TAKEOVER THREATS, JOB SECURITY CONCERNS, AND EARNINGS MANAGEMENT

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ABSTRACT

Edward S. Sul: Takeover Threats, Job Security Concerns, and Earnings Management
(Under the direction of Robert M. Bushman and Mark H. Lang)

I exploit the international, staggered adoption of takeover laws in order to examine the effect of increased turnover sensitivity to performance on managers' financial reporting choices. Using a difference-in-difference design, I find that the enactment of laws designed to promote takeover activity is associated with greater earnings management (abnormally high accruals, small positive earnings, discretionary earnings smoothing and poor accruals quality) and greater opacity (reduced analyst forecast accuracy and following and greater forecast dispersion). This is consistent with managers responding to increased risk of termination by distorting earnings information. As predicted, results are particularly pronounced for managers with the highest ex ante risk of termination and at firms with poor performance. The effects are mitigated in countries in which strong institutions limit the CEOs' ability to manage earnings and create opacity. Overall, my results suggest that reforms aimed at enhancing governance through higher turnover sensitivity to performance encourage earnings management and opacity by increasing job security concerns.

To Mom, Dad, and my loving wife, Dasol

ACKNOWLEDGEMENTS

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1. INTRODUCTION

Corporate governance is essential to mitigating agency problems and maximizing firm value. Strong governance helps align managers' incentives with those of shareholders (Shleifer and Vishny, 1997). The potential benefits of improved corporate governance may lead politicians and regulators to adopt reforms designed to enhance the governance of firms domiciled within a country. Despite the potential benefits, governance reforms may generate unintended negative consequences. In this paper, I document an example of such unintended negative consequences – increased earnings management and financial reporting opacity – by exploiting the staggered adoption of country-level takeover legislation.[1] These laws promote takeover activity within a country by reducing barriers to mergers and acquisitions (M&A) transactions, encouraging information dissemination, expanding disclosure, enhancing governance and increasing minority shareholder protection.[2] I provide evidence that CEOs manage earnings and create financial reporting opacity in response to heightened concerns about job security as a result of these governance-enhancing regulations.[3]

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[1] I follow Bushman et al. (2004) in defining opacity as the unavailability of firm-specific information to those outside publicly traded firms. While both earnings management and analyst forecast properties represent financial reporting transparency (e.g., Lang et al., 2012; Maffett, 2012), I refer to earnings management separately from 'transparency' as represented by analyst forecast properties in this paper since earnings management is a direct manager choice in response to legislation and is my primary focus within this study. I complement this with analyst forecast properties within my analyses in order to confirm that the information environment has indeed deteriorated.

[2] For instance, the Code on Takeovers and Mergers of Malaysia announced the strengthening of investor protection, instituting of higher standards of governance in takeovers, enhancing transparency and improving efficiency as its key objectives (Khan and Bibi, 2015).

[3] I use the term "job security concerns" throughout this paper to describe managers' concerns about losing their jobs.

Increased takeover pressures created by a shock, such as M&A legislation, affect governance both directly through the threat of takeover and indirectly through changes in a firm's internal governance mechanisms (e.g., Fama, 1980; Fama and Jensen, 1983). Among the key components of strong internal governance is the ability of the board to fire poorly performing managers. In this regard, Lel and Miller (2015) examine takeover laws and find direct evidence that the sensitivity of turnover to performance significantly increases following a country's adoption of legislation that increases the threat of takeover.

An increase in turnover sensitivity to performance places pressure on CEOs, who fear termination if they do not perform. This pressure can create incentives to manipulate information in order to improve the impression that CEOs make on monitors (Adams and Ferreira, 2007). When boards and outside investors emphasize accounting information in evaluating a manager, it can exacerbate incentives to manage earnings or hide behind opacity. Furthermore, Hermalin and Weisbach (2012) posit that more disclosure and the associated increases in monitoring and scrutiny adversely affect managers' job security and incentivize them to engage in value-reducing activities in order to appear more able.[4] These value-reducing activities include the intentional distortion of accounting information.

However, an enhanced governance mechanism such as turnover sensitivity to performance could also lead to an improved information environment. Provided the costs of earnings management and opacity to outside investors (e.g., Leuz et al., 2003; Burgstahler et al., 2006; Lang et al., 2012), boards have incentives to discipline earnings management in addition to

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[4] Hermalin and Weisbach (2012) note that any shock that affects disclosure can affect managers' decisions to distort earnings information. My assumption is that international takeover laws shock both the disclosure regime and job security concerns. As the goal of these laws is to expand the market for corporate control within a country, the promoted laws expand disclosures in order to stimulate takeover activity (Nenova, 2006). Increased job security concerns follow as a result of the increased monitoring and scrutiny (Hermalin and Weisbach, 2012) and turnover sensitivity to performance (Lel and Miller, 2015).

poor performance. Hazarika et al. (2012) posit that the proactive monitoring of earnings management dissuades CEOs from distorting accounting information to serve their own interests. Moreover, takeover laws were intended to enhance transparency, disclosure and governance in order to attract potential acquirers so that the board could be expected to further monitor the production of high quality accounting information.

Thus, boards may desire to limit earnings manipulation via strong governance. However, the complete elimination of earnings management and opacity is unlikely to be optimal at a firm (Hermalin and Weisbach, 2012) and directors likely bear a cost for detecting such manipulations. As such, the effect of an enhanced governance mechanism, such as turnover sensitivity to performance, on earnings management and opacity remains an empirical question. This paper addresses this question by examining changes in information quality around the time at which takeover laws were enacted.

The sample includes observations from 33 countries, 13 of which passed a takeover law between 1995 and 2004. I exploit the staggered adoption of these country-level laws as a plausibly exogenous shock to CEO turnover sensitivity to performance, based on the results presented in Lel and Miller (2015). Leuz and Wysocki (2015) argue that cases of staggered implementation of regulation, especially if the dates are exogenously determined, provide a robust understanding of the consequences of laws. As such, I employ a difference-in-difference design to compare changes in financial reporting characteristics for firms in countries that passed takeover laws with firms in countries that never passed such laws. I focus on two characteristics: earnings management and analyst forecast properties. Earnings management is a direct response by managers pressured to deliver high performance and analyst forecast properties represent an outcome-based measure of transparency (e.g. Lang and Lundholm, 1996; Lang et al., 2012).

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Results indicate that firms engage in significantly more earnings management activities and become significantly more opaque following their country's adoption of takeover legislation. Specifically, firms are more likely to discretionarily smooth earnings, report small positive income, have worse accruals quality, and utilize abnormally high accruals in the post-M&A law period. Furthermore, analyst following decreases, analyst forecast accuracy worsens and analyst forecast dispersion increases. The results are robust to both a country, industry and year fixed effects specification and a firm and year fixed effects specification.

Findings also suggest that the increased job security concerns – as a result of takeover law initiation – and the associated increases in turnover sensitivity to performance incentivize managers to pursue earnings management and opacity. Managers with poorer market or accounting performance at the time of takeover legislation engage in significantly more earnings management and have worse analyst forecast properties following the legislation than do managers with good performance. Furthermore, I use international officer data to directly calculate ex ante turnover probability. In doing this, I find that managers with higher turnover risk at the time of takeover legislation subsequently decrease information quality significantly more than managers with low turnover probability. As such, the results are most pronounced for managers expected to have greater job security concerns following a shock to turnover sensitivity to performance – i.e. those who had been delivering poor performance or have inherently higher turnover risk.

Moreover, I find that having high quality country-level institutions help limit managers' opportunities to worsen their information environments. Using sample partitions based on the anti-self-dealing index and common vs. code law as my measures of country-level investor protection, I demonstrate by inter-country comparison that lower investor protection makes

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opportunistic manipulation of accounting information following takeover law initiation easier. Thus, although the incentives for managers who are concerned about job security to distort accounting information are likely widespread, countries with strong institutions can combat potentially negative consequences on the information environment.

I conduct a number of sensitivity analyses to provide support for my inferences. I find that growth strategies and share issuances are not viable alternative explanations for higher earnings management and opacity, based on cross-sectional tests that split the sample on these measures. These findings mitigate the concern that the deterioration of the information environment reflects a change other than increased job security concerns which incentivizes CEOs to manipulate earnings. My inferences do not change when including controls for other potentially confounding channels (e.g., short selling laws). Furthermore, my inferences are robust to including country-specific time trends, bootstrapping for statistical significance and using a control sample matched on size and performance, which lend support to the assumptions of the difference-in-difference estimation and to the validity of my research design. My inferences are also robust when employing alternate transparency proxies, different sample periods and various sample compositions.

My study contributes to existing literature in several ways. First, it contributes to the governance literature by providing evidence of an unexpected and negative effect of regulations that enhance a key governance mechanism. Using a unique, international setting in which firms experience a positive shock to turnover sensitivity to performance, an important internal governance mechanism, my study documents a subsequent increase in earnings management and opacity that is connected to greater turnover pressures on managers. This result indicates that although increasing turnover sensitivity to performance in order to ensure managers act in

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shareholders' interests and perform well can be beneficial, it is important to also consider the resulting incentives for managers to obfuscate accounting information.

This paper also contributes to the takeover literature by using a set of staggered country-level takeover laws as a plausibly exogenous shock to takeover threats in order to document an unintended increase in earnings management and opacity. Prior studies (e.g., Mikkelson and Parch, 1997; Gompers et al., 2003; Baber et al., 2015) use takeover defenses or occurrences of completed or attempted takeovers as proxies for takeover threats. However, such studies are subject to endogeneity concerns because firms themselves establish takeover defenses. Moreover, completed or attempted takeovers occur because of characteristics of the firm itself. I mitigate these endogeneity concerns by using a set of takeover laws that serve as a shock to takeover threats in that countries rather than firm characteristics determine the laws' enactment.[5] This study is the first to use international M&A laws to explore firms' responses to heightened takeover threats with respect to financial reporting choices.

A third contribution of this research applies to the investor protection literature. I find that the increased earnings management and opacity following takeover legislation is more pronounced for firms in countries with poor quality institutions. This suggests that undesirable consequences exist mainly in environments in which managers have not only greater incentives, but also better opportunities for manipulating accounting information. Thus, I identify strong institutions as a mechanism through which countries can limit the ability of CEOs to distort accounting information for their private benefit. Although prior literature provides evidence that

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[5] U.S. state antitakeover laws have been used as an exogenous measure of decreased takeover threats, but Karpoff and Wittry (2015) indicate that these laws are strongly affected by corporate lobbying. On the other hand, it is difficult to imagine that firms lobby regulators at the country level in order to increase the likelihood of becoming a takeover target. Nonetheless, I discuss studies that examine the effect of state antitakeover laws on information quality in greater detail later within this section.

strong investor protection is negatively associated with earnings management and opacity (e.g. Leuz et al., 2003), this paper illuminates the importance of institutions in a setting in which they help to mitigate undesired consequences of regulations. This is useful for policymakers who seek to improve governance mechanisms, such as performance monitoring, without enabling managers concerned about job security to manipulate accounting information.

In a related study, Armstrong et al. (2012) exploit a set of U.S. state antitakeover laws and examine their effect on transparency. The study provides evidence that, following the decrease in takeover threats from these laws, firms' financial reporting quality improves. My paper extends and complements Armstrong et al. (2012) in several ways. First, I provide international evidence of the link between takeover threats and information quality. This is significant since the existing U.S. literature on this relation is mixed (e.g. Bowen et al., 2008; Zhao and Chen, 2009; Armstrong et al., 2012; Baber et al., 2015). This paper offers a new take on this relation using a novel international takeover law setting.

More importantly, I isolate job security concerns as a channel through which takeover law implementation influences managers' accounting choices. Prior literature does not directly examine this channel, although Armstrong et al. (2012) partition their sample on ex-ante probability of takeover, finding no differences in transparency across partitions. In the international sample used in this paper, I also find no significant differences in financial reporting quality when partitioning based on ex-ante takeover probability. However, I further investigate concerns about turnover using ex ante performance and turnover probability. Here, I provide direct evidence that job security concerns serve as a channel. Additionally, I find that the increase in earnings management and opacity following takeover law adoption is more

pronounced for the CEOs who are expected to have higher job security concerns at the time of takeover legislation – poor performers and those with greater turnover risks.

It is also possible that a turnover-driven explanation is masked in the U.S. setting. Because the US has strong investor protection, even if job security concerns create incentives to manipulate accounting information, the country's institutions limit CEOs' ability to do so. The cross-country sample thus illuminates the influence of takeover laws in conjunction with varying degrees of investor protection. This allows for the exploitation of greater variation in firm level characteristics, such as earnings management. As a result, I am able to identify job security concerns as a channel through which takeover laws impact the information environment; this result is more pronounced in low investor protection countries.

The remainder of this paper proceeds as follows. Section 2 provides background information on the setting and related literature. Section 3 describes the research design, methodology and relevant variables. Section 4 details the main results and robustness analyses with regard to the estimation assumptions, as well as an explanation for the results. Section 5 presents the results of a number of additional tests that further support my results. This section also conducts cross-sectional tests in order to disentangle potential drivers of the results. Section 6 contains a number of robustness analyses. Section 7 concludes.

2. BACKGROUND AND HYPOTHESES

Corporate governance is important because of the inherent agency problems present when managers are separated from outside investors (Bushman and Smith, 2001). In particular, managers may pursue their private interests – which do not align with the shareholders' interests but are often protected by legal mechanisms (Jensen and Meckling, 1976). Corporate governance protects shareholders' interests and their investments (Shleifer and Vishny, 1997) and existing literature documents that governance can significantly affect firm value.[6]

The components of corporate governance examined within prior literature include turnover sensitivity to performance (e.g., Shleifer and Vishny, 1997; Volpin, 2002; DeFond and Hung, 2004; Lel and Miller, 2015). With such mechanisms in place, CEOs, especially those who are underperforming, are under higher pressure and face greater job security concerns. Thus, while improving sensitivity of turnover to performance may increase managerial effort, it can also increase incentives to manage performance measures and create an opaque information environment.

Prior literature provides evidence that job security concerns can encourage attempts to distort the information by which managers are being evaluated (e.g. DeAngelo, 1988; Graham et al., 2005; Mergenthaler et al., 2012; Ali and Zhang, 2015). Given that CEOs are incentivized to manipulate information to signal their quality (Adams and Ferreira, 2007), a shock to turnover sensitivity to performance that increases job security concerns for CEOs could magnify these

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[6] Papers that examine components of governance and their benefits on firm value include Gompers et al. (2003), Masulis et al. (2007) and Bebchuk et al. (2009).

incentives. Further, Hermalin and Weisbach (2012) discuss in their theoretical paper how CEOs can manipulate reporting quality following a shock to the disclosure regime, and the associated increase in scrutiny imposes more monitoring, which place greater job security concerns on managers. Thus, managers may have incentives to manipulate the accounting information that is used in their evaluation and hide behind opacity.

Thus, an improvement in corporate governance mechanisms, such as turnover sensitivity to performance, increases job security concerns for CEOs. Moreover, manipulation of accounting information is not restricted to upwards earnings manipulation or to one period. Fudenberg and Tirole (1995) and DeFond and Park (1997) argue that job security concerns drive managers to smooth earnings in consideration of both current and future performance, suggesting the presence of both upwards manipulation for current poor performers and smoothing for those who are more concerned about future performance.

