	5
Switzerland	-	3
United Kingdom	Financial Conduct Authority (FCA)	3

Exhibit 3: Ownership Reporting Limits

This table shows the minimum threshold at which a shareholder must report their holding for each country (Min. %) included in this study as well as the authority enforcing the threshold. Source: European Securities and Markets Authority.



Exhibit 4: FactSet Revere Business Industry Classification Breakdown

This illustration shows the breakdown of FactSets's RBICS classification. We divide firms into sectors, i.e. 32 unique categories. Source: FactSet Insights

Country	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	Average
Austria	77	76	75	75	76	72	69	69	78	79	74.6
Belgium	75	75	75	77	77	76	75	75	75	71	75.1
Croatia	47	48	49	49	51	48	48	46	40	41	46.7
Denmark	87	88	88	90	91	92	91	90	94	93	90.4
Finland	86	85	85	89	90	89	89	90	94	92	88.9
France	69	72	70	69	70	69	71	71	70	68	69.9
Germany	80	80	81	81	81	79	78	79	80	79	79.8
Greece	48	45	48	44	46	43	40	36	34	35	41.9
Italy	53	52	50	47	44	43	43	42	39	39	45.2
Netherlands	82	82	82	83	84	83	83	84	89	88	84.0
Poland	58	60	60	62	63	61	60	58	55	53	59.0
Portugal	62	64	63	62	64	63	62	63	61	61	62.5
Russia	28	28	29	29	29	27	28	28	24	21	27.1
Spain	62	58	57	58	58	60	59	65	62	61	60.0
Sweden	85	85	84	88	89	87	89	88	93	92	88.0
Switzerland	85	85	85	86	86	86	85	86	88	87	85.9
United Kingdom	77	80	82	81	81	78	76	74	78	76	78.3

Exhibit 5: Corruption Perception Index Score

This table shows the Corruption Perception Index score for each country over the period 2010-2019 year. It also includes an average score, which we use to divide Europe into HIGH and LOW TRANSPARENCY. Source: Transparency International.

	Modified Jones	McNichols
gnitude	0.000***	0.000***
tion	0.000***	0.000***

The table shows the p-values from the Breuch-Pagan test for our main regressions. ***, **, * corresponds to significance level of 1%, 5%, 10%. We reject the null hypothesis that the residuals are homoscedastic.

Exhibit 7: Clustered results from corruption regressions

	· · · · · · · · · · · · · · · · · · ·	Modifie	d Jones			McNic	chols	
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value
BLOCK_MULTI	-0.081	0.057	-1.128	0.131	-0.037	0.030	-0.976	0.165
AGE	0.022	0.001	0.610	0.543	0.023	0.001	0.839	0.403
ROA	0.081	0.126	1.334	0.184	-0.181	0.357	-1.062	0.290
SIZE	-0.119	0.015	-1.197	0.233	-0.098**	0.007	-2.147	0.033
TOBINQ	0.149	0.028	0.983	0.327	0.194	0.022	1.682	0.095
LEV	0.014	0.047	0.563	0.574	0.020	0.069	0.569	0.570
STDSA	-0.006	0.046	-0.396	0.693	0.042	0.121	1.112	0.268
STDCF	0.066	0.325	1.115	0.267	-0.076	0.506	-0.831	0.407
OWNERSHIP	-0.052	0.001	-1.188	0.237	0.019	0.001	0.370	0.712
AUDOP	0.007***	0.021	4.023	0.000	0.004*	0.029	1.798	0.074
TRANSPARENCY	-0.031	0.004	-0.761	0.448	0.005	0.004	0.121	0.904
INDUSTRY		Ye	es			Ye	S	
COUNTRY		-				-		
YEAR		-				-		
Observations		1,4'	70			1,47	70	
Adjusted R ²		0.0	73			0.1	11	

(HIGH) Multiple blockholders and magnitude of earnings management

This table shows the standardized coefficients (Coeff.), the clustered standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R^2 from our regression using absolute values as dependent variable. P-values are shown for two-sided T-tests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. Industry, country, and year fixed effect display "Yes" when the majority of dummies are significant at the 10% level. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

