

Consequences of Mandatory Quarterly Reporting: The U.K. Experience

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Abstract

Many commentators have expressed concerns about short-term focus in corporate decision making. Some have suggested that corporate executives will focus more on long-term investments if corporations are required to report semi-annually rather than quarterly. However, establishing a causal link between reporting frequency and corporate decision making has been difficult, due to either the absence of a clear exogenous shock or dated data. We exploit the start of mandatory quarterly reporting in 2007 and the end of the requirement in 2014 in the United Kingdom to examine corporate and capital market behavior. Using a difference-in-differences analysis, we find that the imposition of mandatory quarterly reporting by the Financial Conduct Authority (FCA) has virtually no impact on investment decisions during the next three years. Instead, after quarterly reporting became mandatory for U.K. public companies in 2007, we find a dramatic decline in the number of companies that issue reports with quantitative information (defined as including both sales and earnings numbers for the quarter). After 2007, we also find a substantial increase in companies announcing managerial guidance for the upcoming year's earnings or sales. Moreover, after 2007, we find an increase in analyst following for all sample companies. In 2014, the U.K. regulation no longer required, but still allowed, public companies to issue quarterly reports. Public companies that moved from quarterly to semiannual reporting after 2014 have so far experienced a reduction in analyst coverage, but no detectable increases in their levels of corporate investments.

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1. Introduction

Several prominent executives, regulators and politicians (e.g., John Bogle, Lou Gerstner, Peter Peterson, John Whitehead and Warren Buffett via the Aspen Institute (2009), presidential candidate Hillary Clinton (2016) and SEC commissioner Dan Gallagher (2015)) have expressed persistent concerns about what they perceive as a growing short-term focus in corporate decision making. In a much-quoted letter to CEOs, Lawrence Fink (2016), the CEO of Blackrock, argues that one of the mechanisms facilitating such a myopic focus is the mandatory requirement to report quarterly results to investors. Further, the SEC is considering the pros and cons of moving to semi-annual reporting from quarterly reporting.¹

However, it has been difficult, if not impossible, to provide causal evidence on the alleged link between mandatory quarterly reporting and corporate decision making, for two reasons. First, existing work on such a link relies on data from the 1950s-1970s (e.g., Leftwich, Watts and Zimmerman 1981; Butler, Kraft and Weiss 2007; Fu, Kraft and Zhang 2012; Kraft, Vashishtha and Venkatachalam 2015). The capital market, the managerial labor market and the composition of investors have changed considerably since the 1970s in at least five important respects. First, companies admit to deferring long-term investments to report short-term profits. Graham, Harvey and Rajgopal (2005) report that a majority of CFOs admit to sacrificing positive NPV projects in order to meet the quarterly earnings estimate set by equity analysts or to smooth reported earnings. Second, CEO tenure is shrinking and is now only 6.7 years on average, and around one-

¹ <https://www.sec.gov/news/speech/international-developments-higgins.html>

third of CEOs were ousted against their will (Kaplan and Minton 2006). Curtailed tenure can serve both as a cause and as a consequence of short-term decision making. Third, the nature of shareholder behavior has fundamentally changed with the advent of activist hedge funds and more shareholder engagement. The impact of activist hedge funds on firms' myopic behavior is hotly debated (Coffee and Palia 2015). Fourth, the average holding period for stocks is less than one year (Bogle 2006), and lower holding periods cause mismatches in the investment horizons of fund managers and their ultimate beneficiaries. Finally, companies continue to face pressure to issue guidance of results, and such guidance arguably leads firms to take short-term actions to meet their guided number (Graham et al. 2005; McKinsey 2006).

Second, methodological concerns often hamper analysis of evidence suggestive of causality in the context of corporate decision making. It is often not obvious whether any change in corporate decisions that the researcher documents after the firm voluntarily changes reporting frequencies is actually attributable to the reporting frequency or to another cause. The SEC's move to require quarterly reporting in 1970s is one such exogenous change, but it is somewhat dated. Remarkably, a more recent natural experiment mandating a reporting change has occurred in the United Kingdom. In 2007, U.K. firms were required to start issuing quarterly "interim management statements" (labeled "quarterly reporting" although the reports need not be strictly issued on quarter end date). However, the Kay Report (2012) recommended the removal of mandatory obligations to provide quarterly reporting. The objective was to reduce pressures that induce short-term decision making by corporate executives. Responding to the Kay report (2012), the Financial Conduct Authority (2014) stopped mandatory quarterly reporting in 2014.

Finding such exogenous shocks that both start and stop quarterly reporting within such a short period of time (2007-2014) is rare. In particular, the relatively short time series enables us

to provide a panoramic view of both the firms that began as voluntary quarterly reporters ("voluntary reporters") and the firms that were forced to switch to quarterly reporting ("switching firms"). We can evaluate how the actions of these firms evolved between these two exogenous shocks to reporting frequency and how the capital market reacted to the behavior of these firms.

In particular, mandatory quarterly reporting, implemented in the U.K. by the rules of the Financial Conduct Authority (FCA), required publicly traded firms to issue interim management statements (i.e., quarterly reports), effective for financial years commencing on or after 20 January 2007. Under these FCA rules, firms had to provide an explanation of material events and transactions that took place during the period and to give a general description of their financial position and performance. These disclosures are treated as regulated information, so issuers are liable for material misrepresentations or omissions in their quarterly reports. However, unlike the SEC, the FCA did not provide precise directions on the content of these reports.

Our sample combines accounting data, security price data, analyst data, and earnings and sales guidance data for the years 2005-2015.² For the main analysis that evaluates the consequences of initiating mandatory quarterly reporting, we restrict our sample period to 2005-2010.³ To determine the voluntary quarterly reporters before the start of the rule mandating quarterly reporting, we manually check every company's website, as well as the Capital IQ database. Using this data, we classify firms as "quarterly quantitative reporting firms" if they disclose sales and earnings information in their quarterly reports, and classify the remaining quarterly reporting firms as "quarterly qualitative reporting firms." Firms that report quarterly,

² We start from 2005 since U.K. companies adopted IFRS in this year.

³ The sample period before (after) 2008 is classified as the pre- (post-) regulation period. To balance the time periods before and after the rule change, we restrict our main analysis to sample years 2005-2010.

regardless of quantitative or qualitative content, prior to 2008 are labeled as “voluntary quarterly reporters.” The remaining firms that mandatorily switched to quarterly reporting (issuing either quantitative or qualitative disclosures) starting in 2008 are labeled “switchers.”

After the start of quarterly mandatory reporting in the U.K., the number of firms that issued quantitative quarterly reports, defined as those with sales and earnings numbers, declined both in the full sample and in the sample of voluntary quarterly reporters. Specifically, 16% of the sample firms reported quantitative quarterly estimates in 2005, relative to 8% in 2010. The evidence is even more striking for the voluntary quarterly reporters. In particular, 52% of the voluntary adopters issued quantitative reports in year 2005, as compared to 19% in 2010. Instead, the number of firms that announce quarterly reports without sales and earnings increased substantially.

At the same time, the number of firms that issued annual earnings and sales guidance increased significantly after the start of mandatory quarterly reporting. In general, 28% of all firms issued guidance in 2005, relative to 50% of all firms in 2010. Both voluntary quarterly reporters and switching firms increased issuance of guidance after the rule change. Specifically, 30% (28%) of the voluntary adopters (switchers) issued guidance in year 2005, as compared to 53% (49%) in 2010.

These empirical patterns need to be interpreted in light of the institutional environment in the U.K. For instance, the preponderance of qualitative quarterly reports, after the introduction of mandatory quarterly reporting, is likely attributable to (i) the FCA’s minimal prescriptive guidance on what constitutes legitimate quarterly reports and the endorsement of qualitative reporting with the intention of letting the market evolve its own equilibrium; (ii) the possibility that voluntary quantitative reporters before the regulation viewed the regulator’s endorsement of qualitative reporting as a signal that they could move to the less restrictive qualitative regime.

We do not find support in the U.K. setting for the claim that more frequent financial reporting results in myopic managerial behavior. To test this claim, we employ alternative investment measures, including capital expenditures; net plant, property, and equipment; R&D; and intangible assets. If more frequent reporting induces a myopic mindset among managers, we would expect mandatory switchers to be associated with lower long-term investments relative to the pre-adoption period and relative to voluntary quarterly reporters. Using a difference-in-differences analysis, we do not find evidence in support of mandatory switchers experiencing differential investment patterns.

Next, we investigate the consequences of mandatory quarterly reporting on analyst coverage of the firm and on the properties of analyst forecasts. Analyst coverage for all firms in the sample increases after the introduction of more frequent mandatory reporting. Using a difference-in-differences design, we find that analyst forecast error, defined as the difference between actually reported earnings per share and forecasted earnings per share, falls for mandatory switchers after the introduction of mandatory reporting. We find no reliable change in the analyst coverage and dispersion of analyst forecasts for the mandatory rule adopters relative to the pre-adoption period and relative to voluntary quarterly reporters.

Because the U.K. introduced mandatory reporting in 2007, just as the financial crisis was starting, we repeat our analyses of the impact of mandatory reporting on company investment and analyst following after (i) dropping the sample years 2008-2010, and (ii) introducing the sample years spanning 2011-2013. All our inferences remain unchanged.

On November 7th, 2014, the FCA published a new policy stating that firms were no longer required to publish quarterly management statements. Subsequently, 9% of the sample firms stopped quarterly reporting. Firms that did not provide guidance when the mandatory rule was in

force and firms in the energy industry are more likely to stop quarterly reporting after the rule change. Using the difference-in-differences design, we find that firms that stop quarterly reporting lose analyst coverage. However, the stoppers are not associated with increased levels of corporate investments or changes in analyst forecast accuracy.

Our paper contributes to the relatively scant literature on an important question related to the link between reporting frequency and corporate decisions, which is the subject of much discussion in academe (e.g., Stein 1989, Kanodia and Lee 1998, Graham et al. 2005, Butler et al., 2007, Fu et al., 2012, Gigler et al. 2014 and Kraft et al. 2015), practice, and policy circles (Aspen Institute 2009, Pozen 2014, Gallagher 2015, Clinton 2016). In addition, the SEC is evaluating the pros and cons of moving to semi-annual reporting from quarterly reporting. Our U.K. evidence spanning 2008-15, in particular, complements U.S. evidence from earlier time periods (e.g., Kraft et al. 2015). Accumulating evidence across different institutional environments will hopefully further our collective understanding of the association between reporting frequency and (i) corporate investment and disclosure decisions, and (ii) changes in the behavior of information intermediaries such as analysts.