On the other hand, turnover sensitivity to performance is a key internal governance mechanism. Improved governance can also curb earnings management and opacity, which are not innocuous; they are costly to outside investors and may only benefit the CEOs (e.g., Leuz et al., 2003; Burgstahler et al., 2006; Lang et al., 2012). As a result, boards have incentives to not only monitor performance, but also to discipline financial reporting choices. Thus, enhanced governance mechanisms could discourage CEOs from engaging in earnings management or hiding behind opacity. Hazarika et al. (2012) confirm that proactive disciplining of aggressive earnings management exists and they present evidence that such disciplining influences CEOs' behavior. Other studies within the literature suggest that better corporate governance structures help mitigate earnings management, although most of the structures examined were board composition measures rather than specific attributes, such as the ability to fire poorly performing

managers (e.g., Beasley, 1996; Klein, 2002; Xie et al., 2003; Davidson et al., 2005).[7]

Nevertheless, earnings management detection imposes costs on boards (Hermalin and Weisbach,

2012), so it may not be common. Whether managers' incentives to obfuscate accounting

information to save their jobs outplay directors' efforts to deter earnings management and ensure

transparent financial reporting is an empirical question that I investigate in this study.

I use the market for corporate control as the research setting, because the threat of

takeover is an important governance mechanism itself and also enhances attributes such as a

CEO's turnover sensitivity to firm performance (Fama, 1980; Fama and Jensen, 1983;

Hirshleifer and Thakor, 1998; Lel and Miller, 2015). For my primary analyses, I utilize a set of

M&A laws passed in 13 countries between 1992 and 2009 from Lel and Miller (2005), which

they gathered from sources including financial law publications such as the *International*

Comparative Legal Guide and *International Financial Law Review*, papers such as Nenova

(2006) and websites of national regulatory agencies.[8] These laws were passed in order to foster

M&A activity, presumably to attract more capital into the country's stock market, improve the

country's global standing and promote more efficient capital allocation by emphasizing the

reduction of barriers to M&As.

Table 1 lists the 13 countries in the treatment sample and the years of takeover law

initiation as well as the 20 countries in the control sample.[9] The countries passed laws between

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[7] Moreover, Bushman and Smith (2003) state that firms that improve governance could also increase disclosure, improve transparency and reduce information asymmetry, which are associated with capital market benefits.

[8] Lel and Miller (2015) exclude Switzerland, which passed a takeover law in 2004 and end their sample in 2003,because of the EU Takeovers Directive that was passed in April 2004. However, research reveals that the effects of this law on takeovers are ambiguous (e.g., Humphery-Jenner, 2012). Thus, to maximize my treatment sample and firm-year observations, I include the 2004 Switzerland law and extend the sample into 2009. I later also exclude Switzerland and end the sample in 2003 and find that this does not affect my results.

[9] Although Lel and Miller (2015) include Czech Republic as a country within the control group, I exclude observations from the Czech Republic because the country has insufficient observations according to the criteria I

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1995 and 2004, ultimately providing a set of staggered adoptions that help mitigate endogeneity issues. I exclude countries that passed takeover laws prior to the beginning of the sample period (1992) in order to isolate the effect of these laws and the resulting increase in performance monitoring on financial reporting. An advantage to using such a set of laws is that the decision to pass takeover legislation and dates of enactment are exogenously determined. It is difficult to imagine that firms have a role in the adoption of these country-level laws.[10] Thus, I provide a nice setting in which I can better identify causal effects of such legislation using a difference-in-difference design with an appropriate control group that consists of countries that had never passed takeover laws.

Prior literature is mixed regarding the relation between takeover threats and earnings quality. While Zhao and Chen (2008, 2009) and Armstrong et al. (2012) find that takeover defenses – which lower the threat of takeover – improve earnings quality, Bowen et al. (2008) and Baber et al. (2015) provide evidence that decreased takeover threats is consistent with higher discretionary accounting practices and misreporting of financial statements, respectively. This relation is not documented in a cross-country setting however, and it may be important to examine other countries in order to illuminate this link and better understand why such a relation occurs.

This paper complements and extends Armstrong et al. (2012), who exploit a set of U.S. state antitakeover laws and provide evidence that firms' financial reporting quality improves

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use. However, as a robustness check, I include observations from the Czech Republic in my control sample and find that inferences do not change.

[10] Prior literature, such as Mikkelson and Partch (1997) and Gompers et al. (2003), use the level of takeover activity and takeover defenses, respectively, as proxies for takeover threats. However, target firms' characteristics and macroeconomic shocks that jointly explain the variables under study affect the level of takeover activity. Moreover, firms implement takeover defenses themselves and thus, suffer from endogeneity concerns. Turnover sensitivity to performance levels suffers from endogeneity concerns for the same reasons, since firms themselves can choose how much performance should impact managerial turnover decisions.

following implementation. Although Armstrong et al. (2012) find that their results can be explained by firms' need to access the capital markets, they do not specifically test the job security concerns story. However, Bertrand and Mullainathan (1998) also use antitakeover laws and document a reduction of pressure on top managers, thus lowering managers' incentives to distort accounting information (Bushman and Smith, 2001), it is important to examine the role played by job security concerns, or turnover pressure. Although Armstrong et al. (2012) provide evidence that there are no differences in transparency between subsamples partitioned on ex ante takeover risk, I use measures that directly represent turnover pressure in the face of increasing turnover sensitivity to performance, such as performance itself or turnover probability.[11] The relation between takeover risks and information quality directly driven by changing turnover pressures is not directly investigated in prior U.S. studies that examine this relation.

In contrast, the current paper examines takeover laws which *increase* takeover threats. A number of provisions in the international M&A laws resemble those in the US, including fair price laws (Connecticut), registration and disclosure laws (Hawaii) and cash-out laws (Pennsylvania). The provisions also include unique provisions. For instance, Taiwan grants large tax benefits to acquirers through new types of M&As like cross-border and cash-out mergers. New Zealand allows acquirers to squeeze out minority shareholders. While the Philippines

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[11] Using my international sample, I also partition based on ex ante takeover risk, calculated by applying a takeover prediction model I built for each observation in my sample. The takeover prediction model is created by regressing instances of becoming a takeover target, collected from SDC Platinum: Mergers and Acquisitions database, on a set of determinants of becoming a takeover target from prior literature such as Cremers et al. (2009), which include Tobin's Q, PP&E, leverage, cash, and ROA, all country-industry adjusted; as well as size, presence of institutional investors, and M&A intensity of the industry. Untabulated results indicate that there are no significant differences in earnings management or analyst forecast properties across ex ante takeover risk partitions.

simplified government approval procedures, India eliminated certain takeover defenses; as a result, these factors promote greater takeover activity in these countries.[12]

Such attempts at fostering greater M&A activity can create distinct incentives. Because they *increase* pressure on top management, they generate incentives to manage earnings and create an opaque information environment. This concept of pressure faced by management is especially relevant in a setting in which turnover sensitivity to reported performance increases (Lel and Miller, 2015). Furthermore, I use a broad international setting in which the wide variation in country institutions and in firm transparency can also be exploited. These aspects are difficult to exploit in a U.S. setting, in which all firms face a similar institutional environment. For instance, CEOs worldwide may have similar incentives to distort performance measures, but countries with high quality institutions could limit the abilities of these managers to execute the distortions. As such, inter-country studies clarify these incentives in distinct institutional environments.

To examine the incentives that drive managers to manipulate earnings following takeover law enactment, I use a firm's ex ante market and accounting performance to separate managers who are performing poorly from those who are performing well, as performance is a primary determinant of forced CEO turnover. This addresses the hypothesis that managers performing poorly have greater job security concerns and have higher incentives to manage earnings when turnover sensitivity to performance increases. To emphasize the relationship between my findings and turnover pressure, I gather annual data on companies' officers from Worldscope CD

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[12] Although the laws differ in terms of what provisions they include, neither Lel and Miller (2015) nor I are concerned with the potentially heterogeneous effects each law might have on takeover threats. We recognize that all of these laws had the intention to, and did increase, takeover activity, which in turn increases turnover sensitivity to performance and hence, job security concerns. The effects on takeover activity are untabulated within this paper, but are included in Lel and Miller (2015) as well as in their online appendix.

ROMs and build a turnover prediction model using a set of determinants for forced turnover. I apply the model to each firm in my sample in order to calculate a direct measure of ex ante turnover pressure, and divide the sample in two based on the median of this measure. This directly tests my job security concerns hypothesis and examines whether CEOs with higher turnover pressure manage earnings and render financial reporting opaque at a higher rate than those under less pressure.

Competing hypotheses include growth strategies and share issuance. Bertrand and Mullainathan (2003) and Zhao and Chen (2008) suggest that managers pursue the quiet life after state antitakeover laws are passed. I investigate the possibility that the opposite occurs after the adoption of takeover laws – that cash flow uncertainty from higher investments and growth strategies increases opacity. Furthermore, Teoh et al. (1998a, b) and Ducharme et al. (2004) suggest that managers who issue shares could have incentives to manipulate accounting information in order to maximize share price. Therefore, I also examine the possibility that the increased opacity following M&A law adoption is driven by firms planning to create optimism about their prospects prior to issuing equity.

The analysis begins with an exploration of whether takeover laws that heighten takeover threats increase or decrease the information quality of a country's firms. I then conduct various cross-sectional tests to understand what might drive this relation. Because I examine a cross-country sample, I also explore whether stronger investor protection can help mitigate the increased levels of earnings management and opacity in firms domiciled in countries that passed M&A laws. Although research has studied the effects of the international market for corporate control on governance (Lel and Miller, 2015), it has not addressed the effects on transparency or why those effects occur. The current study addresses this gap.

3. METHODOLOGY

3.1 SAMPLE

The sample comes from the Worldscope database between the years of 1992 and 2009.[13] I exclude all of the firms that are not in one of the 33 treatment and sample countries. All of the firms in the sample have observations in the three years prior to and following M&A law adoption, which eliminates firms created in the post-law period and firms that became inactive in the pre-law period.[14] The firms in the control countries have at least seven observations each.[15] From there, I adjust my sample size depending on the set of required variables for the particular regression.[16] For my main regressions, the sample size ranges from 29,327 firm-year observations to 52,692 firm-year observations.

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[13] The sample period begins in 1992 because Worldscope coverage of international firms is poor prior to 1990, and I require up to three years of financial data to calculate certain earnings management measures such as discretionary smoothing. I chose 2009 as the end of the sample period because that allows up to five years of outcomes following the last regulation I use (Switzerland in 2004). In robustness tests, I use a sample period ending prior to 2004 to avoid certain confounding events, such as the 2004 EU Takeover Directive, 2005 Mandatory IFRS adoption and the 2008 financial crisis. Inferences remain the same as those from the alternative sample period.

[14] Relaxing the requirement of having at least three pre-law and three post-law observations does not change the inferences. I also run a balanced panel in those years and the conclusions remain the same.

[15] This is to mirror the requirement of the treatment firms, which require three pre-law observations: one observation in the year of law enactment and three post-law observations, for a total of at least seven observations per firm. Also, relaxing this requirement for the control sample does not lead to qualitatively different conclusions.

[16] I allow the sample size to change depending on the model in order to preserve sample size when possible. Inferences remain the same when I drop any observation without the required observations for any of the regressions in order to use a consistent sample size across all of the main regressions.

3.2 RESEARCH DESIGN

I utilize a series of difference-in-difference estimations to examine how M&A law

adoption affects a firm's financial reporting characteristics. The model is as follows:

$$EARNINGS\ MANAGEMENT = \alpha + \beta 1 * (TREAT*POST) + \beta 2 * (X) + Fixed\ Effects$$
OR *ANALYST FORECAST*
PROPERTIES

EARNINGS MANAGEMENT and *ANALYST FORECAST PROPERTIES* represent the dependent

variables that I describe below. *TREAT* is an indicator variable that equals one if the firm is in

one of the 13 countries that enact takeover laws and zero otherwise, and *POST* is an indicator

variable that equals one if the observation is from the post-law period and zero otherwise. The

interaction between *TREAT*POST* is the main explanatory variable, and the coefficient, $\beta 1$, is

negative (positive) if the laws decrease (increase) information quality for the treatment firms

more than they decrease (increase) information quality for the control firms from the pre- to

post-law period. *X* is a set of control variables also expected to have effects on earnings

management or on analyst forecast properties. All of the regressions include country, industry

and year fixed effects, so I do not include *TREAT* and *POST* in my model. Robust standard errors

are clustered at the firm level in order to correct for possible serial correlation and

heteroscedasticity, following Lel and Miller (2015). All of the continuous, unranked and

nonlogarithmic variables are truncated at the 1% level.

3.3 DEPENDENT VARIABLES

Because transparency is not directly observable and prior studies have used a variety of

measures, I use various proxies to examine how takeover law initiations affect a firm's

information environment. I include both the firm's transparency-related decisions (earnings

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management) and transparency outcomes (analyst forecast properties) to investigate CEO's direct responses to takeover laws and to understand in-depth how M&A legislation affects a firm's information environment, respectively. Detailed descriptions for all of the variables appear in Appendix A.

3.3.1 Earnings Management

I use four different proxies, each capturing a different aspect of earnings management, as well as an aggregate measure of financial reporting quality. I allow for CEOs to use distinct methods of earnings management to suit their needs, depending on their specific circumstances. I investigate discretionary smoothing (Fudenberg and Tirole, 1995), target beating (Graham et al., 2005), unsigned accruals quality and signed abnormal accruals levels since accruals are likely used to directly manipulate earnings. Because of measurement error associated with a single earnings management proxy, I examine multiple earnings management variables in order to cover a broad spectrum of manipulation methods.

The first measure, discretionary smoothing (*DIS_SMTHC*), is a combination of two commonly used variables which represent earnings management – variability of net income relative to cash flow and the correlation between accruals and cash flows (e.g., Leuz et al., 2003; Barth et al., 2008; Lang et al., 2012). The intuition is that the discretionary use of accruals to smooth out fluctuations in underlying cash flows beyond an inherent amount indicates the presence of earnings management. To capture this direct smoothing with the purpose of managing earnings (as opposed to firm fundamentals affecting income variability), I follow Lang et al. (2012) in regressing the smoothing measure on a set of firm fundamentals and assume that the residual represents discretionary smoothing.

The second proxy represents instances of small positive income (*SPINC*), a dummy variable that equals one if net income scaled by total assets is between 0 and 0.01, and zero otherwise (e.g., Srinivasan et al., 2015).[17] Prior literature documents a "kink" in the distribution of reported earnings around zero: a statistically small number of firms with small losses and a statistically large number of firms with small profits, suggesting that many firms around this heuristic target of "zero" manage their earnings so as to report a profit and avoid a loss (e.g., Burgstahler and Dichev, 1997; Beaver et al., 2003; Dechow et al., 2010). I also investigate meeting or beating analyst forecasts and prior period earnings as alternative proxies for target beating and inferences are unaffected (untabulated).

Third, I use the Dechow and Dichev (2002) measure of accruals quality (*DDEQ)*, the standard deviation of residuals from a regression of accruals on current, past and future cash flows. Dechow and Dichev (2002) find an association between this standard deviation and poor accruals quality. Thus, researchers widely use this measure as a proxy for earnings management, including within the international literature (e.g., Barth et al., 2012).