		Modifie	d Jones			McNie	chols	
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value
BLOCK_MULTI	-0.109*	0.062	-1.435	0.077	0.013	0.031	0.337	0.632
AGE	0.053	0.002	1.320	0.189	0.010	0.001	0.336	0.737
ROA	0.119*	0.134	1.887	0.061	-0.130	0.425	-0.658	0.512
SIZE	-0.176*	0.017	-1.670	0.097	0.030	0.008	0.564	0.574
TOBINQ	0.172	0.029	1.122	0.264	-0.032	0.024	-0.265	0.791
LEV	0.052**	0.048	2.111	0.036	0.044	0.079	1.108	0.270
STDSA	-0.009	0.054	-0.516	0.606	0.036	0.136	0.866	0.388
STDCF	-0.010	0.355	-0.150	0.881	-0.014	0.571	-0.141	0.888
OWNERSHIP	-0.042	0.001	-0.887	0.377	0.111	0.001	1.909	0.058
AUDOP	-0.002	0.025	-1.146	0.254	-0.007***	0.031	-2.692	0.008
TRANSPARENCY	-0.013	0.004	-0.323	0.747	0.027	0.004	0.806	0.421
INDUSTRY		-				-		
COUNTRY		-				-		
YEAR		-				-		
Observations		1,4	70			1,4'	70	
Adjusted R ²		0.0	41			0.0	15	

(HIGH) Multiple blockholders and direction of earnings management

This table shows the standardized coefficients (Coeff.), the clustered standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R² from our regression using absolute values as dependent variable. P-values are shown for two-sided T-tests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. Industry, country, and year fixed effect display "Yes" when the majority of dummies are significant at the 10% level. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

		Modifie	d Jones			McNie	chols	
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value
BLOCK_MULTI	0.022	0.005	0.701	0.758	0.027	0.007	1.009	0.843
AGE	0.041	0.000	1.554	0.123	0.001	0.000	0.062	0.951
ROA	0.016	0.097	0.149	0.882	-0.065	0.074	-1.419	0.158
SIZE	-0.047*	0.001	-1.686	0.094	-0.008	0.002	-0.285	0.776
TOBINQ	-0.008	0.005	-0.178	0.859	0.003	0.004	0.151	0.880
LEV	0.050	0.015	1.405	0.162	-0.014	0.022	-0.481	0.631
STDSA	0.043	0.021	1.401	0.164	0.002	0.026	0.095	0.924
STDCF	0.171***	0.087	5.243	0.000	-0.002	0.157	-0.065	0.948
OWNERSHIP	0.012	0.000	0.362	0.718	0.028	0.000	0.954	0.342
AUDOP	-0.014	0.012	-0.751	0.454	-0.002	0.008	-0.297	0.767
TRANSPARENCY	-0.057	0.001	-0.312	0.756	-0.198	0.003	-0.842	0.401
INDUSTRY		Ye	es			Ye	S	
COUNTRY		-				-		
YEAR		-				-		
Observations		1,3	10			1,3	10	
Adjusted R ²		0.1	83			0.14	47	

(LOW) Multiple blockholders and magnitude of earnings management

This table shows the standardized coefficients (Coeff.), the clustered standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R² from our regression using absolute values as dependent variable. P-values are shown for two-sided T-tests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. Industry, country, and year fixed effect display "Yes" when the majority of dummies are significant at the 10% level. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

		Modifie	d Jones			McNie	chols	
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value
BLOCK_MULTI	0.017	0.006	0.493	0.689	0.036	0.011	0.943	0.826
AGE	0.104**	0.001	2.077	0.040	0.089**	0.001	2.225	0.028
ROA	0.536***	0.054	10.908	0.000	0.239***	0.070	5.886	0.000
SIZE	-0.089**	0.002	-2.174	0.032	-0.023	0.003	-0.591	0.556
TOBINQ	-0.191***	0.005	-5.597	0.000	-0.104***	0.006	-3.600	0.000
LEV	0.078***	0.015	2.638	0.009	0.011	0.027	0.326	0.745
STDSA	-0.084**	0.030	-2.252	0.026	-0.051***	0.024	-2.724	0.007
STDCF	0.017	0.112	0.474	0.636	0.010	0.175	0.272	0.786
OWNERSHIP	-0.030	0.000	-0.918	0.361	0.000	0.000	0.006	0.995
AUDOP	0.026	0.016	1.296	0.197	0.011	0.011	1.248	0.214
TRANSPARENCY	-0.082	0.002	-0.479	0.633	-0.155	0.004	-0.641	0.522
INDUSTRY		Ye	es			-		
COUNTRY		-				-		
YEAR		-				-		
Observations		1,3	10			1,3	10	
Adjusted R ²		0.2	68			0.02	26	