2. Institutional Background and Related Literature

2.1 The Setting

The Transparency Directive (2004/109/EC) used to require issuers of shares admitted to trading on a regulated market to publish interim management statements *during* the first six months of the financial year and again *during* the second six-month period. The requirement to publish interim management statements was implemented in the U.K. by the Disclosure and Transparency Rules. Under these rules, interim management statements were required to provide an explanation

of material events and transactions that have taken place during the period and their impact on the issuer's group, and to give a general description of the financial position and performance of the issuer's group (DTR 4.3.4–5). These disclosures are treated as regulated information, so issuers may be subject to liability if the quarterly reports contain materially false or misleading information and suffer losses as a result of such information.

However, FCA rules do not provide precise directions on the content of interim management statements (e.g., quantitative or qualitative statements). Instead, the FCA was willing to let market-led disclosure practices evolve around quarterly reporting. These rules were implemented effective for financial years commencing on or after 20 January 2007. They are significant because they provide the first shock relevant to our analysis.

In November 2013, the European Commission adopted the Transparency Directive Amending Directive (2013/50/EC). One of the key changes made by the Amending Directive was to remove the requirement to publish quarterly statements. In July 2014, the FCA issued a consultation paper (CP 14/12 Removing the Transparency Directive's requirement to publish interim management statements), which set out its proposals for achieving this goal. On November 7th, 2014, the FCA published a policy statement (PS 14/15 Removing the Transparency Directive's requirement to publish interim management statements), which explained how and when it was implementing the proposals in CP 14/12. One of the consequences of the changes is that interim management statements published on a voluntary basis will no longer be treated as regulated information – thus, issuers can avoid liability for information in the quarterly statements. This requirement provides the second shock related to the relaxation of the mandatory requirement to report quarterly data.

2.2 Theoretical work

Theoretical research on the impact of more frequent reporting is mixed. On one hand, Kanodia and Lee (1998) and Gigler et al. (2014) show that the anticipation of periodic performance reports has a disciplining effect on managers' ex ante investment decisions and makes them less likely to engage in overinvestment. The disciplining effect in these models occurs through the effect of performance reports on stock prices.

On the other hand, Gigler et al. (2014) extend Stein's (1989) work to show that a higher reporting frequency increases the probability of managerial myopic investment behavior. Higher reporting frequency generates short-term performance measures that fail to reflect managerial actions that generate value only over the long run. This, in turn, encourages premature evaluation of managers that makes it unviable for them to engage in long-term investments. Therefore, a more frequent reporting regime can exacerbate incentives for myopic investment behavior.

2.3 Empirical work

Prior work has proposed that there are both benefits and costs to more frequent reporting. Among the benefits, scholars have argued and/or demonstrated that more frequent reporting is associated with reduced cost of capital, improved liquidity and increased timeliness of earnings news (Butler et al., 2007; Fu et al., 2012). Three papers by related co-authors have relied on U.S. firms that voluntarily reported on a quarterly basis in 1953 and the laggards who were switched mandatorily to quarterly reporting in 1970 by the SEC. In the first of such papers, Butler et al. (2007) find that although earnings timeliness improves for firms voluntarily changing their reporting frequency, earnings timeliness is unaffected for firms that are forced to shift the reporting frequency via a mandate. Fu et al. (2012) find that firms that voluntarily or mandatorily increasing their reporting frequency experience a reduction in information asymmetry and a decrease in their

cost of capital by more than 60 basis points. Turning to the costs of frequent reporting, Kraft et al. (2015) claim that increased reporting frequency in the 1970s is associated with a large decline in investments.

We found three relevant papers that investigate the U.K. context. Cuipers and Meek (2010) investigate the characteristics of firms that voluntarily report on a quarterly basis before the 2007 rule change that required mandatory quarterly reporting. They find that voluntary reporters have lower bid-ask spreads and higher share turnover. However, these authors do not examine the capital market consequences of firms that were required to switch to quarterly reporting. A recent working paper by Ernstburger et al. (2015) claims that mandatory quarterly reporting in the U.K. increased real earnings management, as proxied by abnormal production and lower discretionary expenses. Unfortunately, these authors eliminate voluntary quarterly reporters from their sample. Finally, Arif and De George (2015) document that firms located in countries where mandatory reporting is less frequent than in the U.S. overreact to U.S. firms' earnings.

We are perhaps the first in the literature to examine, in detail, the impact of the introduction and removal of mandatory quarterly reporting in the U.K. on the (i) content of quarterly reports, (ii) earnings guidance, (iii) potentially myopic investments, and (iv) analyst following and the properties of analysts' earnings forecasts.

3. Sample Selection and Research Design

3.1 Data

We obtain accounting and security price data from Compustat Global from 2005 to 2015. Guidance data are from Standard and Poor's Capital IQ database, and analyst data are from I/B/E/S. We exclude financial services firms (SIC 6000-6999) because of their peculiarities. Compustat Global reports the accounting data at the quarterly frequency. However, for non-quarterly

reporting firms and qualitative quarterly reporting firms, the database imputes quarterly data from semi-annual and annual reports. Therefore, it is important to recognize that the Compustat Global database, in its current form, cannot be used reliably to determine the reporting frequency.⁴ To overcome this limitation, we manually check the reporting frequency of each firm. Specifically, we manually check company websites followed by the Capital IQ database for news to determine the reporting frequency.

Using this manually collected data, we classify firms as “quarterly quantitative reporting firms” if they disclose sales and earnings information at the quarterly frequency, and we classify firms as “quarterly qualitative reporting firms” if they disclose qualitative quarterly information with or without sales or earnings information. Firms that reported quarterly, issuing either quantitative or qualitative information, prior to 2008 are voluntary quarterly reporters. The remaining firms mandatorily switched to quarterly reporting (either quantitative or qualitative disclosures) after 2007.

We restrict our sample to firms with at least 10 million GBP in assets at the beginning of the year. To reduce the influence of outliers, we winsorize, on a yearly basis, the top and bottom 1% of continuous independent variables. Finally, the sample period before (after) 2008 is classified as the pre- (post-) mandatory quarterly reporting period. To balance the time periods before and after the start of the quarterly reporting rule, we restrict our main analysis to sample years 2005–2010. Table 1 provides sample statistics. The final sample used to investigate the consequences of starting quarterly reporting covers the period from 2005–2010 and has 4,079 firm-

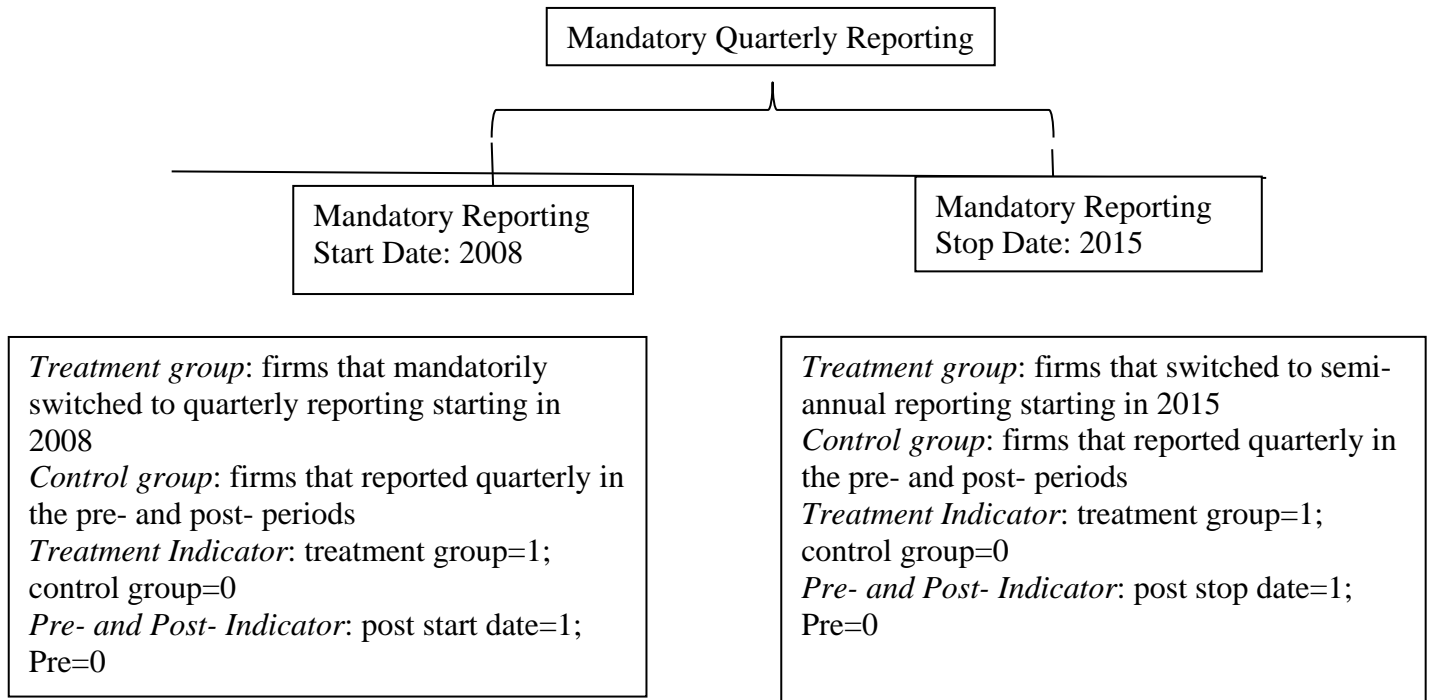
⁴ Worldscope is an alternative source of global accounting data. However, the coverage of Compustat Global is marginally larger than that of Worldscope (Dai, 2012). Hence, we use Compustat Global as our main source of data. We use Worldscope to double-check accounting numbers and reporting frequency. Like Compustat Global, Worldscope also imputes quarterly accounting numbers for the firms without quarterly reporting.

year observations. 1,167 of these firm-year observations are from the “voluntary quarterly reporters” sample, and 2,912 firm-year observations are from the “switchers” sample. Missing one or more control variables or dependent variables (forecast dispersion, research and development expenses, etc.) leads to reliance on fewer observations in some of the tests. We report the number of observations for each specification discussed below. In section 5, we discuss the sample used to investigate the consequences of stopping quarterly reporting.