Lastly, I use a measure that represents signed abnormal accruals (*ABNACCR*), which is the difference between a firm's accruals for a given year and the firm's predicted accruals following DeFond and Park (2001) and Francis and Wang (2008). Unlike the Dechow and Dichev (2002) accruals quality measure, this measure of abnormal accruals is signed. Thus, *ABNACCR* can provide insight into a firm's tendency towards upward or downward earnings management. Thus, a more positive measure of *ABNACCR* represents an abnormally upward-

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[17] My measure is different from Srinivasan et al.'s [2015] measure, which takes the percentage of firm-years in the past three years in which net income scaled by total assets was between 0 and 0.01. I do not take a three-year average because of the event study nature of my analysis. For instance, using a one-year measure avoids confounding effects of pre-law small positive income instances on the firm's three-year small positive income proportion within the year following takeover law adoption. I use Srinivasan et al.'s [2015] three-year measure to check for robustness, however, and my inferences are not affected.

leaning earnings management via the manipulation of accruals, indicating greater instances of accruals and earnings inflation.[18]

Because each of these four measures represents a different type of earnings management (discretionary smoothing, target beating, accruals quality and inflation), I also examine an aggregate measure of financial reporting quality (*FRQ*). This measure represents the average ranks of each of these earnings management variables (Lang et al, 2012).[19] Before averaging the variable ranks, I adjust the signs so that increasing *FRQ* values correspond with increasing financial reporting quality, or decreasing earnings management.[20] Aggregating different proxies for earnings management provides greater intuition into how overall financial reporting quality changes following the adoption of takeover laws than if I were to depend on a single, noisy dimension of earnings management.[21]

I include a number of variables to control for firm fundamentals that prior literature explains are also associated with earnings management. The control variables include firm size (*LNTOTASS*), the natural log of total assets (in USD), book to market ratio (*BM*), return on assets (*ROA*), standard deviation of returns (*STDRETURN*), an indicator variable for an "old" firm if the firm's age is above the sample median (*OLD*), yearly growth in sales (*SGROWTH*), an

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[18] Alternative proxies for discretionary accruals, such as the modified Jones model (Dechow et al., 1995) or discretionary estimation errors (Francis et al, 2005) do not change inferences.

[19] In calculating *FRQ*, I require that a firm has observations for *SPINC* and *ABNACCR,* but do not require there to be observations for *DIS_SMTHC* and *DDEQ* to preserve sample size. If data for either is missing, I take the average of the ranks of the remaining variables to calculate *FRQ*. Results are robust when using different requirements to calculate *FRQ*.

[20] Since higher values of *DIS_SMTHC*, *SPINC* and *ABNACCR* represent increasing earnings management, I multiply the ranks of these by -1 and average with the rank of *DDEQ* to calculate the aggregate *FRQ* measure that represents financial reporting quality.

[21] For robustness, I also compute an aggregate earnings management measure using principal component analysis; results do not change. I report the aggregate measure because doing so preserves the sample size, given the high variance in sample size across variables.

indicator variable for loss firms (*LOSS*), the percentage of closely held shares (*PCNTCLHLD*) and cash flows in the fiscal year (*CF*). More detailed explanations of all of the variables, dependent or independent, appear in Appendix A.

3.3.2 Analyst Forecast Properties

The next set of dependent variables, analyst forecast properties, are not directly the result of a manager's decisions (like manipulating accruals), but reflect the transparency outcome of the firm's overall information environment. Firms that are more transparent are likely to attract more analysts, and the resulting analyst forecasts are likely to be more accurate and less dispersed.[22]

The first variable I consider is analyst following (*ANALYST*). Prior literature, such as Lang et al. (2003), indicates that analysts are attracted to firms that are more transparent, especially in an international context. Further, analyst forecasts for firms that are more forthcoming are likely to be more accurate and less dispersed (Lang and Lundholm, 1996; Jin and Myers, 2006; Maffett, 2012). As such, I also examine two additional analyst forecast properties, *ACCURACY* and *DISPERSION*, in my analyses.

Moreover, I aggregate the three analyst forecast properties into a single analyst forecast quality variable, *AFQ*, by taking the average ranks of *ANALYST*, *ACCURACY* and *DISPERSION*.[23] To control for firm fundamentals that are also related to analyst properties, I include the following variables: size (*LNTOTASS*), return on assets (*ROA*), return variability

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[22] In the robustness tests, I also use other transparency proxies to ensure that my results hold even when I use different components of transparency for dependent variables.

[23] Similar to when I calculated *FRQ*, I aim to preserve the sample size and do not require that *ACCURACY* and *DISPERSION* measurements both exist to calculate *AFQ*. Again, modifying the sample requirements does not change the inferences from my results. I also multiply the rank of *DISPERSION* by -1 so that higher values represent greater transparency.

(*STDRETURN*), annual growth in sales (*SGROWTH*), the earnings surprise when earnings are

released (*EARNSURP*) and old firm indicator (*OLD*).

3.4 DESCRIPTIVE STATISTICS

 Table 2 presents the descriptive statistics for all of the dependent and control variables

that I use. I provide the mean, lower quartile, median, upper quartile and the standard deviation

of each variable. Approximately 15% of firms in the sample report small positive income and the

median firm has a slightly negative level of abnormal accruals, although the mean is slightly

positive. A single analyst follows the median firm. The average firm has total assets (in U.S.

dollars) of roughly $242 million, corresponding to a logged value of approximately 5.5, which is

similar to but slightly less than the median value in Lel and Miller (2015).[24] The median firm has

a book to market ratio below 1, but the mean is at approximately 1.26. The average firm has

positive growth in sales, slightly less than 50% of the shares closely held, and has positive

accounting and market performance.

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[24] Lel and Miller (2015) discarded all of the firms with less than $10 million in total assets, which would inflate the median value. I do not remove such firms in order to conserve sample size; however, my results are essentially unchanged when dropping such firms.

4. MAIN RESULTS

4.1 COMPARISON OF EARNINGS MANAGEMENT

Table 3, Panel A reports the results from difference-in-difference estimations with the five earnings management proxies as the dependent variables. Higher values of *DIS_SMTHC*, *SPINC* and *ABNACCR* represent higher earnings management, while higher values of *DDEQ* and *FRQ* represent lower earnings management. The independent variable of interest is the interaction term, *TREAT*POST*. In Columns 1, 2 and 4 – in which the dependent variables are *DIS_SMTHC*, *SPINC* and *ABNACCR* – the coefficients on *TREAT*POST* are significantly positive, suggesting that earnings management increases in the period following takeover law implementation for the treatment firms. The results in Columns 3 and 5 are consistent with the results in Columns 1, 2 and 4, as I find a significantly negative coefficient on *TREAT*POST* for *DDEQ* as well as for the aggregate measure of financial reporting quality, *FRQ*. Thus, the results reported in Table 3, Panel A support the hypothesis that after countries pass takeover laws, the managers of firms domiciled there respond by engaging in significantly more earnings management activities.

Panel B presents the results of the same regressions depicted in Panel A, but includes firm and year fixed effects rather than country, industry and year effects. Since my observations are generally measured at the firm-year level, firm fixed effects help control for unobservable firm differences that may serve as omitted correlated variables with earnings management. The results of the firm fixed effects specification are quite similar to the results in Panel A. In all five regressions, earnings management increases significantly for treatment firms following takeover

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law adoption. Thus, even when I control for unobservable firm differences between the treatment and control firms, I find that firms are significantly more likely to smooth earnings discretionarily, report small positive incomes and have poor accruals quality and abnormally higher levels of accruals.

This effect on earnings management appears to be economically meaningful. Focusing on Column 5 in Panel B for the aggregate financial reporting quality measure, being in the treatment group is associated with a 0.0310 decrease in *FRQ*. For the median firm, all else being equal, this represents a 6% decrease in *FRQ*, or about 15.5% of an interquartile shift in *FRQ*. The individual earnings management measures are also affected by similar economic magnitudes to the effect on *FRQ*.[25]

4.2 COMPARISON OF ANALYST FORECAST PROPERTIES

Table 4, Columns 1-4 present the results of difference-in-difference regressions with *ANALYST*, *ACCURACY*, *DISPERSION* and *AFQ* as the dependent variables. These estimations elucidate how the post-takeover law period affects the transparency of a firm from the perspective of analysts, who frequently use the firm's information. If managers become more prone to manipulating accounting numbers, this creates opacity, and the quality of the firm's analyst forecast properties reflect this change.

Panel A, Columns 1-3 report that the coefficient of *TREAT*POST* is significantly negative, negative and positive for the dependent variables *ANALYST*, *ACCURACY* and *DISPERSION*, respectively. This suggests that following takeover law adoption, treatment firms have significantly lower analyst following, worse forecast accuracy and greater forecast

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[25] I provide estimates of economic significance in order to intuitively interpret the magnitude of the effect of being in the treatment group on earnings management proxies. The true size of the effect on any given firm is affected by numerous factors and circumstances surrounding the firm beyond the scope of this analysis; Hence, this effect is for the "median firm, all else equal."

dispersion. Column 4 confirms the previous findings by reporting the coefficient on

TREAT*POST to be significantly negative for the aggregate analyst forecast quality variable,

AFQ. The firm fixed effects specification in Panel B not only suggests similar inferences, but

also presents stronger results than in Panel A. The consistency of the results across the different

facets of analyst properties and fixed effects specifications provides convincing evidence that

firms facing higher takeover threats following passage of takeover laws in their countries create

more opaque information environments.

Similar to the economic effect on *FRQ*, being in the treatment group is associated with a

decrease in the aggregate analyst forecast quality measure by approximately 7% for the median

firm, or roughly 16% of an interquartile shift in *AFQ*, all else being equal. Thus, the results are

economically meaningful and complement the consistent statistical significance of the results

found in these tests.

4.3 ROBUSTNESS OF THE MAIN RESULTS

A key assumption in my difference-in-difference estimation is that without the laws, the

treatment and control groups would follow similar patterns in the dependent variables. I conduct

tests to ensure that this assumption holds true for my estimations. Another underlying

assumption is that the differences in the dependent variables between the two groups are a result

of the shock and not fundamental differences between the treatment and control firms. Although

firm fixed effects mitigate this concern, I also use a matched control sample in order to ensure

that differences in firm fundamentals are not driving my results.

First, I run the main regressions, controlling for country-specific time trends so as to

ensure that treatment and control firms follow similar patterns within the time series of the

dependent variables (Angrist and Pischke, 2015). I interact country and year dummies and

include them as controls in my regressions.[26] Table 5, Panel A reports that even with these variables included, *TREAT*POST* remains significantly negative for both *FRQ* and *AFQ*. This suggests that controlling for country-specific time trends does not change the result, i.e. that increases in earnings management and the deterioration of analyst forecast properties follow M&A law adoption.

Second, I bootstrap the statistical significance of the coefficient on *TREAT*POST*. This ensures that the implementation of country-level takeover laws uniquely affects transparency and that a random assignment into the treatment group does not indicate the same result. I follow the approach in Bushman et al. (2005), who use a set of staggered insider trading laws in their setting. First, I randomly assign my sample countries into treatment and control groups.[27] For the firms chosen to be in the treatment group, I randomly assign an initial year of law implementation within my sample period (1992-2009) and define *TREAT*, *POST* and *TREAT*POST* accordingly. I estimate my multivariate models from Tables 3 and 4 using the random country-event dates and examine the coefficients on *TREAT*POST*. I repeat this simulation of random assignment and estimation 1,000 times in order to yield an empirical distribution of *TREAT*POST* coefficients. Table 5, Panel B presents the results: I find that *TREAT*POST* remains significantly negative for both *FRQ* and *AFQ* with the bootstrapped statistical significances.

Finally, I rerun the estimations from Tables 3 and 4 using a matched sample of control firms for a better comparison across the treatment and control groups. Each treatment firm is

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[26] As another robustness check, I include interactions between my control variables and the *POST* indicator in order to control for time trends in control variables. In untabulated regressions, opacity continues to increase significantly for treatment firms during the post-M&A law period.

[27] For complete randomization, I do not require that assignment into treatment and control nation groups occur in the same proportion as the sample countries within the actual data. However, establishing the requirement and re-running the simulations yield exceedingly similar results.

matched with a control firm in the same two-digit ICB industry and fiscal year by size

(*LNTOTASS*) and performance (*ROA*). This serves as a more robust way of controlling for firm

fundamentals between the treatment and control firms; namely, by restricting the control sample

to consist of the most similar firms in my treatment sample. Table 5, Panel C presents the results

of the matched sample tests. I continue to find that treatment firms are significantly more likely

to manage earnings and have worse analyst forecast properties.

Overall, Table 5 presents results of the tests, ensuring the robustness of my main findings

from Tables 3 and 4 by satisfying assumptions in difference-in-difference estimations.

Controlling for country-specific time trends, bootstrapping by random assignment and simulation

and using a matched sample of control firms all indicate the same result: that M&A laws drive

increased opacity by way of increased earnings management and worsening analyst forecast

properties.

4.4 JOB SECURITY CONCERNS

With the market for corporate control serving as a governance mechanism by which to

ensure high performance and thus increasing turnover sensitivity to performance (Lel and Miller,

2015), regulations aimed at increasing takeover activity in a country pressure managers to

perform. The resulting pressure and possible desperation to save their jobs may incentivize CEOs

to manage earnings and become more opaque in way which makes them appear better than what

the actual performance would indicate.

If managers make changes to improve their job security, then earnings management and

opacity likely increase following takeover legislation more among poorly performing managers.

These managers face the most pressure to improve their performance or get fired in the face of

increasing trends of turnover sensitivity to performance. The CEOs who perform highly are less

likely to have job security concerns and thus, their incentives to distort accounting numbers seem to be less than those of poor performers.

I use two measures of performance to divide the sample into strong and poor performance firms: a market measure (firm yearly return) and an accounting measure (yearly ROA). I make the split based on the sample median of each measure and run the multivariate regressions from Tables 3 and 4 to compare the strength of the results in each subsample. Table 6, Panels A and C present return split results, while Panels B and D report ROA split results. Panels A and B contain earnings management measures as the dependent variables, and C and D use analyst forecast properties as the dependent variables.

All but one set of regressions across all of the panels in Table 6 report that the coefficient of *TREAT*POST* relates more positively to earnings management and opacity for poor performers than for good performers. The one model that suggests otherwise is in Panel A for *DIS_SMTHC*, which reports that high performance firms are more likely to engage in abnormally high levels of earnings smoothing. Considering that smoothing includes both upward and downward earnings management, this is understandable because good firms may be looking to save for the future rather than inflate earnings now (Fudenberg and Tirole, 1995; DeFond and Park, 1997). The chi-squared statistics of the differences in the coefficients are significant at the 10% level across all of the models presented in Table 6, except for those in the *DDEQ* models. Taken together, the results are consistent with the job security concerns hypothesis, since poorly performing CEOs are more desperate to distort accounting information to save their jobs following a shock to turnover sensitivity to performance. In contrast, high performance CEOs may be more encouraged to smooth earnings to protect themselves in the future, but otherwise have no incentives to inflate earnings or hide behind opacity.

Next, I directly address turnover concerns by calculating ex ante turnover probability for each firm, based on turnover data collected from Worldscope CD ROMs.[28] I follow prior literature such as Peters and Wagner (2014) and regress a turnover indicator on a set of variables expected to be associated with forced turnover using a logit estimation. These determinants of forced turnover include country-industry-adjusted firm yearly ROA, total assets, country-industry return volatility, a loss indicator, leverage and book-to-market ratio.[29] I apply the coefficients from this turnover prediction model to each firm in my sample in order to calculate the turnover probability, *PRED_TURNOVER*, for each firm's manager. I split the sample based on the median of this measure and estimate the same multivariate transparency regressions from Tables 3 and 4.

Table 7, Panels A and B present results consistent with the job security concerns hypothesis. Panel A displays evidence of all of the measures of earnings management being greater for CEOs with higher ex ante turnover probability. The results in Panel B indicate that the adverse impact of takeover laws on analyst forecast properties is also greater for managers with higher ex ante turnover pressure. Furthermore, the chi-squared-statistics of differences in the coefficients of *TREAT*POST* between the high and low turnover probability groups are significant at the 10% level for all of the dependent variables in Panels A and B, except *DISPERSION*. Thus, Tables 6 and 7 present results that support the hypothesis that the unintended consequences of takeover laws on financial reporting are explained by managers with greater job security concerns – i.e. poor performers or those with greater turnover risks. As such,

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[28] The CD-ROMs provide only the name and position of each officer. Thus, it is difficult to distinguish between forced and voluntary turnover. I use a forced turnover prediction model using variables known to be correlated with forced turnover when calculating turnover probability. I follow DeFond and Hung (2004) in identifying the top officer in each firm.

