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ABSTRACT

A large body of research is devoted to understanding the causes and consequences of adopting international accounting standards. Thus far, researchers' attention has focused almost exclusively on the informational benefits of the adoption. We extend the existing literature by offering a different, stewardship perspective. We hypothesize that the voluntary adoption of international accounting standards is associated with changes in the firm internal performance evaluation process; in particular, it is associated with increases in the sensitivities of CEO turnover and employee layoffs to accounting earnings. Our results are consistent with these predictions.

I. INTRODUCTION

There has been a significant movement around the world towards an internationally-recognized set of accounting standards in recent decades.[1] A large body of academic research is devoted to this phenomenon, examining both the motivation for adopting international accounting standards and its economic consequences (e.g., Ashbaugh 2001; Leuz and Verrecchia 2000; Ashbaugh and Pincus 2001; Lang et al. 2003; Bradshaw et al. 2004; Barth et al. 2008; and Daske et al. 2007a). The researchers' attention, however, has focused almost exclusively on the *informational* benefits of the adoption; whereas it has long been recognized that *stewardship* demands also substantially shape firms' accounting choices (e.g., Watts and Zimmerman 1986; Ball 2001; and O'Connell 2007). We broaden the scope of the current literature by investigating the adoption of international accounting standards from a stewardship perspective in terms of firm internal performance evaluations. The case of Daimler-Benz AG offers an illustrative anecdote. Daimler-Benz summarized in its 1996 financial statements that its U.S. GAAP adoption (after U.S. cross-listing in 1993) not only affected its "external reporting," but the same U.S. GAAP numbers were also used for "internal controlling" purposes to increase the transparency and efficiency of "internal reporting" and improve the performance measurement of the company and its business units (see Ball 2001, 2004, for detailed discussion and commentary on this case).

We analyze whether the voluntary adoption of international accounting standards (i.e., IFRS or U.S. GAAP) by non-U.S. firms is associated with changes in the role accounting earnings play in firms' internal performance evaluations. Principal-agent theory suggests that the weight a performance measure receives in optimal compensation contracts increases with its informativeness

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[1]Both IFRS (International Financial Reporting Standards) and U.S. GAAP are commonly perceived as "internationally-recognized" accounting standards, although IFRS have gained greater momentum recently. According to the IASB, close to 100 jurisdictions have now mandated IFRS financial reporting, including the adoption of IFRS by all European Union listed firms since 2005 (http://www.iasplus.com/country/useias.htm). In addition, many firms adopted IFRS/U.S. GAAP on a voluntary basis prior to their country's mandatory adoption. The International Accounting Standards (IAS) were renamed to IFRS in 2001; we use IFRS and IAS interchangeably.

about the agent's actions (Holmstrom 1979; Lambert and Larcker 1987; and Bushman and Smith 2001). If IFRS/U.S. GAAP earnings are more informative about firm performance than local GAAP earnings, we expect the switch to IFRS/U.S. GAAP to be accompanied by a greater emphasis on accounting earnings in the internal performance evaluation process, implying higher sensitivities of CEO turnover to accounting earnings post-adoption.[2] Furthermore, if the more informative IFRS/U.S. GAAP earnings better enable firms to identify underperforming divisions, we expect employee layoffs to also be more sensitive to accounting earnings post-adoption.

Prior evidence indicates that voluntary IFRS/U.S. GAAP adoption comes with significant changes in firms' financial reporting properties, with earnings being more informative, less managed, and exhibiting more timely loss recognition (e.g., Barth et al. 2008; and Lang et al. 2003). Voluntary IFRS/U.S. GAAP adoption is also associated with reduced cost-of-capital (Leuz and Verrecchia 2000) and lower analyst earnings forecast errors (Ashbaugh and Pincus 2001), suggesting that IFRS/U.S. GAAP earnings are more informative, less likely to be obfuscated by earnings management, and thus can be a better reflector of managerial effort and firm underlying performance than local GAAP earnings. It has also been recognized that accounting conservatism contributes to optimal compensation contracting and firm governance (e.g., Ball et al. 2000; Ball 2001; Watts 2003a; and Leone et al. 2006). The attractiveness of IFRS/U.S. GAAP earnings for internal performance evaluation is further enhanced by their greater conservatism through more timely loss recognition than local GAAP earnings.

Our sample consists of firms from Continental Europe that voluntarily adopted IFRS or U.S. GAAP from 1988 to 2004.[3] Consistent with our predictions, we find that CEO turnover and

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[2] Due to the lack of data availability on top executive compensation for international firms, we focus on CEO turnover instead.