(LOW) Multiple blockholders and direction of earnings management

This table shows the standardized coefficients (Coeff.), the clustered standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R² from our regression using absolute values as dependent variable. P-values are shown for two-sided Ttests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. Industry, country, and year fixed effect display "Yes" when the majority of dummies are significant at the 10% level. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

	Exhibit 8: Robustness te	est for 10% and 2	0% blockholder cutoff	
	10%		20%	
	ROBUST10_BLOCK	Observations	ROBUST20_BLOCK	Observations
EM_MJ^1	0.001	7940	-0.011	5290
$EM_MJ_AB^2$	-0.001	7940	-0.015	5290
EM_MCN ³	0.000	7940	-0.002	5290
EM_MCN_AB ⁴	-0.001	7940	-0.003	5290
	1: EM_MJ 10% H: 0.544 C: 0.5	535	1: EM_MJ 20% H: 0.102. C: 0	0.151
	2: EM_MJ_AB 10% H:0.397 C	: 0.413	2: EM_MJ_AB 20% H: 0.036 ³	**, C: 0.076*
	3: EM_MCN 10% H: 0.468 C:	0.472	3: EM_MCN 20% H: 0.452, C	2: 0.458
	4: EM_MCN_AB 10% H: 0.373	3 C: 0.374	4: EM_MCN_AB 20% H: 0.4	18, C:0.412

		Modifie	d Jones		8	McNic	chols	
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value
BLOCK_MULTI	-0.016	0.010	-1.241	0.107	-0.003	0.006	-0.247	0.403
AGE	0.007	0.000	0.637	0.525	-0.006	0.000	-0.605	0.545
ROA	-0.622***	0.022	-17.007	0.000	-0.443***	0.013	-14.506	0.000
SIZE	-0.052**	0.003	-2.521	0.012	-0.037***	0.001	-2.740	0.006
TOBINQ	0.122***	0.003	6.334	0.000	0.102***	0.002	5.197	0.000
LEV	-0.063***	0.013	-4.133	0.000	-0.082***	0.010	-5.159	0.000
STDSA	0.000	0.029	0.024	0.981	0.016*	0.015	1.819	0.069
STDCF	-0.052***	0.081	-2.917	0.004	-0.037***	0.039	-3.005	0.003
OWNERSHIP	-0.014	0.000	-1.197	0.232	0.001	0.000	0.099	0.921
AUDOP	0.000	0.008	0.031	0.975	-0.003	0.007	-1.167	0.243
TRANSPARENCY	-0.053	0.001	-1.320	0.187	-0.008	0.001	-0.192	0.848
INDUSTRY		Ye	es			Ye	S	
COUNTRY		-				-		
YEAR		Ye	es			Ye	S	
Observations		10,8	320			10,8	20	
Adjusted R ²		0.4	30			0.28	35	

Exhibit 9: Baseline regression with clustered standard errors on firm level

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This table shows the standardized coefficients (Coeff.), the clustered standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R^2 from our regression using absolute values as dependent variable. P-values are shown for two-sided T-tests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. Industry, country, and year fixed effect display "Yes" when the majority of dummies are significant at the 10% level. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