[29] Using an alternate turnover prediction model, including country-industry-adjusted returns rather than ROA, yields similar results.

increases in turnover sensitivity to performance following takeover law adoption encourage

CEOs facing increased job security concerns to manage earnings and hide behind opacity, for the

short term or the long term, in order to protect their jobs.

5. ADDITIONAL TESTS

5.1 INSTITUTIONAL SPLIT

I explore how the negative effect of takeover laws on the information environment differs among countries. Countries with poor quality institutions are likely to have weaker monitoring and greater opportunities for managers domiciled in those countries to manipulate accounting information (Leuz et al., 2003). To test this, I explore whether increases in earnings management and opacity surrounding M&A legislation are more pronounced for countries with poorer institutions.

I employ two measures of institutions. The first variable is the anti-self-dealing index (*ASDI*) from Djankov et al. (2008), which measures the level of difficulty for minority shareholders to thwart the consumption of private benefits by controlling shareholders.[30] The second variable is an indicator that equals one if the country is a common law regime (English legal origin) and zero otherwise (*COMMON*). La Porta et al. (2006) justify the use of legal regime by proving that common law countries typically have stronger investor protection.

Table 8 presents the results for the weak and strong investor protection sample splits when investor protection is measured by *ASDI* (Columns 1-4) and when it is measured by *COMMON* (Columns 5-8). The results suggest that firms in low ASDI and civil law countries have more negative coefficients of *TREAT*POST* when the dependent variable is *FRQ* or *AFQ*,

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[30] Djankov et al. (2008) claim that self-dealing is one of the central problems of corporate governance internationally.

or *FRQ*, respectively. The difference between strong and weak institutions is also statistically significant for *FRQ* within the legal origin split at the 1% level.

Thus, evidence exists that firms domiciled in low ASDI and civil law countries are more likely to commit earnings management and have an information environment characterized by worse analyst forecast properties. Combined with Lel and Miller's (2015) finding that turnover sensitivity to performance increases at a greater rate for poorer investor protection countries,[31] Table 8 suggests that managers in such countries distort information more in order to prevent forced turnover. Thus, the presence of strong institutions or investor protection proves to be an important country-level feature that helps deter managers from opportunistically increasing earnings management and opacity following takeover law initiation.

5.2 RAPID INVESTMENTS AND GROWTH

The literature offers another possible explanation as to why firms' information environment could change following an exogenous shock to takeover threats. Known as the "quiet life" hypothesis, it refers to managers going "quiet" by making fewer investments and pursuing fewer growth options when insulated from takeover threats. This increases the quality of a firm's financial reports as a result of the decreased uncertainty in cash flows (e.g., Bertrand and Mullainathan, 2003; Giroud and Mueller, 2010; Armstrong et al., 2012) associated with changes in investing and operating decisions at "quiet life" firms.

This paper examines firms' behavior under *increased* takeover threats. Thus, the literature might predict a reversal of the "quiet life": lower insulation pressures managers to increase investments and focus on rapid growth in order to thwart a potential takeover.

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[31] Lel and Miller (2015) find that the increased turnover sensitivity to performance following adoption of takeover laws is more pronounced for countries with poor institutions, suggesting that high quality institutions already have high turnover sensitivity to performance, and thus, takeover law adoption has little effect. They also use the same *ASDI* and *COMMON* variables to measure institutional quality.

Uncertainty and future cash flow variability might then increase, causing financial reports to appear to be of lower quality.

Similar to Giroud and Mueller (2010) and Armstrong et al. (2012), I identify firms with positive or negative country- and industry-adjusted growth in (1) assets, (2) PP&E, (3) COGS and (4) SG&A, all from Worldscope.[32] In this way, managers of firms with negative adjusted growth in the four variables are seen as pursuers of the "quiet" life. If the increased opacity is a result of managers who are essentially moving away from the "quiet life", I would expect to see the positive relation between *TREAT*POST* and earnings management or opacity to apply moreso for firms with *positive* country- and industry-adjusted growth in the above four variables.

Results are presented in Table 9, with the sample split into firms that are likely pursuing rapid growth and investments in order to fend off takeovers and firms that are not. I treat firms that have negative adjusted growth in all four variables as firms that are not pursuing rapid growth. I eliminate firms that have positive or negative growth for fewer than all four of the variables in order to ensure that the measure best captures growth strategies.[33]

I find no evidence that the positive (negative) relation between *TREAT*POST* and earnings management (analyst forecast properties) is limited to managers of firms with positive growth. Thus, this relation has no apparent connection to high growth strategies. The chi-squared statistics suggest that the differences in coefficients between the high growth group and the low growth group are all insignificant, providing no evidence that the resulting increase in earnings

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[32] Because I use an international sample, unlike Giroud and Mueller (2010) and Armstrong et al. (2012), I make slight modifications such as: adjusting for country and industry, instead of state and industry when measuring growth and by using SG&A expense instead of advertising expenses due to data availability in Worldscope.

[33] However, I also use different definitions of what makes a firm likely or not likely to pursue rapid growth strategies following takeover law adoption. I also look at the growth of each of the four variables on its own. In all of the estimations with these different definitions of quiet law reversing firms, my inferences do not change.

management and opacity in countries that adopt takeover laws is a result of managers who cease

to pursue the "quiet life" and instead, attempt to make more investments and pursue growth.

5.3 SHARE ISSUANCES

While controversy surrounds what actually happens to firms' accounting quality with

regard to equity issuances, prior literature indicates that companies issuing new equity have

increased incentives to manage earnings so as to help inflate prices (e.g., Teoh et al., 1998a, b;

Ducharme et al., 2004). Thus, I ensure that my results are not isolated to share issuers. I split the

sample into firms that have a secondary equity offering (SEO) in the following year and firms

that do not.[34] The SEO data is taken from the SDC: Global New Issues database.

Table 10, Panels A and B present the results for the SEO sample split. There is no clear

indication that the increased earnings management and deteriorating analyst forecast properties

in the post-law period for treatment firms is isolated to SEO firms. The differences in the

coefficients of *TREAT*POST* between SEO and non-SEO firms are insignificant. To the extent

that there are differences, the non-issuers have more pronounced coefficients than do the issuers.

Therefore, I can also rule out share issuances as the driver behind increased earnings

management and opacity following takeover law adoption.

5.4 ADDITIONAL CONTROLS FOR CONFOUNDING CHANNELS

There are other sets of concurrent regulations that could have affected earnings

management or transparency during the sample period. Thus, I include a set of controls to rule

out confounding channels and ensure that the takeover laws are responsible for affecting the

post-law information environment. I include corporate governance reforms (Kim and Lu, 2013),

short selling regulations (Maffett et al., 2015) and insider trading laws (Bhattacharya and Daouk,

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[34] I also split the sample into firms that have a SEO in the concurrent year and find no difference in the inferences.

2002).[35] I also control for country-level investor protection to ensure that the results are incremental to institutions' effects on financial reporting. I create a dummy variable, *GOODINVPROT*, to represent firms in countries with high quality institutions. This dummy variable equals one if *ASDI* is higher than the sample median and the firm is from a common law regime, and zero otherwise.

Results are presented in Table 11 with the earnings management variables in Panel A and analyst forecast variables in Panel B. In both panels, I continue to find consistent evidence that opacity significantly increases for treatment firms following takeover law adoption. Furthermore, it is interesting to note that corporate governance reforms (*CGR*) tend to be negatively correlated with information quality despite the reforms' intentions to improve governance mechanisms. Moreover, as expected, *GOODINVPROT* tends to be positively correlated with transparency. Nevertheless, takeover law adoption continues to be associated with increasing earnings management and opacity incremental to all of the other concurrent effects.

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[35] I also include a measure of the legal protection of labor unions and regulation of collective disputes from labor laws (Atanassov and Kim, 2009). However, the regressions do not report a coefficient for the labor laws variable because of multicollinearity. Thus, I do not report this variable in the tables. The insider trading laws variable is also omitted because of the multicollinearity in all but a few earnings management models. Thus, this variable is not reported in Panel B. I can be confident, however, that country fixed effects in my model take care of any variation that these other effects might create.

6. ROBUSTNESS ANALYSES

6.1 OTHER TRANSPARENCY PROXIES

As previously mentioned, transparency is an unobservable measure and can take many forms. While this paper has primarily focused on earnings management and analyst forecasts, the extant literature uses other facets of transparency as logical proxies. Thus, I make sure that other measures of transparency follow the same pattern as with earnings management and analyst forecast properties.

One measure I examine is whether the firm employs a Big 5 auditor to audit its financial statements (*BIG5*), which is a dummy variable that equals one if the firm had a Big 5 auditor in a given firm-year and zero otherwise.[36] A number of sources provide auditor data, including point-in-time Worldscope CDs, Compustat Global and Osiris. Prior literature, such as Teoh and Wong (1993), presents evidence that oversight by a Big 5 auditor is associated with a higher quality of financial reporting. Control variables are chosen from those which prior literature has shown to be correlated with the decision to employ a certain type of auditor (e.g., Fan and Wong, 2005). These variables include firm size (*LNTOTASS*), book to market ratio (*BM*), leverage (*LEV*), return on assets (*ROA*), total inventory scaled by total assets (*INVTA*), accounts receivables scaled by total assets (*ARTA*), an indicator variable for an old firm (*OLD*) and cash flows (*CF*).

The other transparency proxies I also examine are based on users of accounting information. Investors, as well as analysts, use firms' financial reports to make important

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[36] The Big 5 auditors are Price WaterhouseCoopers, Deloitte & Touche, Ernst & Young, KPMG and Arthur Andersen. Names may have varied in different years, but I treat all of them as the same audit firm.

decisions. Investors' behavior, especially in their reactions to the release of financial information such as earnings announcements, may reflect firms' transparency. Thus, I use two proxies for the information content of earnings announcements, following DeFond et al. (2007) and Landsman et al. (2012).

The first proxy, *AVOL*, represents abnormal trading volume, or the natural log of the mean of the event period (day t-10 to t+10 if t is the day of the earnings announcement) volume divided by the average estimation period (day t-60 to t-10 and day t+10 to t+60) volume. The second proxy, *AVAR*, is the natural log of the ratio of the mean of the squared market model adjusted returns in the event period divided by the variance of the firm's market model residuals during the estimation period. The relevant literature finds that the information content of earnings announcements is higher in settings in which investors find the information to be more reliable (e.g., DeFond et al., 2007; Landsman et al., 2012). In other words, transparent earnings have more information content and higher investor reactions reflect this in the form of greater abnormal volume (more trading to transparent information) and abnormal volatility (more dissimilar interpretations of transparent earnings announcements). Control variables for these two models include size (*LNTOTASS*), annual sales growth (*SGROWTH*), return on assets (*ROA*), return variability (*STDRETURN*), book to market ratio (*BM*), loss indicator (*LOSS*), the number of days between fiscal year end and earnings announcement (*EADELAY*), leverage (*LEV*) and the percent of closely held shares (*PCNTCLHLD*).

Table 12 presents the results. In all three of the models, *TREAT*POST* is significantly negative. This means that following takeover law implementation, firms become much less likely to employ a high quality auditor and the information content of their earnings announcements significantly decrease, suggesting increasing opacity of the firm's financial information. Results

are robust when using firm fixed effects specifications. Thus, even when using other proxies for transparency, I find that opacity increases following M&A law adoption.

6.2 REDUCED SAMPLE PERIOD

To mitigate the influence of omitted determinants of earnings management and opacity many years prior to or following the passage of takeover laws unrelated to takeover threats, I condense the sample period to include only a fixed number of years prior to, and following, the adoption year. Table 13, Columns 1 and 2 present the results from a sample period that is restricted to three years before and after takeover law adoption.[37]

Both models (for *FRQ* and *AFQ*) display results consistent with those that appear in Tables 3 and 4. The results imply that earnings management and opacity increase for treatment firms following takeover law adoption, regardless of how many years pre- and post-law that the sample includes.

6.3 PRE-2004 SAMPLE

The implementation dates of the takeover laws in my sample are between 1995 and 2004. However, Switzerland passed M&A legislation in 2004, and thus, the sample includes observations through 2009. However, three international events warrant a robustness check using a sample that stops prior to 2004. These are the 2004 EU takeover directive, the adoption of the 2005 mandatory International Financial Reporting Standards (IFRS) by many countries and the 2008 financial crisis, all of which could have affected earnings management and analyst forecasts. In order to end the sample period prior to 2004, I remove Switzerland observations from the sample.

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[37] I run the same tests using a sample that includes up to five years before and after takeover law adoption, and inferences remain the same.

Results of the tests which use a sample that ends prior to 2004 are presented in Table 13, Columns 3 and 4. These results indicate that the coefficients of *TREAT*POST* remain with the predicted signs. These coefficients are significant for aggregate information quality measures as well as the dependent variables. Thus, when I terminate the sample period prior to 2004 in order to avoid effects of the EU takeover directive, IFRS adoption and the financial crisis, I continue to find significant evidence that opacity and earnings management increases more for treatment firms following takeover law adoption.

6.4 DROPPING THE TREATMENT YEAR AND THE YEAR BEFORE THE TREATMENT YEAR

I observe occurrences after removing two years from the sample. I remove the adoption year for each country, because the date of enactment and its impact on the given fiscal year is unclear. A number of observations may have experienced more months under the new takeover law regime than others, yet they are all coded the same. Furthermore, I remove the year prior to M&A law implementation because firms may manage earnings and become more opaque in anticipation of these laws being passed, although this would bias the results against my findings.

The results in Table 13, Columns 5 and 6 provide evidence that even with observations in the year of and the year before M&A law enactment dropped from the sample, the coefficients on *TREAT*POST* remain significantly negative. As such, I have confidence that my results are not affected by different law adoption dates during the fiscal year or by the anticipation of the passage of these laws. Rather, it is the laws themselves that drive the subsequent differences in changes to earnings management and opacity between the treatment and control groups.

6.5 DROPPING COUNTRIES ONE BY ONE

In order to maximize the generalizability of my results for countries not included within the sample, I also test whether a single country drives my results. I rerun the main tests on a sample that includes every treatment country but one, dropping each in turn. No matter which country I drop, I find the same results as when I include all of the countries (untabulated).[38] This suggests that my results are not attributable to any one particular country and rather, can be generalized to other settings for which a takeover law may be adopted.

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[38] Inferences remain unchanged when I drop the following countries from the sample: Japan (which comprises 36% of my observations) South Korea, Indonesia or Thailand, who were hit the hardest by the Asian financial crisis in the late 1990s.

7. CONCLUSION

Corporate governance is critical in ensuring the alignment of shareholders' and managers' interests and mitigating agency problems. The literature regards turnover sensitivity to performance as an important mechanism for strong governance. However, this can simultaneously increase job security concerns for CEOs. These concerns create incentives to manage earnings and hide behind opaque financial reporting in order to distort the accounting information upon which CEOs are evaluated so as to save their jobs. On the other hand, regulations that enhance governance mechanisms could curtail earnings management and promote transparent financial reporting. In this paper, I attempt to address this tension by exploiting a global exogenous shock to the market for corporate control, an important governance mechanism associated with increased turnover sensitivity to performance. Using measures of earnings management and analyst forecast properties, I investigate whether takeover legislation improves or deteriorates information quality.

I find that following M&A law initiation, earnings management increases and analyst forecast properties worsen for firms domiciled in countries that pass takeover legislation. More specifically, discretionary smoothing, target beating and abnormal accruals increase, while accruals quality decreases for firms located in M&A law countries during the post-legislation period. Furthermore, analyst following decreases, analyst forecast accuracy worsens and analyst forecast dispersion increases for these same firms. As such, I use an international setting to provide evidence that takeover threats are associated with poorer information quality, a

relationship upon which prior literature has not come to a clear consensus with regard to the US setting.