[3] Continental Europe accounts for a substantial portion of the voluntary IFRS/U.S. GAAP adoptions during our sample period. For example, out of the voluntary IFRS adopters around the world reported in Barth et al. (2008), about 60% come from Continental Europe (Chinese firms are the next largest group, accounting for 22% of the observations). We

employee layoffs are more sensitive to accounting earnings after IFRS/U.S. GAAP adoption. These findings support our hypothesis that accounting earnings play a greater role in firm internal performance evaluations after the adoption of international accounting standards. In addition, we investigate firms' decisions to adopt international accounting standards and proxy for the performance evaluation demand with two variables: closely held shares (Bushman and Piotroski 2006) and labor productivity. After controlling for various other factors, we find that greater performance evaluation demand (less closely held shares and lower labor productivity) are associated with a higher likelihood of IFRS/U.S. GAAP adoption.

The above evidence does not necessarily imply that the voluntary adoption of international accounting standards *causes* the changes in internal performance evaluations in terms of higher earnings performance sensitivities. Firms that voluntarily adopt IFRS/U.S. GAAP likely experience fundamental changes in their operations, financing, and corporate governance; and the adoption of international accounting standards can simply be an instrument for these profound changes.[4] Our findings suggest that the greater reporting transparency through international accounting standards likely plays a role (which may not be strictly causal, but is important nonetheless) in improving firms' internal performance evaluations. It is important to document that IFRS/U.S. GAAP adoption is associated not only with changes in firms' operating and information environment, as shown in prior studies, but also with changes in corporate governance.

We make several contributions to the literature. First, our study distinguishes from and complements the large body of academic work that focuses almost exclusively on the informational benefits of IFRS/U.S. GAAP adoption. We support the long-held notion that stewardship demands

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also focus on Continental Europe because of the contrast between the local GAAPs that permit or even encourage the creation and release of "hidden reserves," with IFRS/U.S. GAAP, which do not allow such practices (discussed in more detail later).

[4] It is also possible that an increase in the level of external monitoring (e.g., by institutional investors or regulators) may prompt a firm to simultaneously improve corporate governance (through heightened performance sensitivities) and increase corporate transparency (by adopting IFRS).

substantially shape firms' accounting choices (e.g., Watts and Zimmerman 1986; Ball 2001; Watts 2003a; and Bushman et al. 2006) and provide an application of the contracting-related perspective to the fast-growing area of international accounting research. Our findings highlight the multitude of implications from the adoption of international accounting standards and add to our understanding of the complex changes experienced by the adopting firms. Second, in light of the recent decision by the IASB/FASB to deemphasize stewardship as a standalone objective in financial reporting, O'Connell (2007) calls for renewed focus on stewardship-related research. Our study takes a step in that direction by highlighting the role of accounting information in corporate governance and internal performance evaluations.

The rest of the paper is organized as follows. We develop our hypotheses in Section II and discuss our methodology in Section III. Sections IV-VI present our main results. Robustness tests are in Section VII. Section VIII concludes.

II. HYPOTHESIS DEVELOPMENT AND LITERATURE REVIEW

We build on prior literature's evidence that accounting earnings are timelier and more conservative after voluntary IFRS/U.S. GAAP adoption and formulate our predictions regarding the sensitivities of executive turnover and employee layoffs to accounting earnings around the time of the adoption. We then discuss the likely reasons behind the changes in accounting earnings properties at the adopting firms. A review of related studies is also included in this section.

Main predictions

Both accounting earnings and stock returns are shown to affect management compensation as well as executive turnover (see Bushman and Smith 2001, for a review of the U.S. and international evidence). We argue that after the voluntary adoption of international accounting standards, accounting earnings assume a greater role in firm internal performance evaluations. In

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particular, we predict that the sensitivity of executive turnover to accounting earnings increases post-adoption. This prediction can be supported by two arguments.

First, prior research suggests that compared to local GAAP earnings, IFRS/U.S. GAAP earnings show greater timeliness and less evidence of earnings management (e.g., Barth et al. 2008; and Lang et al. 2003), suggesting that they are better reflectors of managerial effort and firm underlying performance. As Watts (2003a) points out, greater timeliness in accounting earnings makes earnings a more effective contracting tool because earnings reflect managers' actions more precisely in each accounting period and this helps avoid the undesirable incentive outcomes due to managers' limited horizons. Principal-agent theory predicts that as the informativeness of a performance measure increases, its weight in the optimal compensation contract rises as a result (Holmstrom 1979; Lambert and Larcker 1987; and Bushman and Smith 2001). This suggests that firms that have voluntarily adopted international accounting standards, which are associated with timelier and less managed earnings, likely place greater emphasis on their accounting earnings post-adoption for evaluating managers.