3.2 Overall design

We explore the impact of starting and stopping mandatory quarterly reporting on the managerial responses using a difference-in-differences design.⁵ In particular, we regress managerial actions (such as change in investments) on an indicator variable for the type of reporting (mandatory versus voluntary quarterly reporting), an indicator variable for the time period (pre- versus post-mandatory reporting period), the interaction between these two indicators, and control variables along with firm and time fixed effects. This research design allows us to investigate the impact of quarterly reporting on managerial responses of firms switching to mandatory quarterly reporting relative to those that were voluntarily reporting on a quarterly basis before the mandatory rule came into force. Employing firms with voluntary quarterly reporting as a control group helps to isolate the effect of mandatory quarterly reporting by differencing out the common omitted factors that change around the adoption. We repeat the same design to investigate the impact of quarterly reporting on the analyst responses. We repeat the analysis for the voluntary stoppers post 2015 in section 5. The figure below presents the timeline and key variables of our difference-in-differences design.

⁵We also employ difference between pre-post design to investigate the consequences of reporting frequency change for all sample firms.



4. Empirical Results

4.1 Disclosure Patterns: Before and After Mandatory Quarterly Reporting

In this section, we investigate the changes to disclosure patterns for both mandatory and voluntary disclosures during the sample period. Further, we compare and contrast the disclosure patterns between voluntary quarterly reporters and mandatory switchers to quarterly reporting.

Univariate analysis

Table 1 presents the univariate patterns in disclosures for voluntary reporters and mandatory switchers. Among the voluntary quarterly reporters, the proportion of companies that announce quantitative quarterly reports declined significantly after the start of the mandatory quarterly reporting regime. Specifically, among the voluntary reporters, 44% of the firms issued quarterly quantitative reports before the rule mandating quarterly reporting, and this percent declined to 20% after the rule change. The evidence from the correlation matrix, tabulated in Table 2, also confirms the findings in Table 1. In particular, the Pearson correlation coefficient between the *Post* indicator (equal to 1 for the mandatory quarterly reporting period) and the *Quant* indicator (equal to 1 if the firm reports quarterly sales and earnings figures) is -0.07 and statistically significant at conventional levels. Further, only 4% of the mandatory switchers to quarterly reporting issued quarterly quantitative reports.

Disclosure patterns for the full sample are presented in panel A of Table 3. The number of firms that issue quarterly quantitative disclosures decreased during the sample period, especially after the advent of mandatory quarterly reporting. At the same time, the number of firms that report quarterly qualitative disclosures increased significantly. Specifically, 16% of the sample firms reported quantitative quarterly estimates in 2005, and that proportion decreased to 8% by 2010. On the other hand, 14% of firms issued qualitative quarterly reports in 2005, while 92% issued them in 2010. In other words, after the initiation of mandatory quarterly reporting, more firms issued qualitative quarterly reports, and firms that had been issuing quantitative reports earlier moved to issuing qualitative quarterly reports. In contrast, the evidence also suggests that the number of firms that issue guidance increased over time. Specifically, 28% issued guidance in 2005, and more than 50% did so in 2010.

The findings are also very similar for the voluntary adopters. Panel B of Table 3 presents the evidence. 52% (48%) of the voluntary adopters issued quantitative (qualitative) reports in 2005, and this percent decreased to 19% (81%) in 2010. In contrast, 30% of voluntary adopters issued earnings guidance in 2005, while 53% did so in 2010. Panel C of Table 3 presents the disclosure patterns for the mandatory switchers. By construction, these firms disclosed neither qualitative nor quantitative reports in years 2005-2007. In 2008, when the rule became mandatory, most firms issued quarterly qualitative reports. Specifically, 94% of the firms issued qualitative quarterly reports. Similar to the full sample and the voluntary adopters sample, the number of mandatory switchers that issued earnings guidance increased significantly. Specifically, 33% of the mandatory switchers gave guidance in 2005, and 54% gave guidance in 2010.⁶

In summary, the univariate evidence from Tables 1–3 suggests that the number of firms that issued quantitative reports declined after the mandatory quarterly rule went into effect both for the full sample and for the voluntary adopters. In contrast, the number of firms that issued earnings guidance increased significantly for the full sample, the voluntary adopter sample, and the mandatory switcher sample.

Multivariate analysis

Next, we estimate a logistic multivariate model that controls for factors that could influence managerial disclosure choices. To do so, we estimate the following logistic model:

$$Quant\ or\ Guide_{i,t} = \alpha + \beta_1 Post_t + \beta_2 Mktcap_{i,t} + \beta_3 Book_market_{i,t} + \beta_4 ADR_{i,t} + \beta_5 Ret_Vol_{i,t} + \beta_6 Leverage_{i,t} + \beta_7 ROA_{i,t} + \beta_8 D_Firm + \beta_9 D_Time + \varepsilon_{i,t} \quad (1)$$

⁶ We also investigate the nature of guidance. Specifically, using the I/B/E/S guidance data that is available from 2007, we find that if firms provide guidance, annual guidance is most common (95%), quarterly guidance is rare (5%), and none of the firms provide semiannual guidance. Of firms that issue annual guidance, 30% on average provide range estimates, and the rest provide point estimates with qualifiers (e.g., *about*, *more than*, *at least*, *may exceed*, *slightly more than*, *slightly less than*, and *not to exceed*).

where *Quant* equals 1 if the firm reports quarterly sales and earnings figures, and 0 otherwise; *Guide* equals 1 if the firm provides earnings or sales guidance and 0 otherwise; *Post* equals 1 for the all years from 2008 onward and 0 otherwise; *Mktcap* is the log of the market capitalization on the last trading day of the fiscal year; *Book_market* is book value of equity divided by market capitalization; *ADR* is equal to 1 if the firm traded in the United States and 0 otherwise; *Ret_Vol* is the standard deviation of daily stock returns in the fiscal year; *Leverage* is book value of long-term debt divided by total assets; *ROA* is net income divided by total assets; *D_Firm* is the firm fixed effect; *D_Time* is the time fixed effect. We estimate the above specification with and without fixed effects. Standard errors are clustered by firm.

Panel A of Table 4 reports the multivariate results for the full sample. The analysis without firm and time fixed effects is presented in Column (1) for the quarterly reporting type (quantitative/qualitative). Similar to the univariate analysis, the multivariate analysis also consistently suggests that the number of firms that disclose quantitative reports declined after mandatory quarterly reporting began. The coefficient estimate on the *Post* dummy is -0.50 and significant at 1%. In terms of economic significance, after the initiation of mandatory quarterly reporting, the odds of a company's issuing qualitative quarterly reports increased to 1.65. The analysis without firm and time fixed effects for the voluntary reporting is presented in Column (4). The number of firms that give guidance went up significantly after the advent of mandatory quarterly reporting. The coefficient estimate on the *Post* dummy is 0.51 and significant at 1%. After the start of mandatory quarterly reporting, the odds of a company's issuing guidance increased to 1.66.

The evidence from the voluntary reporting sample, tabulated in panel B of Table 4, is even more striking. Specifically, after mandatory quarterly reporting took effect, the odds of a company

issuing qualitative quarterly reports increased to 3.67, compared to odds of 1.65 for the full sample. This data suggests that, after the start of mandatory quarterly reporting, even firms that had been issuing quantitative quarterly reports moved toward quarterly qualitative reports.

Table 4 also presents models with firm and year fixed effects. The model with firm fixed effects can include only observations where a firm experiences a change in disclosure behavior. That is, the model with firm fixed effects excludes any observations with no change in disclosure behavior throughout the sample period. This restriction results in a reduction of the number of usable observations from 4,079 to 1,016. The specification with fixed effects can be interpreted as a change in the reporting behavior for the sample for which the reporting behavior of the firm is not the same across the sample years. The analysis using fixed effects is reported in Columns (2), (3), (5), and (6). Overall, the conclusions are qualitatively similar to the analysis without the fixed effects.

Taken together, the evidence in Tables 1–4 suggests that, after the beginning of mandatory quarterly reporting, the number of firms that issue quantitative quarterly reports declined significantly, and this decrease is even more significant for the voluntary adopters. Further, the number of firms that issue guidance increased significantly after mandatory quarterly reporting began.

4.2 Managerial Real Actions Before and After Mandatory Quarterly Reporting

In this section, we investigate the effect of the reporting frequency rule change on firms' "real" actions. Specifically, we investigate changes in investments among the mandatory rule adopters relative to voluntary rule adopters before and after the rule change. We employ alternative investment measures, including capital expenditures; net plant, property, and equipment; R&D; and intangible assets. If more frequent reporting induces a myopic mindset

among managers, then mandatory switchers should be associated with lower investments relative to the pre-adoption period.

Univariate analysis

Table 1 presents the univariate patterns in investments for voluntary adopters and mandatory switchers. Investments declined after the rule change for the mandatory switchers to quarterly reporting. Specifically, capital expenditures declined by 1% of lagged total assets, and net plant, property, and equipment declined by 4% of lagged total assets. At the same time, capital expenditures and net plant, property, and equipment declined even for the voluntary reporters after the reporting frequency rule change. The evidence from the correlation matrix, tabulated in Table 2, also confirms the findings in Table 1. Specifically, after the reporting frequency rule change, firms experienced lower investments. The Pearson correlation coefficient between the *Post* indicator (equal to 1 for the mandatory quarterly reporting period) and capital expenditure (net plant, property, and equipment) is -0.06 (-0.06) and statistically significant at conventional levels. Investments measured using intangible assets and research and development are not statistically different between the pre- and post-rule change periods for both voluntary adopters and mandatory switchers.

We do not find statistically significant difference-in-differences (investment differences between the post- and pre-mandatory quarterly reporting requirement period for the mandatory switchers and the voluntary adopters) between the investments of voluntary adopters and those of mandatory adopters. Specifically, the last column of Table 1 documents the difference in investments between mandatory quarterly reporting firms and voluntary quarterly reporting firms. The difference-in-differences is statistically insignificant for all of the investment measures.

Overall, the univariate results do not suggest that more frequent reporting induces managerial myopia.