I also provide strong evidence that the increase in earnings management and opacity is greater for firms that have worse market and accounting performance and higher turnover risk. This suggests that the relation is primarily attributable to managers who have greater job security concerns. Managers with poor performance or higher turnover probability are under greater pressure to improve performance or get fired, especially in a setting in which turnover sensitivity to performance improves. I also find evidence that managers with good performance may be more prone to discretionarily smooth earnings in order to mitigate turnover risk in future years. Overall, my results are consistent with job security concerns incentivizing CEOs to manage earnings and create an opaque information environment in an attempt to save their jobs, whether in the short term or in the long term.

Furthermore, when I split the sample based on country-level institutions, I find that one way to combat these unintended consequences is by having high investor protection at the country level, as my results are more pronounced for firms in countries with poor institutions. This suggests that strong country-level institutions can limit managers' opportunities to manipulate accounting information in order to save their jobs.

In addition, I find no support for other theories with regard to why the information environment deteriorates following takeover legislation, such as: pursuance of investments and rapid growth in response to decreased insulation from takeover threats or a need to access equity markets by issuing shares. This indicates that turnover threats that increase following M&A legislation, rather than takeover threats alone, explain these results. I also find that the effect of takeover laws on the information environment is incremental to the effects of other concurrent

mechanisms, such as short-selling legislation. Thus, takeover legislation that enhances one area of governance through increased performance monitoring has unintended consequences as a result of managers' fears for their jobs. This results in higher earnings management and worsened analyst forecast properties. My inferences remain unchanged even after conducting a number of robustness tests.

In this paper, I document an unintended, but negative, consequence of legislation that increases the discipline of managers. Managers who are more likely to lose their jobs as a result of this disciplinary mechanism respond by creating a more opaque information environment in order to retain their jobs. My findings suggest that future research further examine the relation between governance and earnings management. More research can be done to study other specific governance mechanisms and how firms or countries can encourage managers to perform well for their shareholders, as well as how this can be achieved without unintendedly encouraging managers with job security concerns to implement earnings management and hide behind opacity that can potentially damage the firms' and their own long-term well-being.

Appendix A. Description of Variables

DIS_SMTHC	Discretionary earnings smoothing, a combination of two measures of earnings management – the variability of net income relative to cash flows and the correlation between accruals and cash flows. These two measures are regressed on a set of earnings smoothing determinants (total assets, leverage, book-to-market, sales volatility, loss frequency, operating cycle length, sales growth, operating leverage, average cash flows from operations, year fixed effects, and industry fixed effects). Then, the average of the scaled percentile rank of the resulting residuals is used. Calculation is based on Lang et al. (2012)
SPINC	Indicator variable that equals one if there was a small positive income in the fiscal year and zero otherwise. Small positive income is defined as net income scaled by total assets being between 0 and 0.01
DDEQ	Standard deviation of the residuals from a rolling five-year model that regresses accruals on current, past, and future cash flows. Calculation is based on Dechow and Dichev (2002)
ABNACCR	Signed measure of abnormal accruals, which is defined as the difference between a firm's accruals for a given year and the firm's predicted accruals. A firm's predicted accruals is the result of calculating the following: [Sales*(Lagged Current Accruals /Lagged Sales) – (Gross PPE*(Lagged Depreciation/Lagged Gross PPE))]/Lagged Total Assets. Calculation is based on DeFond and Park (2001) and Francis and Wang (2008)
FRQ	Financial reporting quality, or an aggregate measure of the four earnings management measures. Calculated as the average of the ranks of each of *DIS_SMTHC*, *SPINC*, *DDEQ*, and *ABNACCR*
ANALYST	The number of analysts making an earnings forecast for the fiscal year, from *I/B/E/S*
ACCURACY	The absolute value of the forecast error scaled by the stock price at the end of the prior fiscal year multiplied by -1; forecast error is the analysts' mean annual earnings forecast less actual earnings, from *I/B/E/S*
DISPERSION	The standard deviation of analysts' forecasts of firm's earnings, scaled by the mean forecast and then divided by the square root of the number of analysts following that firm, also from *I/B/E/S*
AFQ	Analyst Forecast Quality, calculated as the average ranks of the *ANALYST*, *ACCURACY*, and *DISPERSION* measures
TREAT*POST	An indicator that equals 1 if the firm is in a country that passes a takeover law at some point during the sample period *and* the time period is after the law is initiated, and 0 otherwise.
LNTOTASS	The log of *TAUSD*, total assets of a firm in US dollars
BM	Book-to-market ratio, calculated by dividing book value of common equity by market value of equity at fiscal year-end
ROA	Net income before extraordinary items divided by total assets at fiscal year-end
STDRETURN	Return volatility, or the annual standard deviation from monthly stock returns
OLD	Indicator variable that equals 1 if the firm's age is above the sample median age, and 0 otherwise. Firm age is taken from Worldscope as number of years since the initial date the firm existed in Worldscope at the time in question

SGROWTH	The percentage change in total sales from fiscal year t-1 to year t
LOSS	Indicator equal to one if the firm's net income before extraordinary items is negative, and zero otherwise
PCNTCLHLD	Average proportion of shares that are closely held at year-end
CF	Cash flows in a fiscal year, taken from Worldscope
EARNSURP	Earnings surprise, calculated as the absolute value of the forecast error scaled by the stock price at the end of the prior fiscal year multiplied by -1. Forecast error is the analysts' mean annual earnings forecast less actual earnings, from *I/B/E/S*
RETURN	Yearly firm return, taken from Datastream
PRED_TURNOVER	The ex ante probability of forced turnover calculated using a regression of an actual turnover indicator on a set of determinants including country-industry adjusted returns, total assets, country-industry return volatility, a loss indicator, leverage, and book-to-market ratio. Actual turnover data is collected from Worldscope CD-ROMs.
QLR	If a firm is classified as being likely to reverse the "quiet life," each of the country-industry adjusted measures of growth from year t-1 to t in total assets, net PP&E, cost of goods sold, and SG&A expense must all be positive. A firm is classified as not being likely to reverse the "quiet life" if none of the four growth measures are positive
SEO	Taken from SDC: Platinum Global New Issues, a firm is a SEO firm if it had a SEO in the fiscal year
ASDI	Anti-self-dealing index from Djankov et al. (2008)
COMMON	A common law indicator taken from La Porta et al. (2006)
CGR	An indicator variable that equals 1 if the firm is in a country that passes legislation aimed at corporate governance reform, and it is during the post-law period. CGRs are from Kim and Lu (2013)
SHORTLEGAL	An indicator variable that equals 1 if the firm is in a country that passes legislation making short selling legal, and it is during the post-law period. Short selling laws are from Maffett et al. (2015)
ITLAW	An indicator variable that equals one if insider-trading laws are enforced in the country of origin and it is during the post-law period. These laws come from Bhattacharya and Daouk (2002)
GOODINVPROT	An indicator variable that equals one if the firm's ASDI is higher than the yearly sample median ASDI *and* if the firm is from a common law country (*COMMON*=1).
BIG5	Indicator variables equal to one if the firm is audited by a "Big 5" auditing firm during the fiscal year, and zero otherwise (collected from historical point-in-time *Datastream*, *Compustat Global*, and *Osiris*)
AVOL	The abnormal trading volume, calculated as $\ln(\text{mean}(V_{it})/V_i)$, where $\text{mean}(V_{it})$ is the average event-period volume for firm i and V_i is the mean estimation-period volume for that firm. The event period covers days -1, 0, +1, and the non-event period covers days t-60 to t-10 and t+10 to t+60 relative to the I/B/E/S earnings announcement date, t=0. This calculation follows that of Landsman et al. (2012)
AVAR	The abnormal return variance, calculated as $\ln(u^2_{it}/\sigma^2_i)$, where $u^2_{it} = R_{it} - (\alpha_i + \beta_i R_{mt})$, R_{it} is the firm's stock return, R_{mt} is the equal-weighted return for all within-country firms in the sample, and α_i and β_i are firm i's event-period market model

	parameter estimates. σ^2_i is the variance of the market-model residuals in the non-event period. The event period covers days -1, 0, +1, and the non-event period covers days t-60 to t-10 and t+10 to t+60 relative to the I/B/E/S earnings announcement date, t=0. This is also based on Landsman et al. (2012)
LEV	Total liabilities divided by total assets at fiscal year-end
INVTA	The ratio of total inventory in a firm to its total assets in a given fiscal year
ARTA	The ratio of accounts receivable to total assets in a given fiscal year
EADELAY	The amount of delay in releasing a firm's own earnings announcements, calculated as the number of days that lapse between fiscal year-end and the earnings announcement

TABLE 1. LIST OF COUNTRIES AND TAKEOVER LAWS

COUNTRY	TAKEOVER LAW YEAR	LAW
ARGENTINA		
AUSTRIA	1998	Takeover Act
BRAZIL		
CHILE	2000	Tender Offer Act
CHINA		
COLOMBIA		
DENMARK		
FRANCE		
GERMANY	2002	Takeover Act
GREECE		
HUNGARY		
INDIA	1997	Substantial Acquisition of Shares and Takeovers
INDONESIA	1998	M&A Regulations
IRELAND	1997	Takeover Panel Act
JAPAN		
KOREA		
LUXEMBOURG		
MALAYSIA	1998	Code on Takeovers and Mergers
MEXICO		
NEW ZEALAND	2001	Takeovers Code
NORWAY		
PAKISTAN	2000	Ordinance on Substantial Acquisitions of Shares and Takeovers of Listed Companies
PERU		
PHILIPPINES	1998	Tender Offer Rules
POLAND		
PORTUGAL		
SRI LANKA	1995	Company Takeovers and Mergers Code
SWITZERLAND	2004	The Merger Act
TAIWAN	2002	Business Mergers and Acquisitions Act
THAILAND		
TURKEY		
VENEZUELA		
ZIMBABWE		

Table 1 presents a list of countries in my sample, the year in which takeover laws were initiated, and the name of the takeover law.

TABLE 2. DESCRIPTIVE STATISTICS

Variable	Mean	25th Pctl	50th Pctl	75th Pctl	Std Dev
DIS_SMTHC	0.5232	0.3000	0.5550	0.7400	0.2655
SPINC	0.1529	0.0000	0.0000	0.0000	0.3599
DDEQ	-0.0382	-0.0469	-0.0256	-0.0140	0.0402
ABNACCR	0.0028	-0.0490	-0.0001	0.0485	0.1292
FRQ	0.5118	0.4150	0.5200	0.6150	0.1394
ANALYST	2.6753	0.0000	1.0000	3.0000	4.8240
ACCURACY	-0.0673	-0.0418	-0.0112	-0.0033	0.1821
DISPERSION	0.0849	0.0139	0.0357	0.0884	0.1435
AFQ	0.5793	0.4500	0.5850	0.7067	0.1623
LNTOTASS	5.6625	4.4489	5.4907	6.7194	1.8319
BM	1.2609	0.4359	0.8005	1.4526	1.9961
ROA	0.0128	0.0025	0.0217	0.0530	0.1168
STDRETURN	0.1267	0.0739	0.1064	0.1561	0.0783
OLD	0.7339	0.0000	1.0000	1.0000	0.4419
SGROWTH	0.0976	-0.0414	0.0485	0.1731	0.2933
LOSS	0.2120	0.0000	0.0000	0.0000	0.4087
PCNTCLHLD	0.4855	0.3176	0.4860	0.6510	0.2240
CF	0.0516	0.0105	0.0532	0.0995	0.0888
EARNSURP	0.1695	0.0116	0.0354	0.1204	0.3859
PRED_TURNOVER	-1.7666	-1.8457	-1.7945	-1.6991	0.1225
RETURN	0.1485	-0.2490	0.0000	0.3333	0.6790
QLR	0.7709	1.0000	1.0000	1.0000	0.4202
SEO	0.0279	0.0000	0.0000	0.0000	0.1647
ASDI	0.5030	0.4260	0.4830	0.4861	0.1771
COMMON	0.0961	0.0000	0.0000	0.0000	0.2947
BIG5	0.3880	0.0000	0.0000	1.0000	0.4873
AVOL	-0.0805	-0.5602	-0.0574	0.4264	0.8509
AVAR	-0.6527	-1.5993	-0.3769	0.6234	1.9500
LEV	0.5739	0.3843	0.5596	0.7264	0.3955
INVTA	0.1286	0.0393	0.1048	0.1837	0.1163
ARTA	0.2064	0.0917	0.1836	0.2900	0.1475
EADELAY	77.1777	51.0000	69.0000	91.0000	37.9700

Note: Variable definitions and detailed measurements are provided in Appendix A.

TABLE 3. TAKEOVER LAWS AND EARNINGS MANAGEMENT

Panel A – Country and Industry Fixed Effects

	(1) DIS_SMTHC	(2) SPINC	(3) DDEQ	(4) ABNACCR	(5) FRQ
Prediction	(+)	(+)	(-)	(+)	(-)
TREAT*POST	0.0281***	0.0519***	-0.00433***	0.0133***	-0.0286***
	(3.06)	(6.83)	(-3.36)	(4.83)	(-7.74)
LNTOTASS	0.000681	0.0132***	0.00311***	-0.000130	0.00212***
	(0.41)	(9.14)	(15.56)	(-0.43)	(3.60)
BM	-0.00755***	0.0103***	0.000704***	-0.000318	0.00149***
	(-7.59)	(8.35)	(4.26)	(-0.91)	(3.43)
ROA	0.115***	-0.800***	0.0654***	0.360***	-0.166***
	(4.20)	(-19.16)	(11.83)	(25.25)	(-13.19)
STDRETURN	-0.208***	0.171***	-0.0667***	0.0474***	-0.0853***
	(-7.55)	(6.94)	(-15.23)	(4.66)	(-7.61)
OLD	0.00589	0.0308***	0.00888***	0.000412	0.00214
	(0.85)	(6.33)	(9.28)	(0.30)	(0.90)
SGROWTH	0.0191***	-0.0616***	-0.00620***	0.0223***	-0.0149***
	(2.94)	(-10.99)	(-5.12)	(5.45)	(-4.71)
LOSS	0.0165***	-0.309***	-0.00494***	-0.00707***	0.0262***
	(3.02)	(-50.43)	(-7.31)	(-3.87)	(11.73)
PCNTCLHLD	0.0549***	-0.0120	0.00514***	0.00432*	-0.0183***
	(4.95)	(-1.30)	(3.64)	(1.73)	(-4.50)
CF	-0.194***	-0.357***	0.00552	-0.550***	0.501***
	(-7.84)	(-15.51)	(1.30)	(-43.19)	(44.29)
Constant	0.335***	0.110*	-0.0535***	0.0230*	0.509***
	(8.05)	(1.91)	(-10.15)	(1.81)	(18.64)
Observations	41165	52692	29327	44106	44105
Adj R-squared	0.044	0.204	0.328	0.130	0.119

Panel B – Firm Fixed Effects

	(1) DIS_SMTHC	(2) SPINC	(3) DDEQ	(4) ABNACCR	(5) FRQ
Prediction	(+)	(+)	(-)	(+)	(-)
TREAT*POST	0.0357***	0.0551***	-0.00242*	0.0126***	-0.0310***
	(3.50)	(6.40)	(-1.88)	(3.66)	(-7.19)
LNTOTASS	0.0121*	0.0530***	0.00461***	-0.0193***	0.00349
	(1.75)	(9.86)	(3.87)	(-8.53)	(1.20)
BM	-0.00802***	0.0103***	0.000484*	0.000659	0.000626
	(-6.24)	(6.65)	(1.85)	(0.95)	(0.95)
ROA	0.183***	-0.836***	0.0419***	0.419***	-0.197***
	(6.43)	(-18.60)	(6.76)	(19.90)	(-12.61)
STDRETURN	-0.105***	0.0376	-0.0245***	0.0496***	-0.0288**
	(-3.95)	(1.33)	(-5.91)	(3.58)	(-2.13)
SGROWTH	0.0105*	-0.0544***	-0.00265**	0.0329***	-0.0148***
	(1.72)	(-8.80)	(-2.35)	(6.82)	(-4.08)
LOSS	0.0175***	-0.381***	-0.00116*	-0.0113***	0.0493***
	(3.40)	(-52.36)	(-1.74)	(-4.69)	(19.63)
PCNTCLHLD	0.0749***	0.0238	-0.000824	0.00653	-0.0246***
	(4.78)	(1.63)	(-0.32)	(1.07)	(-3.52)
CF	0.0184	-0.224***	-0.00141	-0.785***	0.589***
	(0.79)	(-9.14)	(-0.35)	(-44.68)	(41.76)
Constant	0.375***	-0.102*	-0.0629***	0.123***	0.462***
	(7.83)	(-1.68)	(-7.71)	(6.67)	(15.24)
Observations	41165	52692	29327	44106	44105
Adj R-squared	0.418	0.337	0.650	0.137	0.262

Table 3 presents results to difference-in-differences estimations of the effect of takeover laws on earnings management. The estimation in Panel A contains country, industry, and year fixed effects, and the estimation in Panel B contains firm and year fixed effects. In both panels, the dependent variables are presented in each of the columns and represent different aspects of earnings management: discretionary smoothing (*DIS_SMTHC*), small positive income (*SPINC*), the Dechow and Dichev (2002) measure of accruals quality (*DDEQ*), abnormal accruals (*ABNACCR*), and an aggregate measure of earnings management that is the ranked average of the prior four measures (*FRQ*). The main explanatory variable is the interaction *TREAT*POST*, which equals 1 if the firm is located in a country that implemented a takeover law during the sample period, and if the observation was from after initiation of such law. t-statistics are in parentheses and are based on robust standard errors at the firm level. All continuous unranked nonlogarithmic variables are truncated at the 1st and 99th percentiles. Asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All detailed variable definitions and calculations are in Appendix A.