Second, compared to local GAAP earnings, IFRS/U.S. GAAP earnings also exhibit more conservative characteristics (e.g., Barth et al. 2008; Lang et al. 2003; and Hung and Subramanyam 2007) and can more effectively serve the purpose of compensation contracting and corporate governance. Accounting conservatism has been recognized as part of the efficient contracting technology between a firm and its various stakeholders, including managers. Watts (2003a) cites the demands from executive compensation contracting and firm governance as important drivers of accounting conservatism. This is because managers' limited tenure and limited liability make it difficult for firms to recover overpayment to managers, therefore creating the need for asymmetric verifiability and conservatively measured accounting earnings. The evidence in Leone et al. (2006) is consistent with timelier loss recognition in accounting earnings mitigating the *ex post* settling up

problem in management cash compensation. Accounting conservatism can be a particularly powerful tool in disciplining poorly performing managers because it speeds up the recognition of losses and provides the board and shareholders a reason to investigate the losses, and if necessary, to dismiss the manager (Watts 2003a). This mechanism helps stem the losses from negative present value projects, and moreover, deter managers from taking on such projects in the first place (Ball 2001). Prior findings on voluntary IFRS and U.S. GAAP adopters suggest that relative to local GAAP earnings, IFRS/U.S. GAAP earnings are subject to less smoothing and are more conservative in that they more readily reflect large losses.[5] Given the active role accounting conservatism plays in firm governance and performance evaluations, these findings suggest that firms that have voluntarily adopted international accounting standards likely place greater emphasis on their accounting earnings post-adoption for evaluating managers and disciplining poor performers. The above arguments lead to our first hypothesis:

Hypothesis 1: The sensitivity of CEO turnover to accounting earnings increases after a firm adopts IFRS/U.S. GAAP.

We next turn to the wider workforce. Since IFRS/U.S. GAAP earnings exhibit greater timeliness and more conservatism, they likely better enable firms to identify underperforming divisions and subsequently engage in the necessary restructuring activities. As Liberty and Zimmerman (1986) point out, even though accounting earnings may not enter directly into labor contracts, as in the cases of management compensation contracts or debt contracts, accounting numbers can nevertheless affect the employment outcome of the labor force. The evidence in DeAngelo and DeAngelo (1991) and D'Souza et al. (2001) supports this notion. We collectively measure the career outcomes of a firm's employees through layoffs (defined as a reduction of a firm's employee headcount of 5% or more in a particular year) and investigate its sensitivity to the

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[5] Using the methodology in Barth et al. (2008) and Lang et al. (2003), we find evidence that earnings in our sample firms are significantly more conservative (there is a greater frequency of large losses) post IFRS/U.S. GAAP adoption.

firm's accounting performance and expect employee layoffs to be more sensitive to accounting earnings post-adoption.

Hypothesis 2: The sensitivity of employee layoffs to accounting earnings increases after a firm adopts IFRS/U.S. GAAP.

What drives the changes in earnings properties after IFRS/U.S. GAAP adoption?

Voluntary adopters of the international accounting standards experience significant changes in accounting earnings properties with earnings becoming timelier, less smoothed, and more conservative after the adoption (e.g., Barth et al. 2008; Lang et al. 2003; and Hung and Subramanyam 2007). These findings, however, do not imply that the documented changes in accounting properties are *caused* by the changes in accounting standards *per se*. Voluntary adoptions are inevitably associated with firm-level incentives, for example, to access the capital markets, to cross-list in another country, to enter into foreign product markets, or as implied by our study, to improve performance evaluation and corporate governance. All of these provide genuine incentives for the adopting firms to improve accounting transparency. A recent study by Christensen et al. (2007) illustrates the importance of preparers' incentives associated with the voluntary adoption decision in affecting accounting earnings properties. They contrast a sample of voluntary IFRS adopters in Germany with German firms that switched to IFRS following the EU mandate in 2005. They find less earnings management and more timely loss recognition after the *voluntary* adoptions; while no such evidence is documented for the *mandatory* adopters.