Multivariate analysis

Next, we estimate a multivariate model that controls for factors that could influence managerial investment decisions. To do so, we estimate the following model:

$$\begin{aligned}
 Investment_{i,t} = & \gamma_1 Treat_{i,t} + \gamma_2 Post * Treat_{i,t} + \gamma_3 Mktcap_{i,t} + \gamma_4 Book_market_{i,t} + \gamma_5 ADR_{i,t} + \gamma_6 Ret_Vol_{i,t} \\
 & + \gamma_7 Leverage_{i,t} + \gamma_8 ROA_{i,t} + \gamma_9 Cash_{i,t} + \gamma_{10} Investment_{i,t-1} + \gamma_{11} D_Firm \\
 & + \gamma_{12} D_Time + v_{i,t}, \tag{2}
 \end{aligned}$$

where *Investment* is one of the four investment measures: (1) *Capex*: capital expenditures scaled by beginning of the year total assets; (2) *NetPPE*: net plant, property, and equipment scaled by beginning of the year total assets; (3) *R&D*: research and development expenses scaled by beginning of the year total assets; and (4) *InTan*: intangible assets scaled by beginning of the year total assets. *Treat* equals 1 if the firm mandatorily switched to quarterly reporting and 0 otherwise. *Post* equals 1 for the sample years starting 2008 and 0 otherwise. *Cash* is cash, cash equivalents and short-term investments scaled by beginning of the year total assets. The interaction between *Post* and *Treat* is our variable of interest. A negative interaction term suggests evidence in support of managerial myopic behavior. All other variables are defined as above.

The results of estimating Equation (2) are reported in Table 5. Similar to the univariate results, the evidence from the multivariate regressions suggests that more frequent financial reporting does not result in lower investments. Specifically, columns (1), (4), (7), and (10) tabulate the analysis for alternative investment measures and without firm and year fixed effects. In these models, the coefficient estimates on the interaction between *Post* and *Treat* are not statistically significant. Columns (2), (5), (8), and (11) tabulate the analysis for alternative investment measures and with both firm and year fixed effects. The coefficient estimates on the interaction between

Post and *Treat* in these models are also statistically insignificant.⁷ To investigate the parallel trends in investments before the reporting frequency rule change, we define a new indicator variable that is equal to one for the year 2006 and add the interaction of this indicator variable with *Treat* to specification (2). The coefficient estimate of this interaction term is insignificant, suggesting that the investments of the mandatory and voluntary rule adopters follow parallel trends before the rule change.

The analysis presented in Table 5 includes the Great Recession period Q4:2007-Q1:2009. To check the robustness of our inferences to excluding the Great Recession period, we repeat our analysis after dropping the sample from 2008-2010 and introducing the sample years from 2011-2013 to maintain balance in pre- and post- reporting frequency rule change years. In this analysis, *Post* equals 1 during the sample years 2011-2013 and 0 in the period 2005-2007. In untabulated results, all of our main takeaways remain unchanged when we use this sample. Therefore, the evidence suggests that the findings presented in Table 5 are not attributable to the Great Recession period.

Finally, we do not impose any restrictions based on sample firms entering or exiting the sample. In other words, we use the full sample without any restrictions other than those discussed in the data section. As a robustness check, we re-estimate the results using an alternative sample selection method. Specifically, we impose the restriction that all sample firms should be part of the full sample period (2005-2010) and repeat our main analysis on this sample. In untabulated results, we find that all our inferences are qualitatively similar.⁸

⁷In untabulated tests, we repeat our analysis after replacing contemporaneous year investments with one year ahead investments. The results are similar to those using contemporaneous year investments.

⁸All our investment-based results are similar if we restrict our sample to firms that disclose quarterly quantitative reports. Specifically, we restrict our sample to mandatory switchers with quantitative quarterly reports and also voluntary reporters that disclose quantitative reports before and after the reporting frequency rule change. Using this

Taken together, the evidence suggests that, in the U.K. setting, more frequent financial reporting is not associated with myopic investments.

4.3 Analyst Following and Forecast Properties: Before and After Mandatory Quarterly Reporting

In this section, we investigate the effect of mandatory quarterly reporting on analyst coverage and on analyst forecast error characteristics. Specifically, we investigate changes to the number of analysts following, forecast dispersion, forecast error, and forecast accuracy among the mandatory rule adopters relative to voluntary rule adopters before and after the rule change. If the rule requiring more frequent reporting provides more frequent information to the markets, then analyst following and analyst forecast properties should improve after the rule change. However, even in the absence of frequent reporting, analysts could gather information by meeting with the managers. Alternatively, they may be attracted to settings where they can add value, such as settings with infrequent mandatory reporting (Barth et al. 2001). Hence, *ex ante*, it is not clear whether more frequent reporting should have any effect on analyst coverage or on analyst forecast characteristics.

Univariate analysis

Table 1 presents the univariate patterns in analyst properties for voluntary adopters and mandatory switchers. The number of analysts following the average firm required to switch to quarterly reporting (i.e., mandatory switchers) increased after the rule. Specifically, the number

sample, we re-estimate specification (2). The coefficient estimate on the interaction between *Post* and *Treat* is not statistically significant.

of analysts following increased on average by 0.60 after the reporting frequency rule change. At the same time, analyst following increased even for the voluntary reporters after the reporting frequency rule change. The evidence from the correlation matrix, presented in Table 2, also confirms the findings in Table 1. Specifically, after the reporting frequency rule change, the number of analysts following increased for all firms. The Pearson correlation coefficient between the *Post* indicator (equal to 1 for the mandatory quarterly reporting period) and analyst following is 0.08 and statistically significant at conventional levels. The system-wide increase in the number of analysts following U.K. firms contemporaneous with the introduction of mandatory reporting is a noteworthy result. However, this finding gets obscured in a difference-in-differences design, as the difference in the number of analysts following mandatory switchers between the post- and pre-mandatory quarterly reporting periods is not statistically different relative to such a difference for voluntary adopters.

Further, analyst forecast dispersion, forecast error, and forecast accuracy are not statistically different between the pre- and post-frequency rule change periods for either voluntary adopters or mandatory switchers. Overall, the univariate results suggest that more frequent reporting has little effect on analyst forecast properties.

Multivariate analysis

Next, we estimate a multivariate model that controls for factors that could influence analyst following and other forecast characteristics. To do so, we estimate the following model:

$$\begin{aligned}
 \text{Analyst_Prop}_{i,t} = & \mu_1 \text{Treat}_{i,t} + \mu_2 \text{Post} * \text{Treat}_{i,t} + \mu_3 \text{Mktcap}_{i,t} + \mu_4 \text{Book_market}_{i,t} + \mu_5 \text{ADR}_{i,t} \\
 & + \mu_6 \text{Ret_Vol}_{i,t} + \mu_7 \text{Leverage}_{i,t} + \mu_8 \text{ROA}_{i,t} + \mu_9 \text{Investment}_{i,t-1} + \mu_{10} \text{D_Firm} \\
 & + \mu_{11} \text{D_Time} + v_{i,t}, \tag{3}
 \end{aligned}$$

where *Analyst_Prop* is one of the four analyst-based measures: (1) *Cov. Gain*: an indicator variable that equals 1 if the number of analysts following the stock increases and 0 otherwise; (2) *Disp*: dispersion in analyst forecast errors, defined as the standard deviation of the forecast errors; (3) *FE*: the analyst forecast error, defined as actual annual earnings minus the median analyst estimate made 90 days prior to the earnings announcement date; and (4) *AFE*: absolute forecast error. *Treat* equals 1 if the firm mandatorily switched to quarterly reporting and 0 otherwise. *Post* equals 1 for the sample years starting 2008 and 0 otherwise. The interaction between *Post* and *Treat* is our variable of interest. All other variables are defined as above.

The results of estimating Equation (3) are reported in Table 6. The analyst coverage increases in some specifications for the mandatory switchers and after the reporting frequency rule change. Specifically, columns (1), (2), and (3) tabulate the analysis for analyst coverage. The interaction term of *Post* and *Treat* is statistically significant for the specifications with no fixed effects and for the specification with firm fixed effects. However, as Column (3) shows, the interaction term becomes insignificant after we add time fixed effects to the specification. One interpretation of this pattern is that both the voluntary reporters and the switchers experienced an increase in analyst coverage after the introduction of more frequent mandatory reporting.

Turning to the other columns, we see a noteworthy finding: the fall in forecast error for mandatory switchers after the introduction of mandatory reporting in column (9), which controls for both firm fixed effects and year fixed effects. In particular, the coefficient on *Post*Treat* in column (9), when the dependent variable is FE, is -0.46 ($p < 0.1$). Hence, after we account for idiosyncratic differences in firm characteristics and overall time trends, forecast error for the switchers falls more after frequent mandatory reporting. For other analyst forecast characteristics, similar to the univariate results, the evidence from the multivariate regressions suggests that

frequent financial reporting has little effect on the analyst forecast characteristics. Specifically, columns (4) - (6) and (10) - (12) document results for alternative specifications for different analyst forecast characteristics. For these models, coefficient estimates on the interaction between *Post* and *Treat* are statistically insignificant.

As in the investment analysis, we repeat our analysis after dropping the sample from 2008-2010. Instead, we add the sample years from 2011-2013 to maintain the balance in pre- and post-reporting frequency rule change years. Untabulated results suggest that all our main inferences are qualitatively similar for this sample. In summary, in the U.K. setting, more frequent financial reporting is associated with an increase in analyst coverage as a whole and lower analyst forecast error for mandatory switchers.

5. Consequences of Stopping Mandatory Quarterly Reporting

In this section, we investigate the characteristics of firms that stopped quarterly reporting and the consequences of stopping quarterly reporting. Specifically, on Nov 7th, 2014 the FCA published a new policy discontinuing the requirement to publish an interim management statement. The revised policy states that interim management statements published on a voluntary basis will no longer be treated as regulated information. This regulation provides the second shock related to the relaxation of the mandatory requirement to report quarterly data. Following this regulation, we investigate the characteristics of the firms that stopped quarterly reporting in fiscal year 2015. Further, we investigate the corporate and capital market behavior of firms that stopped quarterly reporting relative to firms that continue to provide quarterly reports.

5.1 Determinants of the Decision to Stop Quarterly Reporting

The theoretical literature linking the decision to issue voluntary reports and past performance is mixed. On one hand, studies suggest that firms disclose good news above a certain threshold and withhold bad news below that threshold (Verrecchia 1983; Dye 1985; Jung and Kwon 1988). On the other hand, the literature also suggests that firms disclose both good and bad news when such news is material (Trueman 1997). Other factors that are likely related to the decision to continue with quarterly reporting include industry characteristics, uncertainty surrounding the firm's prospects, and firm size (Ali et al., 2014; Chen et al., 2011; Houston et al., 2010). Finally, firms that were less likely to issue guidance when the mandatory frequent reporting regime was in place are more likely to stop quarterly reporting, assuming that their reluctance to provide guidance is associated with their proclivity to disclose less information to the capital market in general.