TABLE 4. TAKEOVER LAWS AND ANALYST FORECAST PROPERTIES

Panel A – Country and Industry Fixed Effects

	(1) ANALYST (-)	(2) ACCURACY (-)	(3) DISPERSION (+)	(4) AFQ (-)
Prediction				
TREAT*POST	-1.243***	-0.0196***	0.0177***	-0.0240***
	(-8.08)	(-4.70)	(4.67)	(-6.47)
LNTOTASS	2.115***	0.00818***	-0.0104***	0.0324***
	(46.02)	(15.00)	(-16.21)	(42.35)
ROA	9.083***	0.315***	-0.136***	0.229***
	(15.31)	(15.65)	(-7.63)	(13.05)
STDRETURN	3.419***	0.00918	0.0699***	0.00616
	(7.84)	(0.57)	(3.91)	(0.47)
SGROWTH	0.593***	0.00547	-0.0237***	0.0176***
	(6.17)	(1.45)	(-6.47)	(5.67)
EARNSURP	-0.281***	-0.239***	0.0101***	-0.0843***
	(-3.37)	(-42.42)	(3.76)	(-36.15)
OLD	-0.554***	-0.0105***	0.00938***	-0.0246***
	(-4.25)	(-5.08)	(3.76)	(-7.96)
Constant	-5.435***	-0.111***	0.136***	0.414***
	(-9.54)	(-7.98)	(10.70)	(30.47)
Observations	49514	49514	34736	49514
Adj R-squared	0.424	0.340	0.065	0.247

Panel B - Firm Fixed Effects

	(1) ANALYST	(2) ACCURACY	(3) DISPERSION	(4) AFQ
Prediction	(-)	(-)	(+)	(-)
TREAT*POST	-1.585***	-0.0268***	0.0251***	-0.0410***
	(-9.92)	(-5.21)	(5.61)	(-9.46)
LNTOTASS	1.121***	0.0287***	0.00341	0.0446***
	(9.91)	(7.57)	(1.13)	(14.98)
ROA	5.387***	0.468***	-0.0879***	0.202***
	(12.46)	(15.09)	(-3.86)	(11.54)
STDRETURN	1.507***	-0.0250	0.0320	0.00720
	(4.36)	(-1.18)	(1.44)	(0.51)
SGROWTH	0.169**	-0.00526	-0.0167***	0.00508
	(2.08)	(-1.06)	(-3.68)	(1.54)
EARNSURP	-0.502***	-0.194***	0.0113***	-0.0563***
	(-6.94)	(-27.06)	(3.24)	(-20.87)
Constant	-1.379*	-0.212***	0.0520**	0.338***
	(-1.92)	(-8.22)	(2.51)	(17.14)
Observations	49514	49514	34736	49514
Adj R-squared	0.775	0.428	0.209	0.437

Table 4 presents results to difference-in-differences estimations of the effect of takeover laws on analyst forecast properties. The estimation in Panel A contains country, industry, and year fixed effects, and the estimation in Panel B contains firm and year fixed effects. In both panels, the dependent variables are presented in each of the columns and represent different analyst forecast properties: the level of analyst following (*ANALYST*), analyst forecast accuracy (*ACCURACY*), analyst forecast dispersion (*DISPERSION*), and an aggregate measure of analyst forecast quality that is the ranked average of the prior three measures (*AFQ*). The main explanatory variable is the interaction *TREAT*POST*, which equals 1 if the firm is located in a country that implemented a takeover law during the sample period, and if the observation was from after initiation of such law. t-statistics are in parentheses and are based on robust standard errors at the firm level. All continuous unranked nonlogarithmic variables are truncated at the 1st and 99th percentiles. Asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All detailed variable definitions and calculations are in Appendix A.

TABLE 5. ROBUSTNESS OF MAIN RESULTS

Panel A - Takeover Laws and Transparency
with Country Time Trends Controls

	(1) FRQ	(2) AFQ
Prediction	(-)	(-)
TREAT*POST	-0.0975***	-0.292***
	(-5.90)	(-2.78)

Panel B - Bootstrapping Randomized Estimations

1000 Randomizations

	(1) FRQ	(2) AFQ
Prediction	(-)	(-)
TREAT*POST	-0.0286***	-0.0240***
p-values from Tables 3 and 4	(0.000)	(0.000)
Bootstrapped p-values	(0.011)	(0.068)

Panel C - Takeover Laws and Transparency
with Matched Sample

	(1) FRQ	(2) AFQ
Prediction	(-)	(-)
TREAT*POST	-0.0192***	-0.0251***
	(-4.40)	(-5.69)

Table 5 presents result to difference-in-differences estimations of the effect of takeover laws on transparency. In all three panels, the dependent variables are presented in each of the columns and represent two components of transparency: financial reporting quality (*FRQ*) and analyst forecast quality (*AFQ*). The main explanatory variable is the interaction *TREAT*POST*, which equals 1 if the firm is located in a country that implemented a takeover law during the sample period, and if the observation was from after initiation of such law. Control variables are the same as those used in Tables 3 and 4, but are not reported for parsimony. Panel A presents the results for the estimation that includes country-year interaction terms to control for country-specific time trends. Panel B presents bootstrapped p-values based on 1,000 estimations with randomized treatment and control samples, as well as the year of M&A law adoption. Those p-values are presented below p-values from the estimations from Tables 3 and 4. Panel C presents the results for estimations using a control sample matched with the treatment sample based on size (total assets) and profitability (ROA). t-statistics in Panels A and C are in parentheses and are based on robust standard errors at the firm level. All three panel estimations contain country, industry, and year fixed effects. All continuous unranked nonlogarithmic variables are truncated at the 1st and 99th percentiles. Asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All detailed variable definitions and calculations are in Appendix A.

Table 6. Takeover Laws and Opacity – Performance Splits

Panel A - Takeover Laws and Earnings Management – Return Splits

RETURN	(1) DIS_SMTH Poor	(2) DIS_SMTH Good	(3) SPINC Poor	(4) SPINC Good	(5) DDEQ Poor	(6) DDEQ Good	(7) ABNACCR Poor	(8) ABNACCR Good	(9) FRQ Poor	(10) FRQ Good
TREAT*POST	0.00728	0.0400***	0.086***	0.0285***	-0.006***	-0.00299**	0.0195***	0.00681**	-0.0356***	-0.0205***
	(0.48)	(3.35)	(6.44)	(3.03)	(-2.60)	(-2.12)	(3.99)	(2.14)	(-5.78)	(-4.26)
LNTOTASS	0.00458	-0.00243	0.020***	0.0137***	0.0028***	0.00273***	-0.000259	-0.000184	0.000104	0.0031***
	(1.53)	(-1.09)	(7.53)	(6.67)	(8.04)	(9.89)	(-0.49)	(-0.44)	(0.09)	(3.71)
BM	-0.0068***	-0.0085***	0.011***	0.0065***	0.0008***	0.000962***	-0.000873	0.000234	0.00180***	0.0021***
	(-4.67)	(-5.30)	(5.92)	(3.77)	(3.39)	(4.04)	(-1.60)	(0.42)	(2.81)	(2.89)
ROA	0.199***	0.0397	-0.91***	-0.899***	0.0735***	0.0437***	0.331***	0.379***	-0.131***	-0.163***
	(4.81)	(0.83)	(-11.76)	(-12.43)	(9.24)	(5.34)	(14.04)	(15.96)	(-6.41)	(-7.86)
STDRETURN	-0.155***	-0.190***	0.207***	0.207***	-0.07***	-0.0607***	0.0500***	0.0356**	-0.103***	-0.0818***
	(-3.72)	(-4.47)	(5.25)	(5.25)	(-10.81)	(-9.78)	(3.31)	(2.07)	(-6.06)	(-4.39)
OLD	-0.0191	0.0116	0.0332**	0.0135	0.0115***	0.00504***	0.000623	0.00238	0.000751	-0.00113
	(-0.98)	(0.86)	(2.19)	(1.45)	(3.88)	(2.91)	(0.13)	(1.00)	(0.10)	(-0.24)
SGROWTH	0.0169	0.0231**	-0.07***	-0.0471***	-0.0054**	-0.00574***	0.0262***	0.0236***	-0.0139**	-0.0198***
	(1.58)	(2.45)	(-6.97)	(-5.57)	(-2.53)	(-3.51)	(3.59)	(4.01)	(-2.55)	(-4.30)
LOSS	0.0382***	-0.0102	-0.38***	-0.285***	-0.00144*	-0.00820***	-0.00853***	-0.00549*	0.0337***	0.0257***
	(5.07)	(-1.12)	(-37.95)	(-29.46)	(-1.66)	(-7.83)	(-3.33)	(-1.75)	(10.49)	(6.99)
PCNTCLHLD	0.0646***	0.0675***	-0.0192	0.00994	0.000119	0.00608***	0.00607	0.00854**	-0.0283***	-0.0198***
	(3.49)	(4.36)	(-1.15)	(0.80)	(0.05)	(3.26)	(1.50)	(2.48)	(-4.14)	(-3.45)
CF	-0.157***	-0.209***	-0.48***	-0.336***	0.00991	0.00676	-0.585***	-0.548***	0.552***	0.507***
	(-3.91)	(-5.54)	(-10.80)	(-9.66)	(1.42)	(1.19)	(-26.33)	(-30.29)	(28.15)	(29.78)
Constant	0.277***	0.327***	0.0542	0.118	-0.058***	-0.0486***	-0.00648	0.0472**	0.556***	0.487***
	(4.75)	(5.32)	(0.66)	(1.33)	(-6.44)	(-8.40)	(-0.36)	(2.30)	(18.28)	(10.30)
Chi-sq stat (difference)	2.91		12.54		1.07		4.74		3.72	
Adj R-squared	0.046	0.060	0.257	0.176	0.373	0.279	0.141	0.124	0.127	0.134

Panel B - Takeover Laws and Earnings Management - Pre-Law ROA Splits

ROA	(1) DIS_SMTH Poor	(2) DIS_SMTH Good	(3) SPINC Poor	(4) SPINC Good	(5) DDEQ Poor	(6) DDEQ Good	(7) ABNACCR Poor	(8) ABNACCR Good	(9) FRQ Poor	(10) FRQ Good
TREAT*POST	0.0571***	0.00355	0.0808***	0.0155**	-0.0060***	-0.00219	0.0203***	0.00647*	-0.0488***	-0.00840*
	(3.98)	(0.30)	(6.04)	(2.37)	(-2.90)	(-1.45)	(4.63)	(1.87)	(-8.33)	(-1.80)
LNTOTASS	0.00150	-0.00276	0.0162***	0.000217	0.00350***	0.00263***	0.0000519	0.000140	0.00220**	0.00368***
	(0.57)	(-1.17)	(6.83)	(0.14)	(10.96)	(9.23)	(0.11)	(0.31)	(2.29)	(4.39)
BM	-0.00292*	-0.0108***	0.0118***	0.0066***	0.00102***	0.00091***	-0.000825	0.0000157	0.000685	0.00296***
	(-1.72)	(-8.39)	(6.47)	(3.90)	(3.54)	(4.81)	(-1.48)	(0.03)	(1.00)	(5.09)
ROA	0.147***	0.0359	-0.763***	-0.763***	0.0571***	0.0662***	0.320***	0.412***	-0.150***	-0.199***
	(3.89)	(0.74)	(-12.25)	(-12.38)	(7.43)	(6.48)	(15.05)	(17.68)	(-7.89)	(-9.65)
STDRETURN	-0.190***	-0.252***	0.0862**	0.183***	-0.0663***	-0.0645***	0.0477***	0.0462***	-0.0515***	-0.0979***
	(-4.90)	(-5.93)	(2.32)	(5.35)	(-10.38)	(-10.92)	(3.17)	(2.89)	(-3.14)	(-5.52)
OLD	0.0187	0.00334	0.0235*	0.0143**	0.0135***	0.00588***	-0.00360	0.000660	0.00206	0.00287
	(1.20)	(0.33)	(1.81)	(2.47)	(5.44)	(4.61)	(-1.06)	(0.35)	(0.37)	(0.81)
SGROWTH	0.0154	0.0201**	-0.068***	-0.038***	-0.005***	-0.0061***	0.0158**	0.0315***	-0.00849*	-0.0236***
	(1.50)	(2.18)	(-7.28)	(-5.24)	(-2.63)	(-3.59)	(2.54)	(5.12)	(-1.69)	(-5.17)
LOSS	0.0284***	-0.0343***	-0.410***	-0.222***	-0.00219**	-0.0087***	-0.0107***	0.000997	0.0421***	0.0183***
	(4.16)	(-3.51)	(-48.20)	(-25.50)	(-2.55)	(-7.17)	(-4.53)	(0.31)	(14.40)	(4.60)
PCNTCLHLD	0.0778***	0.0529***	0.0135	0.0100	0.00284	0.00541***	0.00348	0.00674*	-0.0319***	-0.0154***
	(4.30)	(3.50)	(0.83)	(1.02)	(1.20)	(2.99)	(0.92)	(1.91)	(-4.83)	(-2.75)
CF	-0.223***	-0.143***	-0.490***	-0.211***	0.0121*	0.00122	-0.537***	-0.576***	0.530***	0.486***
	(-5.51)	(-4.06)	(-11.64)	(-8.23)	(1.78)	(0.21)	(-25.45)	(-31.52)	(27.48)	(29.98)
Constant	0.284***	0.373***	0.00261	0.135*	-0.114***	-0.0508***	0.0207	-0.00815	0.491***	0.564***
	(3.74)	(6.38)	(0.03)	(1.70)	(-25.38)	(-8.16)	(1.19)	(-0.39)	(15.11)	(13.14)
Chi-sq stat (difference)	8.29		19.31		2.24		6.17		29.27	
Adj R-squared	0.050	0.066	0.278	0.087	0.358	0.311	0.129	0.133	0.143	0.130