Given the firm-level incentives associated with voluntary adoptions of IFRS/U.S. GAAP, certain provisions in IFRS and U.S. GAAP also facilitate firms' efforts to provide more informative financial statements. A major vehicle for income smoothing and earnings management by Continental European firms is the use of "hidden reserves," the essence of which is to make

excessive provisions for potential future losses.[6] Companies in Continental Europe are expressly allowed by law to set up reserves for *unspecified* potential future losses under the 'prudence' concept and later draw upon the reserves to cover poor performance (Ball 2004; and Alexander and Archer 2001). Although it is hard to assess the extent of hidden reserves in reported financial statements, such practices are believed to be widespread in Continental Europe.[7]

On the other hand, "hidden reserves" are prohibited under both U.S. GAAP and IFRS, significantly reducing the latitude of earnings management at the adopting firms. FAS No. 5 on "Accounting for Contingencies" (effective since 1975) lays out stricter conditions for recording loss contingencies. In paragraph eight, it states that "(a)n estimated loss from a loss contingency shall be accrued by a charge to income if both of the following conditions are met: a....it is probable that an asset had been impaired or a liability had been incurred…b. the amount of loss can be reasonably estimated." The standard also specifically prohibits the provision of 'general' contingencies by stating that "(s)ome enterprises have in the past accrued so-called 'reserves for general contingencies.' General or unspecified business risk does not meet the conditions for accrual in paragraph 8, and no accrual for loss shall be made…" Similar provisions prohibiting the recognition of unspecified loss contingencies are found in IAS 10 (effective from 1978).[8]

The above arguments are consistent with the broad perception that international accounting standards are associated with greater accounting transparency and more informative reporting. For

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[6] To create a reserve, a company makes excessive provisions for a potential future loss by increasing an expense account. The opposite side of the accounting entry can be either a reduction of an asset account, an increase of a liability account, or an increase to an equity reserve account (Ball 2004). The above entry can be reversed when needed later to release the reserve and increase income.

[7] For example, the *European Accounting Guide* (Alexander and Archer 2001, page 1360) has the following discussion for Switzerland: *"... the creation of hidden reserves is expressly allowed by law...By definition, the extent of hidden reserves in financial statements is difficult to assess. An economic journal, however, in collaboration with a Swiss securities rating company, published from 1989 to 1992 a ranking of the most profitable Swiss companies, based on an estimation of their "true" (undistorted) income. In some cases, reported income represents less than 25% of estimated real earnings. When confronted with the financial statements of Swiss companies, analysts must be conscious of the widespread use of hidden reserves."*

[8] IAS 37 "Provisions, contingent liabilities and contingent assets," which became effective in 1999, replaced parts of IAS 10. However, IAS 37 does not change the essence of the accounting treatment for loss contingencies.

example, the following is an excerpt from a *Reuters* report in 1995 on "*Deutsche to shift to IAS accounting standard*":

> *Deutsche Bank AG, Germany's largest commercial bank, said on Tuesday it would present its 1995 results in accordance with International Accounting Standards, the first German bank to do so.* ***"With this step we will meet higher standards for improved transparency and information quality,"*** *board member Juergen Krumnow was quoted as saying in a statement...Deutsche joins chemical giant Bayer AG, pharmaceuticals leader Schering AG and Germany's largest industrial conglomerate Daimler-Benz AG in* ***providing greater insight into their books than more opaque German accounting methods offer. International Accounting Standards prohibit hidden reserves and demand more information on risk provisions -- a key omission in German accounting systems*** *... (emphasis added)*

In summary, the changes in accounting earnings properties experienced by firms that have voluntarily adopted IFRS/U.S. GAAP reflect these firms' incentives to improve their financial reporting transparency. This is facilitated by the IFRS/U.S. GAAP guidelines, including those against the use of "hidden reserves." The resulting accounting earnings under international accounting standards exhibit less evidence of earnings management and are timelier in reflecting economic losses, making them more effective tools for internal performance evaluations and corporate governance.

Related studies

The large and growing body of research related to international accounting standards can fall into the following three areas: 1) studies of the motives for adopting IFRS/U.S. GAAP; 2) analyses of the changes in accounting properties associated with the adoption; and 3) investigations of the economic consequences of the adoption (e.g., changes in the cost of capital). Below we summarize the literature along these lines.