To determine characteristics of firms that stopped quarterly reporting in fiscal year 2015, which was the first fiscal year after the end of mandatory quarterly reporting, we manually check company websites followed by the Capital IQ database for disclosures to determine the reporting frequency.⁹ Table 7, Panel A presents the descriptive statistics of the variables used in the analyses. Univariate differences suggest that small firms and non-guiders are more likely to stop quarterly reporting. Characteristics such as book-to-market, ADR, return volatility, leverage, and return on assets are not statistically different between the quarterly reporters and stoppers.

⁹Firms can stop quarterly reporting either by publicly announcing their decision or by doing so quietly. Therefore, we rely on company disclosures and regulatory news rather than press releases to identify the firms that stopped quarterly reporting.

Next, we estimate a logistic multivariate model to ascertain the characteristics of firms that stopped quarterly reporting:

$$Stop_{i,t} = \alpha + \beta_1 Mktcap_{i,t-1} + \beta_2 Book_market_{i,t-1} + \beta_3 ADR_{i,t-1} + \beta_4 Ret_Vol_{i,t-1} + \beta_5 Leverage_{i,t-1} + \beta_6 ROA_{i,t-1} + \beta_7 Guide_{i,t-1} + \beta_8 Mandatory\ Switchers + Industry\ Fixed\ Effects + \varepsilon_{i,t}, \quad (4)$$

where *Stop* equals 1 if a firm stops quarterly reporting in 2015 and 0 otherwise; *Mktcap* is the log of the market capitalization on the last trading day of the fiscal year; *Book_market* is the book value of equity divided by market capitalization; *ADR* is equal to 1 if the firm traded in the United States and 0 otherwise; *Ret_Vol* is the standard deviation of daily stock returns in the fiscal year; *Leverage* is book value of long-term debt divided by total assets; *ROA* is net income divided by total assets; *Guide* equals 1 if the firm provides managerial guidance and 0 otherwise; and *Mandatory Switchers* equals 1 if the firm mandatorily switched to quarterly reporting in 2008 and 0 otherwise. Firms are classified into one of 12 industries, according to the classification in Professor Kenneth French's website. We estimate the above specification with and without industry fixed effects. Standard errors are clustered by firm.

Panel B of Table 7 presents the multivariate results. Consistent with the evidence from univariate results, small firms and non-guiders are more likely to stop quarterly reporting. However, the coefficient estimate on firm size becomes marginally significant after we add the guidance dummy to the model. Specifically, the coefficient estimate on guidance is -0.90 and significant at the level of 1%, whereas the coefficient estimate on market capitalization is -0.14 with a p-value of 0.16. Firms' decision to guide and firm size are highly positively correlated (0.33); therefore, market capitalization loads significantly when the guidance variable is excluded. Column (4) of

Table 7 presents the results after we add industry fixed effects.¹⁰ The findings suggest that firms in the energy industry are more likely to stop quarterly reporting. This is perhaps unsurprising given that the energy industry experienced lower performance and higher operating uncertainty in 2015 due to falling oil prices.

Overall, firms that do not provide guidance when the mandatory reporting rule was in effect and firms in the energy industry are more likely to stop quarterly reporting after the FCA removed the quarterly reporting requirement.

5.2 Managerial Real Actions Before and After the Discontinuation of Quarterly Reporting

In this section, we investigate the effect of stopping quarterly reporting on firms' "real" actions. Specifically, we investigate changes in investments among the firms that stopped quarterly reporting relative to firms that continued to provide quarterly reports before and after the rule change. If more frequent reporting induces a myopic mindset among managers, then the firms that stopped quarterly reporting should invest more relative to the pre-adoption period and relative to voluntary quarterly reporters. To test this conjecture, we adopt a difference-in-differences design and estimate a multivariate model that controls for factors that could influence managerial investment decisions. To do so, we estimate the following model:

$$\begin{aligned}
 Investment_{i,t} = & \gamma_1 Stop_{i,t} + \gamma_2 Post * Stop_{i,t} + \gamma_3 Mktcap_{i,t} + \gamma_4 Book_market_{i,t} + \gamma_5 ADR_{i,t} + \gamma_6 Ret_Vol_{i,t} \\
 & + \gamma_7 Leverage_{i,t} + \gamma_8 ROA_{i,t} + \gamma_9 Cash_{i,t} + \gamma_{10} Investment_{i,t-1} + \gamma_{11} D_Firm \\
 & + \gamma_{12} D_Time + u_{i,t},
 \end{aligned}
 \tag{5}$$

¹⁰ We exclude financial services firms and chemical industry firms (financial services firms because of their peculiarities and chemical industry firms because none of these sample firms stopped quarterly reporting in 2015). The intercept on specification (4) of Table 7 is for the firms in the consumer nondurables industry.

where *Stop* equals 1 if a firm stops quarterly reporting in 2015 and 0 otherwise, and *Post* equals 1 for the sample year 2015 and 0 for the year 2014. A positive interaction term suggests evidence in support of managerial myopic behavior. All other variables are defined as above.

The results of estimating Equation (5) are reported in Table 8. The evidence using the difference-in-differences design suggests that the stoppers of quarterly reporting do not make higher investments relative to the pre-quarterly reporting period and relative to the voluntary quarterly reporters. Specifically, in none of the specifications and alternative investment definitions considered, as documented in columns (1) through (12) of Table 8, are the coefficient estimates on the interaction between *Post* and *Stop* statistically significant.

Overall, the evidence suggests that in the U.K. setting, the discontinuation of quarterly reporting is not associated with higher investments.

5.3 Analyst Coverage and Forecast Properties: Before and After Discontinuing Quarterly Reporting

In this section, we investigate the effect of firms' discontinuation of quarterly reporting on analyst coverage and on analyst forecast error characteristics. Given that small firms and non-guiders are likely to stop quarterly reporting, analyst coverage is expected to decline for the stoppers. However, even in the absence of quarterly reporting, analysts could gather information by meeting with managers. Moreover, one could argue that analysts are attracted to settings where they can add value, and hence analyst following could even increase after the FCA rescinded mandatory quarterly reporting (Barth et al. 2001). Hence, ex ante, it is not clear whether the discontinuation of quarterly reporting should have any effect on analyst coverage or on analyst forecast characteristics. To test the effect of halting quarterly reporting on analyst coverage and forecast properties, we adopt a difference-in-differences design and estimate the following multivariate model:

$$\begin{aligned}
Analyst_Prop_{i,t} = & \mu_1 Stop_{i,t} + \mu_2 Post*Stop_{i,t} + \mu_3 Mktcap_{i,t} + \mu_4 Book_market_{i,t} + \mu_5 ADR_{i,t} \\
& + \mu_6 Ret_Vol_{i,t} + \mu_7 Leverage_{i,t} + \mu_8 ROA_{i,t} + \mu_9 Investment_{i,t-1} + \mu_{10} D_Firm \\
& + \mu_{11} D_Time + v_{i,t}, \tag{6}
\end{aligned}$$

with all variables defined as above. The results of estimating Equation (6) are reported in Table 9.

The evidence using the difference-in-differences design suggests that the stoppers of quarterly reporting experience a loss of analyst coverage. Specifically, as tabulated in columns (1) through (3) of Table 9, the coefficient estimate on the interaction between *Post* and *Stop* is statistically significant at a level of 5%. However, the discontinuation of quarterly reporting has little effect on other analyst forecast characteristics. Specifically, as reported in columns (4) through (12) of Table 9, coefficient estimates on the interaction between *Post* and *Treat* are statistically insignificant for forecast dispersion, forecast error, and absolute forecast error.

Overall, the evidence suggests that in the U.K. setting, the halting of quarterly reporting results in loss of analyst coverage but has little effect on analyst forecast characteristics.

6. Conclusions and Interpretation of the Findings

The institutional environment of the United Kingdom needs to be taken into account when interpreting the empirical findings of this paper. Our first major finding is that the number of companies that announce quarterly reports with quantitative information declined after the adoption of mandatory quarterly reporting. In contrast, the number of firms that announce quarterly reports with qualitative information increased after the introduction of mandatory reporting. Second, managerial guidance increased substantially after mandatory quarterly reporting was adopted. These findings are likely attributable to (i) the FCA's minimal prescriptive guidance on what constitutes legitimate quarterly reports and the endorsement of qualitative reporting with the intention of letting the market evolve its own equilibrium; and (ii) the possibility

that voluntary quantitative reporters before the regulation viewed the regulator's endorsement of qualitative reporting as a signal that they could switch to the less restrictive qualitative regime.

Third, and perhaps most importantly, the initiation of mandatory quarterly reporting has virtually no effect on investment decisions, as proxied by capital expenditure; levels of plant, property, and equipment; R&D; and intangible assets, in the U.K. setting. These results raise doubts about whether a shift from quarterly to semi-annual reporting is likely to cause a substantial decrease in myopic corporate behavior and a substantial increase in long-term corporate decision making.

Fourth, the initiation of mandatory quarterly reporting increased analyst coverage for U.K. firms as a whole and is associated with lower analyst forecast error for mandatory switchers. That is, analysts' ability to forecast future earnings appears to have improved after mandatory frequent reporting.

Finally, the discontinuation of quarterly reporting by certain firms from 2015 onwards is associated with a decline in analyst coverage, though forecasting errors by analysts for such firms did not change. Most important, we found no significant effect on the level of investment by the U.K. firms shifting from quarterly to semiannual reporting from 2015 onwards. Again, these findings raise questions about whether such a shift is an effective strategy for decreasing myopic corporate behavior and increasing long-term corporate investments.

We are in the process of organizing one-on-one interviews with U.K. CFOs and analysts to obtain more nuanced and textured reports of the impact of this major change in the U.K. reporting environment. In future drafts, we hope to supplement our findings with insights from these interviews.