Panel C - Takeover Laws and Analyst Forecast Properties - Pre-Law Return Splits

RETURN	(1) ANALYST Poor	(2) ANALYST Good	(3) ACCURACY Poor	(4) ACCURACY Good	(5) DISPERSION Poor	(6) DISPERSION Good	(7) AFQ Poor	(8) AFQ Good
TREAT*POST	-1.778***	-0.445**	-0.0356***	-0.00249	0.0294***	0.00828*	-0.0457***	-0.00227
	(-7.34)	(-2.39)	(-5.61)	(-0.44)	(4.65)	(1.74)	(-8.53)	(-0.44)
LNTOTASS	1.920***	2.364***	0.00602***	0.00858***	-0.0112***	-0.0109***	0.0327***	0.0314***
	(27.11)	(34.88)	(7.52)	(10.22)	(-8.93)	(-13.09)	(26.99)	(27.96)
ROA	5.931***	11.66***	0.352***	0.345***	-0.0237	-0.251***	0.117***	0.338***
	(6.36)	(12.76)	(9.20)	(11.45)	(-0.95)	(-8.90)	(4.68)	(12.54)
STDRETURN	0.817	4.249***	0.0347	0.00493	0.0717**	0.0712***	-0.0126	0.00652
	(1.26)	(6.35)	(1.46)	(0.18)	(2.31)	(2.88)	(-0.63)	(0.32)
SGROWTH	-0.00580	0.431***	0.00928	-0.00101	-0.0267***	-0.0157***	0.0189***	0.00588
	(-0.03)	(3.22)	(1.47)	(-0.17)	(-4.02)	(-3.05)	(3.60)	(1.36)
EARNSURP	-0.963***	-0.209*	-0.270***	-0.220***	0.0351***	0.00394	-0.104***	-0.0653***
	(-7.08)	(-1.95)	(-26.25)	(-30.22)	(4.70)	(1.45)	(-23.88)	(-22.69)
OLD	0.0184	-0.190	-0.0348***	-0.00654*	0.0245**	0.00885**	-0.0675***	-0.0248***
	(0.03)	(-0.77)	(-5.55)	(-1.77)	(2.56)	(2.03)	(-6.90)	(-4.15)
Constant	-3.708***	-7.244***	-0.0809***	-0.125***	0.133***	0.126***	0.474***	0.409***
	(-3.82)	(-8.79)	(-3.49)	(-6.41)	(4.81)	(9.30)	(20.62)	(22.26)
Chi-sq stat (difference)	19.12		15.25		7.19		34.05	
Adj R-squared	0.428	0.456	0.362	0.341	0.062	0.089	0.265	0.277

Panel D - Takeover Laws and Analyst Forecast Properties - Pre-Law ROA Splits

ROA	(1) ANALYST Poor	(2) ANALYST Good	(3) ACCURACY Poor	(4) ACCURACY Good	(5) DISPERSION Poor	(6) DISPERSION Good	(7) AFQ Poor	(8) AFQ Good
TREAT*POST	-1.873***	-0.484**	-0.0374***	-0.0134***	0.0362***	0.00797**	-0.0514***	-0.0110**
	(-8.52)	(-2.32)	(-4.68)	(-2.78)	(4.94)	(2.06)	(-9.13)	(-2.30)
LNTOTASS	2.035***	2.526***	0.00684***	0.00837***	-0.0158***	-0.0122***	0.0335***	0.0358***
	(33.78)	(32.03)	(8.48)	(9.66)	(-13.37)	(-15.80)	(32.63)	(28.44)
ROA	2.224***	13.43***	0.344***	0.314***	0.0741***	-0.284***	0.0163	0.431***
	(3.64)	(12.79)	(10.10)	(11.32)	(3.56)	(-9.27)	(0.92)	(13.05)
STDRETURN	1.872***	6.575***	0.0595**	-0.0392	0.0422	0.0632***	0.0388**	0.0135
	(3.72)	(8.51)	(2.51)	(-1.53)	(1.47)	(2.76)	(2.19)	(0.61)
SGROWTH	0.539***	0.161	0.00851	-0.000753	-0.0207***	-0.0211***	0.0154***	0.00602
	(3.87)	(1.11)	(1.22)	(-0.15)	(-3.18)	(-4.47)	(3.31)	(1.36)
EARNSURP	-0.583***	-0.259**	-0.257***	-0.219***	0.00973**	0.0111***	-0.0797***	-0.0788***
	(-5.15)	(-2.12)	(-30.27)	(-27.18)	(2.00)	(3.59)	(-22.51)	(-24.34)
OLD	0.114	-0.275	-0.0306***	-0.00769***	0.0283***	0.00220	-0.0560***	-0.0139***
	(0.33)	(-1.46)	(-4.92)	(-3.00)	(4.12)	(0.67)	(-7.60)	(-3.18)
Constant	-4.453***	-8.669***	-0.0787***	-0.121***	0.173***	0.153***	0.453***	0.360***
	(-4.40)	(-10.79)	(-3.98)	(-5.58)	(6.54)	(10.92)	(19.22)	(19.18)
Chi-sq stat (difference)	21.12		6.61		11.66		29.98	
Adj R-squared	0.445	0.455	0.355	0.337	0.067	0.101	0.259	0.280

Table 6 presents results to difference-in-differences estimations of the effect of takeover laws on transparency. The dependent variables in Panels A and B are the earnings management variables from Table 3, while the dependent variables in Panels C and D are the analyst forecast properties variables from Table 4. For each test, the left column presents results for firms with poor ex ante performance (below median firm yearly return in Panels A and C and below median firm ROA in Panels B and D) and the right column presents results for the opposite (above median performance measures in their respective panels). The main explanatory variable is the interaction *TREAT*POST*, which equals 1 if the firm is located in a country that implemented a takeover law during the sample period, and if the observation was from after initiation of such law. The chi-squared test statistic of the differences in the coefficients for *TREAT*POST* between high and low performance firms are presented at the bottom of the table. Each estimation contains country, industry, and year fixed effects; t-statistics are in parentheses and are based on robust standard errors at the firm level. All continuous unranked nonlogarithmic variables are truncated at the 1st and 99th percentiles. Asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All detailed variable definitions and calculations are in Appendix A.

Table 7. Takeover Laws and Opacity – CEO Turnover Risk Splits

Panel A - Takeover Laws and Earnings Management - Pre-Law Turnover Probability Splits

TURNOVER RISK	(1) DIS_SMTH Low	(2) DIS_SMTH High	(3) SPINC Low	(4) SPINC High	(5) DDEQ Low	(6) DDEQ High	(7) ABNACCR Low	(8) ABNACCR High	(9) FRQ Low	(10) FRQ High
TREAT*POST	0.0118	0.0432***	0.0171**	0.0768***	-0.00195	-0.00653***	0.00405	0.0242***	-0.0119**	-0.0459***
	(0.97)	(3.04)	(2.00)	(6.02)	(-1.32)	(-3.07)	(1.21)	(5.35)	(-2.49)	(-7.82)
LNTOTASS	-0.00593*	-0.000834	-0.00179	0.0104***	0.004***	0.00303***	-0.00112*	0.000170	0.008***	0.00333***
	(-1.77)	(-0.32)	(-0.80)	(4.39)	(8.77)	(9.23)	(-1.71)	(0.35)	(6.57)	(3.48)
BM	-0.0091***	-0.005***	0.00716***	0.0130***	0.0012***	0.000826***	-0.000237	-0.000148	0.0035***	0.000685
	(-5.23)	(-3.34)	(2.92)	(7.71)	(3.95)	(3.49)	(-0.37)	(-0.28)	(4.89)	(1.06)
ROA	0.0571	0.164***	-0.990***	-0.955***	0.04***	0.0697***	0.426***	0.323***	-0.164***	-0.133***
	(1.06)	(4.19)	(-11.95)	(-12.81)	(4.69)	(9.10)	(16.50)	(15.36)	(-6.92)	(-6.72)
STDRETURN	-0.262***	-0.163***	0.158***	0.169***	-0.07***	-0.0630***	0.0498***	0.0373**	-0.086***	-0.0777***
	(-5.53)	(-4.14)	(3.66)	(4.45)	(-10.52)	(-10.19)	(2.73)	(2.53)	(-4.25)	(-4.75)
OLD	-0.00833	0.0155	0.0291***	0.0286**	0.0057***	0.00900***	0.00418	0.00204	0.00550	-0.0105*
	(-0.54)	(0.93)	(3.35)	(2.14)	(2.70)	(3.86)	(1.46)	(0.66)	(0.97)	(-1.86)
SGROWTH	0.0122	0.0265***	-0.0346***	-0.0731***	-0.0061***	-0.00549***	0.0293***	0.0257***	-0.023***	-0.0165***
	(1.15)	(2.75)	(-3.57)	(-8.02)	(-3.15)	(-3.40)	(4.07)	(4.11)	(-4.06)	(-3.48)
LOSS	-0.0138	0.0318***	-0.275***	-0.382***	-0.0061***	-0.00274***	-0.00371	-0.0073***	0.0266***	0.0345***
	(-1.45)	(4.29)	(-26.90)	(-39.82)	(-6.49)	(-3.02)	(-1.25)	(-2.96)	(6.78)	(10.98)
PCNTCLHLD	0.0524***	0.0790***	0.0220*	-0.0125	0.00323	0.0000593	0.00635*	0.00842**	-0.025***	-0.029***
	(3.05)	(4.59)	(1.80)	(-0.80)	(1.61)	(0.03)	(1.70)	(2.25)	(-3.81)	(-4.64)
CF	-0.164***	-0.222***	-0.377***	-0.442***	0.00921	0.000000865	-0.576***	-0.545***	0.523***	0.531***
	(-4.05)	(-5.78)	(-9.93)	(-11.39)	(1.45)	(0.00)	(-27.98)	(-27.64)	(27.28)	(29.51)
Constant	0.308***	0.297***	0.149*	0.0904	-0.048***	-0.0889***	0.0337	0.0119	0.486***	0.535***
	(5.58)	(4.40)	(1.77)	(1.21)	(-7.16)	(-5.38)	(1.48)	(0.72)	(12.40)	(13.04)
Chi-sq stat (difference)	2.85		15.16		3.16		12.88		20.13	
Adj R-squared	0.059	0.053	0.143	0.257	0.323	0.341	0.137	0.133	0.127	0.133

Panel B - Takeover Laws and Analyst Forecast Properties - Pre-Law Turnover Probability Splits

TURNOVER RISK	(1) ANALYST Low	(2) ANALYST High	(3) ACCURACY Low	(4) ACCURACY High	(5) DISPERSION Low	(6) DISPERSION High	(7) AFQ Low	(8) AFQ High
TREAT*POST	-0.639***	-1.645***	-0.00838	-0.0307***	0.0167***	0.0222***	-0.0176***	-0.0396***
	(-3.52)	(-7.07)	(-1.30)	(-5.32)	(3.29)	(3.89)	(-3.14)	(-7.75)
LNTOTASS	2.031***	2.305***	0.0115***	0.00779***	-0.0160***	-0.0133***	0.0360***	0.0363***
	(23.15)	(34.72)	(8.91)	(8.56)	(-10.44)	(-12.38)	(20.54)	(31.55)
ROA	12.67***	9.639***	0.360***	0.361***	-0.358***	-0.0697***	0.477***	0.121***
	(9.94)	(9.99)	(9.71)	(10.69)	(-7.52)	(-3.06)	(10.70)	(5.65)
STDRETURN	5.530***	1.447**	0.0297	0.0315	0.0408	0.0924***	0.0660***	-0.0207
	(7.90)	(2.27)	(1.27)	(1.25)	(1.32)	(3.73)	(2.77)	(-1.15)
SGROWTH	0.181	0.732***	0.00148	0.00120	-0.0275***	-0.0239***	0.00653	0.0197***
	(1.04)	(4.89)	(0.21)	(0.21)	(-3.39)	(-4.79)	(1.01)	(4.68)
EARNSURP	-0.269**	-0.350***	-0.206***	-0.255***	0.00917**	0.00794**	-0.0742***	-0.0785***
	(-2.37)	(-2.81)	(-22.30)	(-33.06)	(2.09)	(2.17)	(-18.81)	(-25.11)
OLD	-0.732***	-0.0453	-0.0109***	-0.0211***	0.0136***	0.0202***	-0.0304***	-0.0577***
	(-3.03)	(-0.11)	(-2.63)	(-4.55)	(2.67)	(3.15)	(-4.61)	(-7.70)
Constant	-5.332***	-6.013***	-0.178***	-0.0791***	0.174***	0.130***	0.368***	0.446***
	(-6.59)	(-6.51)	(-6.10)	(-5.37)	(6.66)	(8.44)	(16.01)	(24.03)
Chi-sq stat (difference)	11.68		6.69		0.52		8.41	
Adj R-squared	0.423	0.429	0.304	0.373	0.087	0.067	0.222	0.295

Table 7 presents results to difference-in-differences estimations of the effect of takeover laws on transparency. The dependent variables in Panel A are the earnings management variables from Table 3, while the dependent variables in Panel B are the analyst forecast properties variables from Table 4. For each test, the left column presents results for firms with low ex ante turnover risk (below median turnover probability) and the right column presents results for the opposite (above median turnover probability). The main explanatory variable is the interaction TREAT*POST, which equals 1 if the firm is located in a country that implemented a takeover law during the sample period, and if the observation was from after initiation of such law. The chi-squared test statistic of the differences in the coefficients for TREAT*POST between high and low turnover risk firms are presented at the bottom of the table. Each estimation contains country, industry, and year fixed effects; t-statistics are in parentheses and are based on robust standard errors at the firm level. All continuous unranked nonlogarithmic variables are truncated at the 1st and 99th percentiles. Asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All detailed variable definitions and calculations are in Appendix A.

Table 8. Takeover Laws and Opacity – Investor Protection Splits

	Anti-Self-Dealing Index				Legal Origin (Common law vs. Code law)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
DEPENDENT VARIABLE	FRQ	FRQ	AFQ	AFQ	FRQ	FRQ	AFQ	AFQ
INVESTOR PROTECTION	High	Low	High	Low	High	Low	High	Low
TREAT*POST	-0.0177***	-0.0289***	-0.0166***	-0.0287***	-0.00132	-0.0332***	-0.0306***	-0.0211***
	(-2.83)	(-5.43)	(-2.98)	(-5.05)	(-0.14)	(-7.70)	(-3.48)	(-4.87)
Chi-sq stat (difference)	1.87		2.34		9.04		0.94	
Observations	12126	31979	11085	38429	5193	38912	4784	44730
Adj R-squared	0.101	0.132	0.275	0.249	0.117	0.121	0.284	0.247

Table 8 presents results to difference-in-differences estimations of the effect of takeover laws on transparency. The dependent variables are the aggregate financial reporting quality (*FRQ*) in Columns 1-2 and 5-6, and the aggregate analyst forecast quality (*AFQ*) in Columns 3-4 and 7-8. For each test, the left column presents results for firms from countries with high quality investor protection and the right column presents results for firms that are from countries with poor investor protection. Investor protection is measured by the ASDI index from Djankov et al. (2008) in Columns 1-4 and by a common law indicator in Columns 5-8. Firms with above median ASDI or from a common law country are categorized as high quality investor protection, and firms with below median ASDI or from a code law country are categorized as low quality investor protection. The main explanatory variable is the interaction *TREAT*POST*, which equals 1 if the firm is located in a country that implemented a takeover law during the sample period, and if the observation was from after initiation of such law. The chi-squared test statistic of the differences in the coefficients for *TREAT*POST* are presented at the bottom of the table. Each estimation contains country, industry, and year fixed effects; t-statistics are in parentheses and are based on robust standard errors at the firm level. All continuous unranked nonlogarithmic variables are truncated at the 1st and 99th percentiles. Asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All detailed variable definitions and calculations are in Appendix A.