Most studies of the voluntary adoptions of international accounting standards (IFRS or U.S. GAAP) explicitly model the adoption decision. The model specifications vary across studies; however, they include common elements that are associated with firm disclosure incentives such as

firm size, performance, financing needs, and the need to communicate with foreign investors (e.g., Harris and Muller 1999; Leuz and Verrecchia 2000; and Ashbaugh 2001).

Researchers also document that voluntary IFRS/U.S. GAAP adopters experience significant changes in accounting earnings properties. Barth et al. (2008) analyze a comprehensive sample of voluntary IFRS adopters around the world and document that relative to local GAAP earnings, IFRS earnings exhibit greater informativeness, less earnings management, and timelier loss recognition. A recent study by Hung and Subramanyam (2007) of a sample of voluntary IFRS adopters in Germany finds similar evidence, in that the IFRS earnings are less smoothed and more conservative than German GAAP earnings.[9] Similar inferences are drawn by Lang et al. (2003) for U.S. GAAP earnings in a sample of U.S. cross-listed firms. Christensen et al. (2007) contrast German firms that have voluntarily adopted IFRS with those that adopted IFRS under the EU mandate in 2005 and document less earnings management and timelier loss recognition in accounting earnings post-adoption *only* for the *voluntary* adopters.

Various studies examine the economic consequences of the adoption of international accounting standards. Leuz and Verrecchia (2000) report, for a sample of German firms, that the voluntary adoption of IFRS/U.S. GAAP is associated with a reduced information asymmetry component of the cost of capital. Bradshaw et al. (2004) document that firms adopting U.S.-like accounting standards see increases in U.S. institutional holdings. Along a similar line, Covrig et al. (2007) analyze data on mutual fund holdings around the world and find that voluntary IFRS adopters have greater ability to attract foreign capital. In addition, Ashbaugh and Pincus (2001)

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[9] Unlike Barth et al. (2008), Hung and Subramanyam (2007) do not find IFRS earnings to be more value relevant than German GAAP earnings. As pointed out by Barth et al., the different findings are likely due to differences in methodology. Hung and Subramanyam have a fairly small and unique sample of German firms and make within firm-year comparisons of German GAAP and IFRS earnings immediately before the IFRS adoption, where the adopting firms may have made adjustments to their German GAAP statements in order to avoid large reconciliation items with IFRS. In addition, Tendeloo and VanStraelen (2005) do not find differences in earnings management activities between German GAAP earnings and IFRS earnings. Again, this study is based on a short sample period (1999-2001) and a small sample of German firms.

document that voluntary IFRS adoption is associated with lower analyst earnings forecast errors. Finally, Daske et al. (2007a) investigate the economic consequences of *mandatory* IFRS adoptions around the world and find evidence of reduced cost of capital after the adoption, although this evidence is concentrated in countries with stronger enforcement of accounting standards, again highlighting the importance of preparers' incentives in bringing about real changes in financial reporting.

III. METHODOLOGY

Our sample consists of Continental European companies that voluntarily adopted IFRS/U.S. GAAP between 1988 and 2004. We require the adopting firms to have both pre- and post-adoption data, and as a result, exclude firms that report under IFRS/U.S. GAAP from the first year they enter into our sample. Financial and price data are from the Worldscope database. We obtain information on debt and equity issuance, mergers and acquisitions, and divestitures (including sales of divisions, spin-offs, split-offs, and carve-outs) from the SDC database. U.S. institutional holdings data are from Spectrum and analyst following data are from I/B/E/S. For the analysis of CEO turnover, we collect company officer names from the January edition of Worldscope CD-ROMs from 1992 to 2002. As discussed in DeFond and Hung (2004), top executive titles vary by country. We follow their procedure and collect the names of the officers under the titles of Chief Executive Officer, Chief Executive, CEO, or a country-specific title, and collectively refer to these top officers as the CEO.[10] When there are multiple individuals with CEO-like titles in a firm-year, we retain the name of the first individual reported by Worldscope. After identifying the CEO for

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[10] DeFond and Hung (2004) provide country specific top executive titles in their Table 1, for example, "managing director" in Belgium, Denmark, Finland, and Italy; "president" in Sweden; and "chairman, board of management" in Austria, Germany, and Netherlands. We exclude all titles involving the term "supervisory board" because it is distinct from the "management board" under the two-tier board structure observed in countries such as Austria, Germany, and Netherlands.

each company in each year, we compare the CEO names between successive years to determine if there is a CEO turnover in a particular firm-year.