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Table 1: Descriptive statistics

	Control Firms: Voluntary Adopters			Treatment Firms: Mandatory Switchers			<i>Diff_{Treatment} -Diff_{Control}</i>
	Before	After	Diff	Before	After	Diff	
# Obs	598	569		1387	1525		
Quant	0.44	0.20	-0.24	0.00	0.04	0.04	0.28
Guide	0.31	0.41	0.10	0.29	0.37	0.09	-0.02
CAPEX/Assets	0.07	0.05	-0.02	0.06	0.05	-0.01	0.01
PPE_Net/Assets	0.31	0.26	-0.05	0.30	0.26	-0.04	0.01
Intan/Assets	0.34	0.35	0.01	0.32	0.29	-0.03	-0.04
R&D/Assets	0.08	0.08	-0.01	0.06	0.06	0.00	0.00
ADR	0.11	0.10	-0.01	0.04	0.03	-0.01	0.00
MarketCap	18.92	18.71	-0.22	18.78	18.25	-0.53	-0.31
B/M	0.63	1.43	0.80	0.63	1.45	0.81	0.02
Leverage	0.21	0.22	0.01	0.22	0.22	0.00	-0.01
Ret_Vol	0.19	0.16	-0.03	0.13	0.15	0.01	0.04
ROA	0.04	0.03	-0.01	0.04	0.02	-0.02	-0.01
Cash/Assets	0.13	0.13	0.00	0.11	0.11	0.00	-0.01
<i>Analyst Sample</i>							
Analyst Following	3.77	4.78	1.00	2.79	3.39	0.60	-0.40
Forecast Dispersion	1.94	2.15	0.21	2.24	1.90	-0.35	-0.55
Forecast Error	0.74	-0.12	-0.86	0.14	0.02	-0.12	0.74
Forecast Accuracy	1.86	1.04	-0.81	0.90	1.10	0.20	1.01

This table presents descriptive statistics of key variables separately for the periods *before* the start of mandatory quarterly reporting (pre-2008) and *after* the start of mandatory quarterly reporting (post-2008) and for voluntary adopters and mandatory switchers. Firms that are either quarterly quantitative or qualitative reporters prior to 2008 are voluntarily reporting at the quarterly frequency and are classified as the control sample. The rest of the firms mandatorily switched to quarterly reporting (issuing either quantitative or qualitative disclosures) starting in 2008 and are classified as treatment firms. This table also reports univariate difference-in-differences. The *Diff* column compares average variables *after* and *before* the start of mandatory quarterly reporting. The *Diff_{Treatment} - Diff_{Control}* column reports the average difference-in-differences between mandatory switchers and voluntary adopters. Differences significant at the 10% level or better are highlighted in bold.

Quant equals 1 if the firm reports quarterly sales and earnings figures, and 0 otherwise; *Guide* equals 1 if the firm provides managerial guidance and 0 otherwise; *Capex* is capital expenditures scaled by beginning of the year total assets; *PPE_net* is net plant, property, and equipment scaled by beginning of the year total assets; *R&D* is research and development expenses scaled by beginning of the year total assets; *InTan* is intangible assets scaled by beginning of the year total assets.

ADR is equal to 1 if the firm traded in the United States and 0 otherwise; *Mktcap* is the log of the market capitalization on the last trading day of the fiscal year; *Book_market* is book value of equity divided by market capitalization; *Leverage* is book value of long-term debt divided by total assets; *Ret_Vol* is the standard deviation of daily stock returns in the fiscal year; *ROA* is net income divided by total assets; *Cash* is cash, cash equivalents and short-term investments scaled by beginning of the year total assets.

Analyst Following is the number of analysts following the stock; *Forecast Dispersion* is dispersion in analyst forecast errors, defined as the standard deviation of the forecast errors; *Forecast Error* is the analyst forecast error, defined as actual annual earnings minus the median analyst estimate made 90 days prior to the earnings announcement date; *Forecast Accuracy* is absolute forecast error.

Table 2: Correlation Matrix

	Post	Quant	Guide	Capx	Net_PPE	InTan	R&D	#Ana	Disp	FE	AFE	ADR
Post	1	-0.07	0.10	-0.06	-0.06	-0.01	-0.03	0.08	-0.01	-0.03	-0.01	-0.02
Quant	-0.07	1	0.00	0.08	0.06	0.02	0.07	0.09	0.01	0.03	0.09	0.22
Guide	0.10	0.00	1	-0.07	-0.08	0.02	-0.01	0.26	-0.02	0.01	-0.05	0.11
Capx	-0.10	0.05	-0.02	1	0.59	0.07	-0.06	0.03	0.11	0.16	0.22	0.00
Net_PPE	-0.05	0.04	-0.05	0.70	1	0.22	-0.24	0.13	0.05	-0.02	-0.03	0.05
InTan	0.04	-0.02	0.09	-0.20	-0.37	1	0.02	-0.01	-0.03	0.00	0.02	0.01
R&D	-0.06	0.06	0.02	-0.16	-0.32	0.02	1	-0.14	-0.03	0.09	0.27	-0.02
#Ana	0.03	0.06	0.26	0.14	0.16	0.03	-0.22	1	0.07	0.00	-0.10	0.42
Disp	-0.03	-0.01	0.05	-0.01	0.07	-0.05	-0.03	0.23	1	-0.02	0.14	0.02
FE	-0.02	-0.03	0.02	-0.01	0.01	-0.08	0.05	-0.03	0.03	1	0.62	-0.01
AFE	-0.05	-0.01	-0.11	0.00	-0.09	-0.04	0.31	-0.30	0.31	0.23	1	-0.05
ADR	-0.02	0.22	0.11	0.06	0.08	0.03	-0.09	0.32	0.09	-0.03	-0.16	1

This table presents Pearson (above the diagonal) and Spearman (below the diagonal) correlations among the key variables of interest. The sample and variable definitions are described in Table 1. Correlations significant at the 10% level or better are highlighted in bold.

Table 3: Disclosure Patterns – Univariates: Before and After Mandatory Quarterly Reporting

Panel A: Full Sample

Year	Control Firms	Treatment Firms	Interim Qualitative	Interim Quantitative	No Guidance	Guide
<i>Before</i>						
2005	155	349	73	82	362	142
2006	219	525	121	98	534	210
2007	224	513	143	81	505	232
<i>After</i>						
2008	203	515	643	75	506	212
2009	193	514	657	50	447	260
2010	173	496	614	55	334	335

Panel B: Control Sample (Voluntary Adopters)

Year	Control Firms	Interim Qualitative	Interim Quantitative	No Guidance	Guide
<i>Before</i>					
2005	155	73	82	109	46
2006	219	121	98	152	67
2007	224	143	81	151	73
<i>After</i>					
2008	203	153	50	135	68
2009	193	162	31	117	76
2010	173	140	33	81	92

Panel C: Treatment Sample (Mandatory Switchers)

Year	Treatment Firms	Interim Qualitative	Interim Quantitative	No Guidance	Guide
<i>Before</i>					
2005	349	.	.	253	96
2006	525	.	.	382	143
2007	513	.	.	354	159
<i>After</i>					
2008	515	490	25	371	144
2009	514	495	19	330	184
2010	496	474	22	253	243

This table presents disclosure patterns for the full sample, the control sample, and the treatment sample for the periods *before* the start of mandatory quarterly reporting (pre-2008) and *after* the start of mandatory quarterly reporting (post-2008). Panel A (B, C) presents the results for the full sample (control sample, treatment sample). Firms are classified as “quarterly quantitative reporting firms” if they disclose sales and earnings information at the quarterly frequency and are classified as “quarterly qualitative reporting firms” if they disclose qualitative quarterly information with or without sales or earnings information. Firms that are either quarterly quantitative or qualitative reporters prior to 2008 are voluntarily reporting at the quarterly frequency and are classified as the control sample. The rest of the firms mandatorily switched to quarterly reporting (issuing either quantitative or qualitative disclosures) starting in 2008 and are classified as treatment firms. *Guide* equals 1 if the firm provides managerial guidance and 0 otherwise.

Table 4: Disclosure Patterns – Difference between Post- and Pre- Mandatory Quarterly Reporting

Panel A: Full Sample

	(1)	(2)	(3)	(4)	(5)	(6)
	Quant	Quant	Quant	Guide	Guide	Guide
Post	-0.50*** (0.00)	-1.08*** (0.00)	-1.74*** (0.00)	0.51*** (0.00)	0.83*** (0.00)	1.92*** (0.00)
Mktcap	0.04 (0.46)	-0.20 (0.28)	-0.11 (0.58)	0.30*** (0.00)	0.21** (0.02)	0.03 (0.79)
Book_market	0.04 (0.25)	-0.11 (0.19)	-0.13 (0.13)	0.08*** (0.00)	0.04 (0.43)	0.07 (0.14)
ADR	1.89*** (0.00)	-12.54*** (0.00)	-13.11*** (0.00)	-0.16 (0.48)	1.05 (0.51)	1.29 (0.45)
Ret_vol	-0.03 (0.86)	-0.10 (0.77)	-0.20 (0.58)	-0.01 (0.90)	0.42** (0.01)	0.37** (0.03)
Leverage	-0.69 (0.22)	-0.13 (0.89)	-0.01 (0.99)	0.31 (0.25)	0.41 (0.56)	0.69 (0.36)
ROA	-1.51*** (0.00)	-4.89*** (0.00)	-5.45*** (0.00)	-0.11 (0.77)	0.13 (0.87)	0.58 (0.48)
Constant	-2.59*** (0.00)	4.20 (0.22)	3.13 (0.38)	-6.78*** (0.00)	-22.13*** (0.00)	-16.96*** (0.00)
#Obs	4,079	1,016	1,016	4,079	2,580	2,580
Firm FE	NO	YES	YES	NO	YES	YES
Year FE	NO	NO	YES	NO	NO	YES

Panel B: Control Sample (Voluntary Adopters)

	(1)	(2)	(3)	(4)	(5)	(6)
	Quant	Quant	Quant	Guide	Guide	Guide
Post	-1.30*** (0.00)	-2.34*** (0.00)	-3.36*** (0.00)	0.55*** (0.00)	0.73*** (0.00)	1.59*** (0.00)
Mktcap	0.02 (0.76)	-0.04 (0.85)	0.10 (0.72)	0.35*** (0.00)	0.08 (0.64)	-0.10 (0.63)
Book_market	0.07 (0.12)	0.03 (0.75)	0.02 (0.85)	0.04 (0.29)	-0.07 (0.54)	-0.06 (0.64)
ADR	2.09*** (0.00)	10.30*** (0.00)	10.24*** (0.00)	0.03 (0.93)	14.21*** (0.00)	12.89*** (0.00)
Ret_vol	-0.01 (0.95)	-0.16 (0.65)	-0.24 (0.58)	0.04 (0.81)	0.45 (0.11)	0.43 (0.13)
Leverage	-0.34 (0.58)	-1.00 (0.45)	-1.10 (0.46)	0.08 (0.86)	0.32 (0.81)	0.64 (0.65)
ROA	-2.20*** (0.00)	-2.14 (0.18)	-2.51 (0.14)	-0.40 (0.55)	0.57 (0.69)	0.66 (0.66)
Constant	-0.70 (0.51)	4.14 (0.44)	2.09 (0.73)	-7.53*** (0.00)	-30.11*** (0.00)	-23.66*** (0.00)
#Obs	1,167	699	699	1,167	720	720
Firm FE	NO	YES	YES	NO	YES	YES
Year FE	NO	NO	YES	NO	NO	YES