Table 9. Takeover Laws and Opacity – Growth Strategy Splits

Panel A - Takeover Laws and Earnings Management - Growth Splits

GROWTH STRATEGY	(1) DIS_SMTH Yes	(2) DIS_SMTH No	(3) SPINC Yes	(4) SPINC No	(5) DDEQ Yes	(6) DDEQ No	(7) ABNACCR Yes	(8) ABNACCR No	(9) FRQ Yes	(10) FRQ No
TREAT*POST	0.0337*	0.000774	0.0722***	0.117***	-0.0072**	-0.00621	0.0175***	0.00815	-0.0372***	-0.0376***
	(1.65)	(0.02)	(4.52)	(3.54)	(-2.40)	(-1.37)	(2.99)	(0.72)	(-4.40)	(-2.61)
Chi-sq stat (difference)	0.72		1.52		0.03		0.54		0	
Observations	11032	2854	12544	3503	8181	1972	11575	3203	11574	3203
Adj R-squared	0.055	0.094	0.151	0.161	0.303	0.379	0.141	0.126	0.115	0.151

Panel B - Takeover Laws and Analyst Forecast Properties - Growth Splits

GROWTH STRATEGY	(1) ANALYST Yes	(2) ANALYST No	(3) ACCURACY Yes	(4) ACCURACY No	(5) DISPERSION Yes	(6) DISPERSION No	(7) AFQ Yes	(8) AFQ No
TREAT*POST	-2.118***	-2.205***	-0.0302***	-0.00545	0.0350***	0.0328***	-0.0283***	-0.0453***
	(-5.11)	(-3.59)	(-2.90)	(-0.25)	(3.13)	(2.71)	(-3.03)	(-3.17)
Chi-sq stat (difference)	0.01		1.09		0.02		1	
Observations	10151	3547	10151	3547	6593	2770	10151	3547
Adj R-squared	0.457	0.433	0.377	0.373	0.065	0.120	0.266	0.270

Table 9 presents results to difference-in-differences estimations of the effect of takeover laws on transparency. The dependent variables in Panel A are the earnings management variables from Table 3, while the dependent variables in Panel B are the analyst forecast properties variables from Table 4. For each test, the left column presents results for firms pursuing growth and the right column presents results for non-growth firms, where growth firms are defined as firms that experience positive country- and industry-adjusted growth in four variables: total assets, PP&E, cost of goods sold, and SG&A expenses. The main explanatory variable is the interaction *TREAT*POST*, which equals 1 if the firm is located in a country that implemented a takeover law during the sample period, and if the observation was from after initiation of such law. The chi-squared test statistic of the differences in the coefficients for *TREAT*POST* are presented at the bottom of the table. Each estimation contains country, industry, and year fixed effects; t-statistics are in parentheses and are based on robust standard errors at the firm level. All continuous unranked nonlogarithmic variables are truncated at the 1st and 99th percentiles. Asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All detailed variable definitions and calculations are in Appendix A.

Table 10. Takeover Laws and Opacity – Share Issuance Splits

Panel A - Takeover Laws and Earnings Management - SEO Splits

SEO	(1) DIS_SMTH Yes	(2) DIS_SMTH No	(3) SPINC Yes	(4) SPINC No	(5) DDEQ Yes	(6) DDEQ No	(7) ABNACCR Yes	(8) ABNACCR No	(9) FRQ Yes	(10) FRQ No
TREAT*POST	0.0142	0.0274***	0.0165	0.0537***	0.00128	-0.0045***	-0.00274	0.0141***	-0.0312	-0.0293***
	(0.20)	(2.96)	(0.26)	(7.04)	(0.12)	(-3.42)	(-0.07)	(5.09)	(-1.05)	(-7.87)
Chi-sq stat (difference)	0.04		0.37		0.32		0.2		0	
Observations	1038	40127	1406	51286	757	28570	1100	43006	1100	43005
Adj R-squared	0.034	0.045	0.202	0.206	0.355	0.326	0.125	0.131	0.133	0.118

Panel B - Takeover Laws and Analyst Forecast Properties – SEO Splits

SEO	(1) ANALYST Yes	(2) ANALYST No	(3) ACCURACY Yes	(4) ACCURACY No	(5) DISPERSION Yes	(6) DISPERSION No	(7) AFQ Yes	(8) AFQ No
TREAT*POST	-2.086**	-1.229***	-0.0299	-0.0193***	-0.00381	0.0180***	-0.0169	-0.0235***
	(-2.02)	(-7.93)	(-1.16)	(-4.55)	(-0.23)	(4.68)	(-0.80)	(-6.27)
Chi-sq stat (difference)	0.73		0.17		1.83		0.1	
Observations	1603	47911	1603	47911	1294	33442	1603	47911
Adj R-squared	0.556	0.419	0.320	0.341	0.029	0.066	0.201	0.249

Table 10 presents results to difference-in-differences estimations of the effect of takeover laws on transparency. The dependent variables in Panel A are the earnings management variables from Table 3, while the dependent variables in Panel B are the analyst forecast properties variables from Table 4. For each test, the left column presents results for firms having a SEO during the fiscal year, while the right column presents results for firms that did not make any issuances. The main explanatory variable is the interaction *TREAT*POST*, which equals 1 if the firm is located in a country that implemented a takeover law during the sample period, and if the observation was from after initiation of such law. The chi-squared test statistic of the differences in the coefficients for *TREAT*POST* are presented at the bottom of the table. Each estimation contains country, industry, and year fixed effects; t-statistics are in parentheses and are based on robust standard errors at the firm level. All continuous unranked nonlogarithmic variables are truncated at the 1st and 99th percentiles. Asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All detailed variable definitions and calculations are in Appendix A.

Table 11. Controls for Confounding Channels

Panel A - Controlling for Confounding Channels - Earnings Management

	(1) DIS_SMTHC (+)	(2) SPINC (+)	(3) DDEQ (-)	(4) ABNACCR (+)	(5) FRQ (-)
Prediction					
TREAT*POST	0.0265***	0.0473***	-0.00358***	0.0114***	-0.0245***
	(2.74)	(5.96)	(-2.62)	(3.97)	(-6.29)
LNTOTASS	0.000102	0.0155***	0.00293***	-0.000292	0.00212***
	(0.06)	(10.29)	(15.35)	(-0.95)	(3.43)
BM	-0.00157	0.0178***	0.00159***	-0.000619	-0.000413
	(-0.99)	(11.63)	(5.67)	(-1.26)	(-0.68)
ROA	0.113***	-0.778***	0.0645***	0.357***	-0.172***
	(3.98)	(-18.22)	(11.19)	(23.84)	(-12.95)
STDRETURN	-0.204***	0.164***	-0.0686***	0.0494***	-0.0834***
	(-7.01)	(6.30)	(-15.07)	(4.67)	(-7.01)
OLD	0.00521	0.0237***	0.00887***	-0.000515	0.00388
	(0.69)	(4.61)	(8.77)	(-0.35)	(1.48)
SGROWTH	0.0161**	-0.0623***	-0.00671***	0.0263***	-0.0162***
	(2.22)	(-10.33)	(-5.04)	(6.04)	(-4.73)
LOSS	0.0179***	-0.308***	-0.00445***	-0.00694***	0.0254***
	(3.18)	(-48.66)	(-6.50)	(-3.74)	(10.99)
PCNTCLHLD	0.0613***	-0.00947	0.00501***	0.00354	-0.0203***
	(5.28)	(-0.99)	(3.47)	(1.37)	(-4.75)
CF	-0.210***	-0.350***	0.00572	-0.549***	0.509***
	(-8.00)	(-14.53)	(1.29)	(-41.29)	(42.30)
CGR	0.0281***	0.00603	-0.00108	0.00994***	-0.0213***
	(3.43)	(0.81)	(-1.04)	(4.50)	(-6.43)
SHORTLEGAL	0.0538***	-0.0370***	0.00252	0.00409	-0.00903*
	(4.10)	(-3.36)	(1.23)	(1.05)	(-1.68)
ITLAW				-0.0760***	0.00918
				(-11.40)	(0.62)
GOODINVPROT	0.124***	-0.0869**	0.00205	-0.0131	-0.0317*
	(2.99)	(-2.21)	(0.30)	(-1.56)	(-1.75)
Constant	0.306***	0.0754	-0.0507***	0.0954***	0.519***
	(7.22)	(1.30)	(-9.48)	(8.17)	(21.88)
Observations	37837	47877	27036	40189	40188
Adj R-squared	0.044	0.214	0.344	0.137	0.124

Panel B - Controlling for Confounding Channels - Analyst Forecast Properties

Prediction	(1) ANALYST (-)	(2) ACCURACY (-)	(3) DISPERSION (+)	(4) AFQ (-)
TREAT*POST	-0.735***	-0.0177***	0.0103***	-0.0193***
	(-4.76)	(-3.96)	(2.60)	(-4.99)
LNTOTASS	2.098***	0.00796***	-0.0105***	0.0324***
	(44.34)	(14.14)	(-15.70)	(40.83)
ROA	8.656***	0.307***	-0.127***	0.215***
	(14.27)	(14.66)	(-6.98)	(11.99)
STDRETURN	3.303***	-0.00117	0.0724***	0.0140
	(7.36)	(-0.07)	(3.79)	(1.01)
SGROWTH	0.623***	0.00161	-0.0253***	0.0171***
	(5.94)	(0.39)	(-6.39)	(5.09)
EARNSURP	-0.261***	-0.234***	0.00864***	-0.0815***
	(-3.05)	(-41.01)	(3.19)	(-34.54)
OLD	-0.558***	-0.00861***	0.0107***	-0.0222***
	(-4.00)	(-3.78)	(3.77)	(-6.50)
CGR	-1.719***	-0.00536	0.0273***	-0.0161***
	(-12.99)	(-1.56)	(7.73)	(-4.71)
SHORTLEGAL	1.115***	-0.00951*	-0.00557	0.00688
	(5.69)	(-1.92)	(-1.17)	(1.41)
GOODINVPROT	-0.313	0.0686***	-0.0664***	0.0831***
	(-0.63)	(5.63)	(-5.42)	(4.88)
Constant	-4.596***	-0.113***	0.129***	0.414***
	(-8.00)	(-7.96)	(10.09)	(29.98)
Observations	45456	45456	31869	45456
Adj R-squared	0.438	0.337	0.065	0.251

Table 11 presents results to difference-in-differences estimations of the effect of takeover laws on various earnings management and analyst forecast property measures. The dependent variables are the transparency proxies used in Tables 3 and 4, and the main explanatory variable is *TREAT*POST*, and control variables are the same as in Tables 3 and 4. Additional controls are included for corporate governance reforms, short selling laws, insider trading laws (where multicollinearity is not a problem), and a good investor protection dummy to account for potential confounding channel, in which the good investor protection dummy is a combination of ASDI and the common law indicator from Table 8. Panel A presents the earnings management results and Panel B presents the analyst forecast properties results. Each estimation contains country, industry, and year fixed effects; t-statistics are in parentheses and are based on robust standard errors at the firm level. All continuous unranked nonlogarithmic variables are truncated at the 1st and 99th percentiles. Asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All detailed variable definitions and calculations are in Appendix A.

TABLE 12. Other Transparency Proxies

Prediction	(1) BIG5 (-)	(2) BIG5 (-)	(3) AVOL (-)	(4) AVOL (-)	(5) AVAR (-)	(6) AVAR (-)
TREAT*POST	-0.0543*** (-6.12)	-0.0567*** (-6.64)	-0.108*** (-4.43)	-0.111*** (-3.86)	-0.147*** (-3.51)	-0.115** (-2.42)
LNTOTASS	0.0414*** (17.58)	-0.0197*** (-4.06)	0.0278*** (9.40)	-0.00955 (-0.63)	0.151*** (22.43)	0.0184 (0.75)
BM	0.00769*** (5.12)	0.00187 (1.64)	0.00328 (1.29)	0.0117*** (2.72)	-0.00630 (-1.31)	0.00353 (0.43)
LEV	-0.0713*** (-4.55)	-0.0788*** (-5.21)	-0.0279 (-1.29)	0.0699 (1.23)	-0.275*** (-5.88)	-0.171* (-1.73)
ROA	0.0659*** (2.94)	-0.0111 (-0.68)	0.198*** (2.97)	0.217** (2.29)	0.480*** (3.81)	0.385** (2.43)
INVTA	-0.0575* (-1.94)	-0.0308 (-0.96)				
ARTA	0.0932*** (3.49)	0.00813 (0.31)				
OLD	-0.0181** (-2.05)					
CF	0.168*** (6.15)	-0.0251 (-1.41)				
SGROWTH			0.106*** (6.86)	0.100*** (5.23)	0.174*** (5.66)	0.135*** (3.86)
STDRETURN			0.0336 (0.51)	-0.103 (-1.23)	1.301*** (9.62)	0.393** (2.56)
LOSS			-0.0534*** (-4.28)	-0.0430*** (-2.83)	-0.0552** (-2.34)	-0.0296 (-1.12)
EADELAY			-0.00271*** (-16.97)	-0.00284*** (-13.95)	-0.00539*** (-18.35)	-0.00492*** (-14.09)
PCNTCLHLD			-0.143*** (-6.40)	-0.174*** (-3.70)	-0.700*** (-14.89)	-0.555*** (-6.72)
Constant	0.277*** (3.51)	0.672*** (11.98)	-0.0864 (-1.19)	0.162 (1.56)	-0.979*** (-6.95)	-0.109 (-0.65)
Fixed Effects	C, I, Y	F, Y	C, I, Y	F, Y	C, I, Y	F, Y
Observations	91153	91153	50802	50802	63037	63037
Adjusted R-sq	0.220	0.657	0.061	0.111	0.077	0.154

Table 12 presents results to difference-in-differences estimations of the effect of takeover laws on various transparency measures. The dependent variables are the Big 5 auditor indicator, abnormal trading volume, and abnormal return variance, and the main explanatory variable is *TREAT*POST*. Models in columns 1, 3, and 5 contain country, industry, and year fixed effects, while models in columns 2, 4, and 6 contain firm and year fixed effects; t-statistics are in parentheses and are based on robust standard errors at the firm level. All continuous unranked nonlogarithmic variables are truncated at the 1st and 99th percentiles. Asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All detailed variable definitions and calculations are in Appendix A.

Table 13. Sensitivity Analyses

	Reduced Sample Period		Drop post-2004		Drop year, year before law	
	(1)	(2)	(3)	(4)	(5)	(6)
	FRQ	AFQ	FRQ	AFQ	FRQ	AFQ
TREAT*POST	-0.0322***	-0.0239***	-0.0261***	-0.0252***	-0.0278***	-0.0285***
	(-8.17)	(-5.90)	(-6.04)	(-5.64)	(-6.28)	(-6.55)
Observations	41286	46649	21650	32902	42052	47393
Adj R-squared	0.119	0.250	0.103	0.242	0.119	0.253

Table 13 present results to difference-in-differences estimations of the effect of takeover laws on aggregate financial reporting quality, *FRQ*, and aggregate analyst forecast quality, *AFQ*. The main explanatory variable is the interaction *TREAT*POST*, which equals 1 if the firm is located in a country that implemented a takeover law during the sample period, and if the observation was from after initiation of such law. Control variables are the same as depicted in Tables 3-4 but are not shown for parsimony. Models in columns 1 and 2 limit the sample period to three years pre- and post-takeover law to remove the possibility of effects far before or after passage of these laws, models in columns 3 and 4 limit the sample to pre-2004 to avoid the possible confounding effect of the EU Takeover Directive, models in columns 5 and 6 drop the year and the year prior to law initiation to remove doubts about when during the fiscal year the law was passed and about whether firms could preemptively change their transparency. All estimations contain country, industry, and year fixed effects. t-statistics are in parentheses and are based on robust standard errors at the firm level. All continuous unranked nonlogarithmic variables are truncated at the 1st and 99th percentiles. Asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All detailed variable definitions and calculations are in Appendix A.

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