We classify firms into those following IFRS/U.S. GAAP accounting standards and those following local accounting standards based on the information provided by Worldscope.[11] For the IFRS/U.S. GAAP adopting firms, the adoption year is treated as event year zero. The local standards firms (firms that follow local GAAP throughout our sample period) serve as the control sample in the various tests. We randomly select an event year zero for these firms. Our sample includes firms that become cross-listed on major U.S. exchanges during our sample period. U.S. cross-listing automatically entails the reconciliation of net income and shareholders' equity with U.S. GAAP; however, these firms are classified as adopting firms only if their home country financial statements also follow U.S. GAAP or IFRS.[12,13]

To analyze firms' adoption decision, we require data on stock returns, accounting earnings, total assets, market capitalization, leverage, growth, foreign sales, and sales per employee one year prior to event year zero, and closely held shares for event year zero.[14] Our final sample comprises

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[11] The coding is based on the information in Worldscope field 07536, *Accounting standards followed*. Following the procedure in Daske et al. (2007b), if the Worldscope description is 'IFRS,' 'International standards,' 'International standards and some EEC guidelines,' 'Local standards with EEC and IASC guidelines,' 'Local standards with OECD and IASC guidelines,' 'Local standards with some IASC guidelines,' we classify the observation as using IFRS; if the Worldscope description is 'U.S. standards (GAAP)' or 'U.S. GAAP reclassified from local standards,' we classify the observation as using U.S. GAAP. Finally, all other cases, except when the applicable accounting standards are not disclosed, are classified as using local accounting standards. As the Worldscope terminology suggests, some of our sample IFRS/U.S. GAAP adopting firms may do so only partially, as the term 'local standards' is mentioned alongside IFRS or U.S. GAAP. However, our predictions in Section II apply to these firms as well. Furthermore, out of our sample of 200 adopting firms, the vast majority, over 80%, have a straightforward Worldscope classification of following 'IFRS' (46 firms), 'International Standards' (98 firms), or 'U.S. Standards (GAAP)' (19 firms).

[12] Arguably, firms that cross-list on major U.S. exchanges may use their reconciled U.S. GAAP earnings for internal performance evaluations even if their home country financial statements follow local GAAP. However, the influence of international accounting standards earnings is likely substantially greater if the firm's entire home country financial statements are prepared according to IFRS/U.S. GAAP. For firms with Level II or Level III ADRs in the U.S. and that adopt IFRS or U.S. GAAP, we set event year zero to be the earlier of the adoption year or the first year of cross-listing.

[13] We exclude German firms listed on the New Market (1997-2003) from our analysis, as IFRS or U.S. GAAP adoption is part of the listing requirement of the German New Market. Most of these firms would not have satisfied our sample requirement in the first place because they follow IFRS/U.S. GAAP from the first year they enter the Worldscope database. Including the remaining (seven) New Market firms in our tests does not affect the inferences.

[14] *Close_Held* is measured in event year zero. Using the lagged year's measure results in more missing observations but does not affect the paper's inferences.

200 IFRS/U.S. GAAP adopting firms and 766 local standards firms.[15] The vast majority of our sample of adopting firms (180 firms, or 90% of the adopting sample) follow IFRS and the rest choose U.S. GAAP.[16]

Table 1 reports our sample distribution by calendar year, country, and industry. Panel A presents the time-series distribution of our sample firms based on event year zero. The frequency of IFRS/U.S. GAAP adoption increases in more recent years, consistent with the trend of greater accounting harmonization around the globe. Panel B reports that Germany and Switzerland are heavily represented in the adopting sample; similar findings are also reported in Barth et al. (2008). Finally, Panel C suggests that manufacturing firms have the largest representation in the adopting sample, again similar to Barth et al. (2008) on IFRS adopters and Lang et al. (2006) on cross-listed firms in the U.S. In order to control for the country, year, and industry effects, all of our subsequent regression analyses include country, year, and industry dummies as control variables.

[Insert Table 1 Here]

Table 2 Panel A presents the summary statistics around event year zero for the variables in our IFRS/U.S. GAAP adoption decision analysis, separately for the adopting and local standards samples. All continuous variables are trimmed at the top and bottom 1%. The adopting sample has a significantly lower percentage of closely held shares. This is consistent with more widely held firms, facing greater information need from investors and also due to internal performance evaluation demands (as postulated in this study), are more likely to adopt international accounting standards. The adopting firms generally possess stronger disclosure incentives, as evidenced by their larger size, higher leverage, larger analyst following, and greater U.S. institutional holdings than local standards firms. Furthermore, the adopting firms tend to have greater capital needs than

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[15] We include all local standards firms in our analysis. An alternative approach is to create a matched sample of local standards firms based on criteria such as country, year, and industry. We choose to incorporate all local standards firms due to methodological concerns about the matched-pairs research design (e.g., Zmijewski 1984).