This table presents multivariate regression results of disclosure patterns for the periods *before* the start of mandatory quarterly reporting (pre-2008) and *after* the start of mandatory quarterly reporting (post-2008). Panel A (B) presents the results for the full sample (control sample). This table presents the consequences of quarterly reporting on disclosure patterns using multivariate regressions. *Post* equals 1 for all of the years from 2008 onward and 0 otherwise. *Quant* equals 1 if the firm reports quarterly sales and earnings figures, and 0 otherwise; *Guide* equals 1 if the firm provides managerial guidance and 0 otherwise. All other variables are defined in Table 1. Standard errors are clustered by firm. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

Table 5: Investment Patterns – Multivariate Tests: Difference in Differences between Treatment and Control Sample

	(1) Capex	(2) Capex	(3) Capex	(4) NetPPE	(5) NetPPE	(6) NetPPE	(7) R&D	(8) R&D	(9) R&D	(10) InTan	(11) InTan	(12) InTan
Treat	-0.00 (0.72)	-0.01 (0.23)	-0.02* (0.06)	0.00 (0.73)	-0.03 (0.26)	-0.05* (0.10)	0.00 (0.72)	0.00 (0.89)	-0.00 (0.80)	-0.02 (0.40)	-0.13 (0.31)	-0.14 (0.26)
Post*Treat	-0.00 (0.73)	-0.01*** (0.00)	0.01 (0.15)	-0.01 (0.50)	-0.03*** (0.00)	0.02 (0.47)	-0.00 (0.39)	0.00 (0.45)	0.01 (0.43)	-0.01 (0.39)	-0.01 (0.54)	-0.01 (0.83)
Mktcap	0.00*** (0.00)	0.00 (0.12)	0.00* (0.08)	0.00*** (0.00)	0.00 (0.18)	0.00 (0.18)	0.00 (0.11)	0.00 (0.37)	0.00 (0.28)	0.01*** (0.00)	0.02 (0.10)	0.03* (0.08)
Book_market	0.00 (0.99)	0.00 (0.14)	0.00 (0.59)	0.00 (0.21)	0.00* (0.10)	0.00 (0.30)	-0.00 (0.34)	0.00 (0.56)	0.00 (0.61)	0.01 (0.20)	0.01 (0.37)	0.01 (0.47)
ADR	-0.00 (0.43)	-0.03* (0.05)	-0.04*** (0.01)	-0.00 (0.96)	-0.02 (0.57)	-0.04 (0.29)	0.00 (0.35)	-0.02 (0.45)	-0.03 (0.39)	0.04 (0.61)	0.12 (0.63)	0.08 (0.75)
Ret_vol	0.00 (0.11)	-0.00 (0.30)	-0.00 (0.59)	0.02* (0.08)	-0.01 (0.27)	-0.01 (0.44)	-0.00 (0.43)	0.00 (0.91)	-0.00 (0.81)	-0.03** (0.02)	-0.00 (0.78)	-0.01 (0.65)
Leverage	0.01 (0.19)	0.03 (0.19)	0.03 (0.12)	0.20*** (0.00)	0.20** (0.02)	0.21** (0.02)	-0.01 (0.56)	-0.03 (0.40)	-0.03 (0.39)	0.03 (0.65)	0.21** (0.02)	0.22** (0.01)
ROA	0.03** (0.02)	0.06*** (0.01)	0.05** (0.03)	0.13*** (0.01)	0.28*** (0.01)	0.25*** (0.01)	-0.06*** (0.00)	-0.00 (0.97)	-0.01 (0.93)	-0.03 (0.84)	0.27 (0.24)	0.24 (0.31)
Cash	0.04*** (0.01)	0.04 (0.20)	0.04 (0.18)	-0.02 (0.62)	0.02 (0.68)	0.03 (0.55)	0.05*** (0.00)	0.04 (0.22)	0.04 (0.23)	0.11 (0.53)	0.34 (0.33)	0.32 (0.33)
Capex_Lag	0.45*** (0.00)	0.03 (0.65)	0.02 (0.78)									
NetPPE_Lag				0.52*** (0.00)	-0.09 (0.18)	-0.09 (0.16)						
R&D_Lag							0.87*** (0.00)	0.11 (0.24)	0.11 (0.24)			
InTan_Lag										0.13* (0.07)	-0.02 (0.17)	-0.02 (0.15)
#Obs	3,215	3,215	3,215	3,237	3,237	3,237	1,075	1,075	1,075	3,218	3,218	3,218
Adj R ²	0.53	0.66	0.67	0.69	0.85	0.85	0.87	0.92	0.92	0.35	0.58	0.58
Firm FE	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES

This table presents multivariate regression results of investment patterns for the periods *before* and *after* the start of mandatory quarterly reporting. *Treat* equals 1 if the firm mandatorily switched to quarterly reporting and 0 otherwise. *Post* equals 1 for the sample years 2008-2010 and 0 for the years 2005-2007. *Capex* is capital expenditures scaled by beginning of the year total assets; *PPE_net* is net plant, property, and equipment scaled by beginning of the year total assets; *R&D* is research and development expenses scaled by beginning of the year total assets; *InTan* is intangible assets scaled by beginning of the year total assets. All other variables are defined in Table 1. Standard errors are clustered by firm. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

Table 6: Analyst Properties – Multivariate Tests: Difference in Differences between Treatment and Control Sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Cov. Gain	Cov. Gain	Cov. Gain	Disp	Disp	Disp	FE	FE	FE	AFE	AFE	AFE
Treat	-0.08*** (0.00)	0.36* (0.06)	0.30 (0.12)	0.76 (0.36)	4.58* (0.10)	3.71 (0.12)	0.21 (0.17)	0.56 (0.50)	0.56 (0.51)	-0.02 (0.91)	1.35 (0.34)	1.25 (0.34)
Post*Treat	0.07*** (0.01)	0.07* (0.05)	0.04 (0.50)	-0.87 (0.24)	-0.31 (0.60)	-1.22 (0.39)	0.03 (0.81)	-0.14 (0.42)	-0.46* (0.10)	0.01 (0.95)	-0.14 (0.41)	-0.00 (0.99)
Mktcap	0.02*** (0.00)	-0.01 (0.72)	-0.00 (0.96)	0.10*** (0.01)	-0.35 (0.25)	-0.30 (0.34)	-0.02 (0.23)	-0.01 (0.90)	0.00 (0.96)	0.09*** (0.00)	-0.10 (0.15)	-0.10 (0.16)
Book_market	0.01 (0.21)	0.02* (0.07)	0.01 (0.12)	-0.01 (0.85)	-0.14 (0.36)	-0.20 (0.20)	0.04 (0.30)	0.11 (0.22)	0.11 (0.25)	-0.02 (0.66)	-0.09 (0.30)	-0.10 (0.26)
ADR	-0.01 (0.88)	-0.02 (0.95)	-0.06 (0.89)	0.19 (0.72)	0.95 (0.73)	1.27 (0.70)	0.13 (0.22)	-0.26 (0.78)	-0.32 (0.72)	-0.48*** (0.00)	0.96 (0.44)	0.81 (0.46)
Ret_vol	0.00 (0.78)	0.06 (0.17)	0.07 (0.16)	-0.14 (0.56)	-0.30 (0.46)	-0.12 (0.80)	-0.12* (0.10)	0.06 (0.56)	0.07 (0.54)	-0.09 (0.18)	-0.10 (0.33)	-0.11 (0.32)
Leverage	0.20*** (0.00)	0.38** (0.04)	0.31 (0.10)	0.14 (0.90)	3.79 (0.49)	3.15 (0.55)	0.03 (0.95)	-0.54 (0.57)	-0.75 (0.42)	-1.77*** (0.00)	0.72 (0.35)	0.75 (0.33)
ROA	0.47*** (0.00)	0.55*** (0.01)	0.58*** (0.00)	-1.24 (0.86)	17.75 (0.53)	18.08 (0.54)	4.01** (0.02)	3.74 (0.34)	4.01 (0.32)	-5.35*** (0.00)	-3.19 (0.22)	-3.38 (0.21)
#Obs	2,050	2,050	2,050	1,156	1,156	1,156	1,547	1,547	1,547	1,547	1,547	1,547
Adj R ²	0.42	0.34	0.34	0.07	0.09	0.09	0.02	0.28	0.28	0.15	0.55	0.55
Firm FE	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES

This table presents multivariate results of the analyst coverage and forecast properties for the periods *before* and *after* the start of mandatory quarterly reporting. *Treat* equals 1 if the firm mandatorily switched to quarterly reporting and 0 otherwise. *Post* equals 1 for the sample years 2008-2010 and

0 for the years 2005-2007. *Cov. Gain* equals 1 if the number of analysts following the stock increases and 0 otherwise; *Disp* is dispersion in analyst forecast errors, defined as the standard deviation of the forecast errors; *FE* is the analyst forecast error, defined as actual annual earnings minus the median analyst estimate made 90 days prior to the earnings announcement date; *AFE* is absolute forecast error. All other variables are defined in Table 1. Standard errors are clustered by firm. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

Table 7: Discontinuation of Mandatory Quarterly Reporting: Descriptive Statistics and Determinants

Panel A: Descriptive Statistics

	Quarterly Reporters	Stoppers	<i>Diff</i>
# Obs	471	45	
MarketCap _{t-1}	19.71	18.97	-0.74
B/M _{t-1}	0.70	0.86	0.16
ADR _{t-1}	0.07	0.07	0.00
Ret_Vol _{t-1}	0.34	0.38	0.04
Leverage _{t-1}	0.22	0.24	0.02
ROA _{t-1}	0.03	0.01	-0.02
Mandatory Switchers	0.78	0.80	0.02
Guide _{t-1}	0.72	0.51	-0.21

Panel B: Determinants of Stoppers (Stop=1 if a firm stops quarterly reporting)

	Stop			
	(1)	(2)	(3)	(4)
Mktcap _{t-1}	-0.21** (0.03)	-0.21** (0.03)	-0.14 (0.16)	-0.15 (0.15)
Book_market _{t-1}	0.02 (0.88)	0.03 (0.87)	0.02 (0.91)	-0.04 (0.82)
ADR _{t-1}	0.43 (0.55)	0.44 (0.54)	0.41 (0.57)	0.58 (0.47)
Ret_vol _{t-1}	0.08 (0.54)	0.08 (0.54)	0.05 (0.67)	0.08 (0.56)
Leverage _{t-1}	1.07 (0.23)	1.05 (0.24)	1.29 (0.15)	1.05 (0.28)
ROA _{t-1}	-0.30 (0.82)	-0.30 (0.83)	-0.18 (0.89)	0.39 (0.79)
Mandatory Switchers		0.08 (0.84)	0.08 (0.84)	0.15 (0.73)
Guide _{t-1}			-0.90*** (0.01)	-0.89** (0.01)
Durable				0.70 (0.58)
Manufacturing				0.70 (0.34)
Energy				1.54* (0.07)
Business Equipment				0.56 (0.44)
Telecom				-0.01 (0.99)
Utilities				1.10 (0.43)
Shops				-0.11 (0.89)
Healthcare				-0.59 (0.62)
Other				0.49 (0.47)
Constant	1.40 (0.43)	1.31 (0.48)	0.60 (0.75)	0.41 (0.85)
Obs	479	479	479	463

This table presents descriptive statistics of key variables and determinants of the decision to stop quarterly reporting. The sample covers fiscal year 2015, which is the first fiscal year after the end of mandatory quarterly reporting. Firms that stop quarterly reporting are classified as *Stoppers*, and firms that continue to report at the quarterly frequency are classified as *Quarterly reporters*. *Diff* is the univariate differences in key characteristics. Differences significant at the 10% level or better are highlighted in bold.