		Modified	Jones			McNicl	hols	
	Coeff.	Std. Er.	T-value	P-value	Coeff.	Std. Er.	T-value	P-value
BLOCK_MULTI	-0.026**	0.011	-1.989	0.023	-0.003	0.007	-0.256	0.398
AGE	0.028**	0.000	2.261	0.024	0.004	0.000	0.310	0.757
ROA	0.642***	0.015	26.631	0.000	0.453***	0.007	29.077	0.000
SIZE	-0.102***	0.004	-4.411	0.000	-0.036**	0.002	-2.070	0.039
TOBINQ	-0.093***	0.004	-2.905	0.004	-0.109***	0.002	-4.509	0.000
LEV	0.045***	0.010	4.086	0.000	0.072***	0.009	4.655	0.000
STDSA	-0.010	0.027	-0.909	0.364	-0.002	0.015	-0.248	0.804
STDCF	0.075***	0.077	4.540	0.000	0.069***	0.060	3.746	0.000
OWNERSHIP	-0.029**	0.000	-2.366	0.018	0.010	0.000	0.703	0.482
AUDOP	0.003	0.011	1.048	0.295	0.002	0.008	0.703	0.483
TRANSPARENCY	-0.133***	0.001	-3.251	0.001	-0.001	0.001	-1.061	0.289
INDUSTRY		-				-		
COUNTRY		-				-		
YEAR		Yes				Yes	5	
Observations		10,82	20			10,82	20	
Adjusted R ²		0.40	7			0.19	8	

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This table shows the standardized coefficients (Coeff.), the clustered standard error (Std. Er.), the T-value, P-value, number of observations and adjusted R² from our regression using non-absolute values as dependent variable. P-values are shown for two-sided T-tests, except for BLOCK_MULTI which uses a one-sided T-test with H1<0. Industry, country, and year fixed effect display "Yes" when the majority dummies are significant at the 10% level. ***, **, * corresponds to significance levels of 1%, 5% and 10% respectively.

							TALENT TURE	TATION TINGTE	VINPLATION							
	B,	LOCK_MULTI	OWNERSHIP	TRANSPARENCY	ROA	SIZE	TOBINQ	LEV	STDSA	AGE	STDCF	AUDOP	EM_MJ	EM_MJ_AB	EM_MCN	EM_MCN_AB
BLOCK_N	MULTI	1.000														
OWNERS	HIP	-0.332 (***)	1.000													
TRANSPA	ARENCY	0.103(***)	-0.323 (***)	1.000												
ROA		0.032 (***)	-0.040 (***)	-0.007	1.000											
SIZE		-0.163 (***)	$0.088 \ (^{***})$	-0.193 (***)	$0.068 (^{***})$	1.000										
TOBINQ		0.011	-0.053 (***)	0.126 (***)	-0.268 (***)	-0.174 (***)	1.000									
LEV		-0.073 (***)	0.093 (***)	-0.065 (***)	-0.508 (***)	0.074 (***)	0.282 (***)	1.000								
STDSA		00.0	-0.061 (***)	$0.051 (^{***})$	-0.029 (***)	-0.197 (***)	0.121 (***)	$0.026(^{***})$	1.000							
AGE		-0.010	-0.084 (***)	0.205 (***)	0.028 (***)	0.227 (***)	-0.067 (***)	-0.045 (***)	-0.116 (***)	1.000						
STDCF		0.018~(*)	-0.036 (***)	0.065 (***)	-0.182 (***)	-0.323 (***)	0.280 (***)	$0.184~(^{***})$	0.320 (***)	-0.163 (***)	1.000					
AUDOP		0.010	-0.014	$0.044~(^{***})$	-0,001	-0.022 (**)	0.010	-0.004	0,008	$0.018~(^{**})$	-0,003	1.000				
EM_MJ		0.013	-0.042 (***)	0,001	0.623 (***)	-0.035 (***)	-0.219 (***)	-0.298 (***)	-0.002	$0.020~(^{**})$	-0.039 (***)	0,003	1.000			
EM_MJ_A	ß	-0.020 (**)	-0.002	0.023 (***)	-0.623 (***)	-0.094 (***)	$0.263~(^{***})$	0.285 (***)	0.025 (***)	0,001	0.095 (***)	0.005	0.065 (***)	1.000		
EM_MCN	_	0,007	-0.002	-0,001	0.429 (***)	0.002	-0.183 (***)	-0.179 (***)	-0,001	0,013	-0.024 (**)	0.002	0.389 (***)	-0.250 (***)	1.000	
EM_MCN	AB	-00.00	-0.005	0.026 (***)	-0.438 (***)	-0.077 (***)	0.200(***)	0.182 (***)	0.030 (***)	0.021 (**)	0.067 (***)	0.005	-0.103 (***)	0.633 (***)	-0.041 (***)	1.000