[16] Our results are robust if we include only IFRS adopters in our analysis.

local standards firms, indicated by their higher frequencies of debt and equity issuance and acquisition activities. Finally, the adopting firms likely face greater information demand from foreign stakeholders, with higher frequency of U.K./U.S. cross-listings and greater percentage of foreign sales relative to total sales, than local standards firms.

[Insert Table 2 Here]

Panel B of Table 2 reports the management turnover rates for our sample countries. Belgium, Netherlands, Sweden, and Finland are dropped from this part of the analysis because each country has a low number of firm-year observations (fewer than ten) with non-missing management turnover data in either the pre- or the post-adoption period among the adopting firms. The remaining countries include Austria, Denmark, France, Germany, Italy, and Switzerland, which account for the 803 firm-year observations in the adopting sample and 1,722 firm-year observations in the local standards sample in our management turnover tests. The sample period for the management turnover tests is shorter than our overall sample period of 1988 to 2004 because non-missing CEO turnover data are available on Worldscope from 1992 to 2002. The turnover rates vary by country, although they match up reasonably well with those reported in DeFond and Hung (2004, see their Table 2). The overall turnover rate in the adopting sample (17.93%) is significantly higher than that in the local standards sample (12.37%).

In Table 2 Panel C we report by country the rates of employee layoffs (defined as a reduction of employee headcount of 5% or more in a firm-year). Switzerland is not included in this part of the analysis because of missing union data that are required later in the layoff regressions. The final sample in this part of the analysis includes 1,930 firm-year observations in the adopting sample and 8,228 firm-year observations in the local standards sample. The layoff rates vary by country and the overall layoff rate in the adopting sample (21.87%) is significantly lower than that in the local standards sample (25.12%).

IV. MODELING THE ADOPTION DECISION

We expand on the adoption decision models in the prior literature and test if the demand from internal performance evaluations is a factor in firms' decisions to adopt international accounting standards. We estimate the following logistic regression model (firm subscripts are suppressed):

$$Prob\ [Adopt = 1] = Logit\ (a_0 + a_1\ Close\_Held_0 + a_2\ Labor\_Prod_{-1} + a_3\ RET_{-1} + a_4\ ROA_{-1} + a_5\ Size_{-1} + a_6\ Lev_{-1} + a_7\ Growth_{-1} + a_8\ Analyst_{-1} + a_9\ Institution_{-1} + a_{10}\ Issue3 + a_{11}\ Acquirer3 + a_{12}\ Target3 + a_{13}\ Divest3 + a_{14}\ Cross\_List + a_{15}\ Foreign\_Sales_{-1} + \sum b_i Country_i + \sum c_j Year_j + \sum d_k Industry_k)$$

(1)

The dependent variable *Adopt* is equal to one for adopting firms, and zero otherwise. All the independent variables are measured around event year zero (detailed variable definitions are in the Appendix). The model also includes country, year, and industry dummy variables.

Following Bushman and Piotroski (2006) we argue that firms with more closely held shares face lower management compensation contracting demand on accounting earnings, thus a lower likelihood of IFRS/U.S. GAAP adoption. Furthermore, we predict that firms with lower labor productivity (measured by industry-adjusted sales per employee) face a greater need for informative measures of firm performance to facilitate internal performance evaluation, therefore a higher probability of IFRS/U.S. GAAP adoption. We include the percentage of closely held shares (*Close_Held_0*) and labor productivity (industry-adjusted sales per employee, *Labor_Prod_{-1}*) in the regression and expect the coefficients on both variables to be negative.