Panel A presents the descriptive statistics of key variables of interest. *Mktcap* is the log of the market capitalization on the last trading day of the fiscal year; *Book_market* is book value of equity divided by market capitalization; *ADR* is equal to 1 if the firm traded in the United States and 0 otherwise; *Ret_Vol* is the standard deviation of daily stock returns in the fiscal year; *Leverage* is book value of long-term debt divided by total assets; *ROA* is net income divided by total assets; *Guide* equals 1 if the firm provides managerial guidance and 0 otherwise; *Mandatory Switchers* equals 1 if the firm mandatorily switched to quarterly reporting in 2008.

Panel B presents the determinants of the decision to stop quarterly reporting. *Stop* equals 1 if a firm stops quarterly reporting in 2015 and 0 otherwise. The coefficient estimates on the determinants are estimated using the logistic regression. Firms are classified into one of 12 industries according to the classification in Professor Kenneth French's website. Standard errors are clustered by firm. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

Table 8: Investment Patterns: Difference in Differences between Treatment (Stoppers) and Control Sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Capex	Capex	Capex	NetPPE	NetPPE	NetPPE	R&D	R&D	R&D	InTan	InTan	InTan
Stop	0.00 (0.91)	0.21 (0.17)	-0.11 (0.44)	0.01 (0.57)	0.33 (0.51)	-0.73 (0.13)	0.00 (0.83)	-0.09 (0.65)	0.52 (0.19)	-0.03 (0.20)	0.21 (0.10)	-5.08* (0.05)
Post*Stop	0.00 (0.58)	0.00 (0.74)	0.01 (0.56)	0.01 (0.79)	0.01 (0.66)	0.02 (0.51)	0.00 (0.77)	0.01 (0.38)	0.01 (0.48)	0.16 (0.17)	0.11 (0.40)	0.11 (0.45)
Mktcap	0.00* (0.05)	0.00 (0.66)	0.00 (0.51)	0.00 (0.65)	0.04* (0.09)	0.04* (0.08)	0.00** (0.04)	-0.02 (0.23)	-0.02 (0.22)	0.00 (0.21)	0.30*** (0.01)	0.30** (0.01)
Book_market	-0.00 (0.93)	0.01 (0.39)	0.01 (0.29)	0.00 (0.50)	0.02 (0.39)	0.02 (0.32)	-0.01** (0.05)	-0.01 (0.68)	-0.01 (0.65)	-0.02* (0.06)	0.23** (0.03)	0.23** (0.04)
ADR	-0.00 (0.12)	-0.07 (0.68)	-0.11 (0.51)	-0.00 (0.71)	-0.78 (0.15)	-0.88 (0.12)	0.03 (0.13)	0.67 (0.25)	0.70 (0.24)	-0.00 (0.86)	-7.28** (0.02)	-7.23** (0.02)
Ret_vol	0.00 (0.24)	-0.00 (0.78)	-0.00 (0.89)	-0.00 (0.86)	-0.01 (0.53)	-0.01 (0.62)	0.00 (0.84)	-0.03 (0.43)	-0.03 (0.42)	-0.01 (0.21)	-0.03 (0.37)	-0.03 (0.34)
Leverage	0.00 (0.58)	0.00 (0.98)	0.00 (0.90)	0.04* (0.10)	0.11 (0.16)	0.12 (0.14)	-0.06** (0.04)	0.02 (0.84)	0.02 (0.87)	0.08 (0.18)	1.54* (0.09)	1.54* (0.10)
ROA	-0.01 (0.50)	0.06 (0.25)	0.05 (0.26)	0.04 (0.26)	0.03 (0.83)	0.02 (0.86)	-0.18** (0.02)	-0.12* (0.08)	-0.12* (0.09)	0.02 (0.92)	0.04 (0.90)	0.05 (0.89)
Cash	0.02 (0.38)	0.10 (0.39)	0.10 (0.38)	-0.00 (0.94)	-0.11 (0.19)	-0.10 (0.21)	0.11 (0.11)	0.23 (0.12)	0.23 (0.12)	0.17* (0.05)	-0.04 (0.89)	-0.04 (0.89)
Capex_Lag	0.73*** (0.00)	-0.11 (0.36)	-0.11 (0.36)									
NetPPE_Lag				0.93*** (0.00)	-0.57*** (0.00)	-0.57*** (0.00)						

R&D_Lag							0.65*** (0.00)	-0.55 (0.23)	-0.56 (0.23)			
InTan_Lag										0.79*** (0.00)	-0.60*** (0.00)	-0.60*** (0.00)
#Obs	966	966	966	968	968	968	440	440	440	965	965	965
Adj R ²	0.74	0.90	0.90	0.92	0.98	0.98	0.71	0.89	0.89	0.64	0.80	0.80
Firm FE	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES

This table presents multivariate regression results of investment patterns for the periods *before* and *after* the end of mandatory quarterly reporting. *Stop* equals 1 if a firm stops quarterly reporting in 2015 and 0 otherwise. *Post* equals 1 for the sample year 2015 and 0 for the year 2014. *Capex* is capital expenditures scaled by beginning of the year total assets; *PPE_net* is net plant, property, and equipment scaled by beginning of the year total assets; *R&D* is research and development expenses scaled by beginning of the year total assets; *InTan* is intangible assets scaled by beginning of the year total assets. All other variables are defined in Table 1. Standard errors are clustered by firm. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

Table 9: Analyst Properties: Difference in Differences between Treatment (Stoppers) and Control Sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Cov. Loss	Cov. Loss	Cov. Loss	Disp	Disp	Disp	FE	FE	FE	AFE	AFE	AFE
Stop	-0.12 (0.22)	-1.17*** (0.00)	1.34 (0.76)	-0.40 (0.38)	5.45 (0.55)	0.28 (0.99)	0.15 (0.56)	1.99 (0.16)	-2.82 (0.79)	-0.21 (0.43)	0.05 (0.97)	-4.47 (0.59)
Post*Stop	0.35** (0.02)	0.55** (0.02)	0.53** (0.03)	-0.63 (0.12)	-0.71 (0.46)	-0.94 (0.43)	0.03 (0.93)	0.66 (0.41)	0.56 (0.42)	-0.14 (0.69)	-0.44 (0.57)	-0.25 (0.70)
Mktcap	0.03*** (0.00)	-0.01 (0.98)	-0.02 (0.93)	0.07*** (0.00)	-0.28 (0.57)	-0.34 (0.49)	-0.09 (0.15)	-0.12 (0.85)	-0.17 (0.81)	0.15** (0.02)	0.45 (0.43)	0.53 (0.40)
Book_market	0.04** (0.05)	-0.01 (0.97)	-0.03 (0.90)	-0.63*** (0.00)	0.02 (0.98)	-0.17 (0.72)	0.94* (0.08)	1.18 (0.31)	1.10 (0.29)	-0.96* (0.06)	-1.01 (0.36)	-0.86 (0.37)
ADR	-0.12** (0.04)	1.49 (0.77)	1.84 (0.72)	1.19 (0.15)	26.64 (0.13)	28.79* (0.08)	-0.16 (0.59)	1.68 (0.91)	3.13 (0.85)	-0.19 (0.52)	-9.42 (0.44)	-12.05 (0.40)
Ret_vol	-0.01 (0.69)	-0.07 (0.50)	-0.08 (0.47)	0.15 (0.42)	1.14 (0.45)	1.04 (0.47)	-0.18 (0.14)	0.11 (0.68)	0.06 (0.85)	0.13 (0.29)	0.19 (0.48)	0.28 (0.41)
Leverage	-0.21** (0.04)	-0.81 (0.40)	-0.84 (0.38)	-0.18 (0.86)	4.81 (0.66)	4.35 (0.68)	2.55 (0.18)	-3.39 (0.29)	-3.65 (0.28)	-3.69** (0.04)	-0.03 (0.99)	0.46 (0.88)
ROA	-0.62*** (0.00)	-1.52 (0.13)	-1.48 (0.14)	0.34 (0.85)	5.33 (0.51)	5.49 (0.51)	14.96* (0.08)	14.71 (0.44)	14.68 (0.43)	-16.13** (0.05)	-13.53 (0.49)	-13.46 (0.49)
#Obs	666	666	666	422	422	422	563	563	563	563	563	563
Adj R ²	0.49	0.33	0.33	0.17	0.32	0.32	0.15	0.77	0.77	0.21	0.78	0.78
Firm FE	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES

This table presents multivariate results of the analyst coverage loss and forecast properties for the periods *before* and *after* the end of mandatory quarterly reporting. *Stop* equals 1 if a firm stops quarterly reporting in 2015 and 0 otherwise. *Post* equals 1 for the sample year 2015 and 0 for the year 2014. *Cov. Loss* equals 1 if the number of analysts following the stock decreases and 0 otherwise; *Disp* is dispersion in analyst forecast errors, defined as the standard deviation of the forecast errors; *FE* is the analyst forecast error, defined as actual annual earnings minus the median analyst estimate made 90 days prior to the earnings announcement date; *AFE* is absolute forecast error. All other variables are defined in Table 1. Standard errors are clustered by firm. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.