Prior research suggests that variables associated with disclosure incentives have predictive power for the adoption decision (e.g., Harris and Muller 1999; Leuz and Verrecchia 2000; and Ashbaugh, 2001). We include lagged variables on firm performance (*RET_{-1}* and *ROA_{-1}*), firm size (*Size_{-1}*), leverage (*Lev_{-1}*), growth (*Growth_{-1}*), analyst following (*Analyst_{-1}*), and U.S. institutional holdings (*Institution_{-1}*) on the right-hand side of the regression model and expect the coefficients on

firm size, leverage, growth, analyst following, and U.S. institutional holdings to be positive. We do

not have predictions for stock returns and accounting returns on assets.[17]

We also include variables to measure, over the three-year period of event year zero and the

following two years, firms' debt and equity issuance (*Issue3*), acquisition-related activities

(*Acquirer3* and *Target3*), and divestitures (*Divest3*). We expect the coefficients on these variables to

be positive as the adoption decision can reflect greater information demand from investors due to

these corporate activities. Finally, to proxy for the information demand from foreign investors and

other foreign stakeholders, we follow Ashbaugh (2001) and Leuz and Verrecchia (2000) and control

for U.S. and U.K. cross-listings (*Cross_List* is equal to one if the firm is cross-listed in the U.S. or

U.K. during our sample period). We also include foreign sales as a percentage of firm total sales

(*Foreign_Sales$_{-1}$*). We expect these variables to have positive signs.

The regression results are reported in Table 3. The coefficient estimates, standard errors,

and the marginal effects are reported in columns (1) to (3), respectively. As predicted, *Close_Held$_0$*

has a negative coefficient, -0.0089, and significant at the 5% level. The marginal effect suggests

that a one standard deviation increase in the percentage of closely held shares decreases the

adoption likelihood by 1.26%, or 6% of unconditional adoption probability of 20.7% (200/966).

This supports our argument that the greater demand for more informative and conservative

accounting earnings due to performance evaluations at more widely held firms increases these

firms' incentives to adopt international accounting standards.[18] The coefficient on *Labor_Prod$_{-1}$* is -

0.0010, negative as expected and significant at the 5% level. The marginal effect indicates that a

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[17] The prediction regarding firm performance is ambiguous, as both good and bad performances can lead to more disclosure. For example, Lang and Lundholm (1993) and Miller (2002) document a positive relation between firm performance and disclosure and Skinner (1994) suggests that firms disclose bad news to reduce litigation risk.
[18] The percentage of closely held shares can also vary with firms' incentives to access the capital market as more closely held firms may have lower demand for external capital. This is the reason why we control for various factors related to firm financing needs in the regression model. To the extent the controls are adequate, our findings on *Close_Held* are consistent with compensation contracting demands affecting firms' decisions to adopt international accounting standards.

one standard deviation increase in labor productivity reduces the likelihood of adoption by 2.16%, or roughly 10.4% of unconditional adoption probability of 20.7% (200/966). This suggests that firms with lower labor productivity compared to their industry peers have greater incentives to adopt international accounting standards. The findings on the control variables suggest that larger firms, those with higher leverage, with more acquisition activities, those that cross-list in the U.S. or U.K., and firms with more substantial foreign sales are more likely to adopt IFRS/U.S. GAAP. The regression has reasonable predictive power with a Pseudo R^2 of 44%.[19]

[Insert Table 3 Here]

V. CEO TURNOVER

H1 predicts that the sensitivity of CEO turnover to accounting earnings increases after the adoption of international accounting standards. We include stock returns as a second performance measure because prior studies show that both earnings and stock returns affect management turnover (see, for example, Kaplan 1994; Franks and Mayer 2001; and Volpin 2002, for international evidence). Following the methodology in prior studies, such as Kaplan (1994) and Franks and Mayer (2001), we define an indicator variable *DROA* as one if accounting earnings (measured by net income before extraordinary items) in a firm-year is negative, and zero otherwise; and define an indicator variable *DRET* as one if the stock return in a firm-year is below -20%, and zero otherwise. Among the 2,525 firm-year observations included in the management turnover

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[19] Leuz and Verrecchia (2000) obtain an R^2 of 40% for their adoption decision regression and Ashbaugh (2001) reports an 18% R^2 in her study. Regarding the significance of the individual explanatory variables in the adoption decision regression, while the findings in prior studies are consistent with the overall theme that potential informational benefits drive the adoption of international accounting standards, the results on individual variables vary across studies, likely due to differences in sample selection and methodology. For example, Leuz and Verrecchia (2000) find a positive coefficient for ROA; while Harris and Muller (1999) do not find such evidence. On the other hand, Harris and Muller (1999) document a positive role for firm size in the adoption decision; whereas Leuz and Verrecchia (2000) find an insignificant coefficient for size. Harris and Muller (1999) report insignificant coefficients on debt and equity issuance, although Ashbaugh (2001) finds a positive role of equity issuance in the adoption decision.

tests, about 9% are with earnings losses ($DROA = 1$) and 17% have stock returns below -20% ($DRET = 1$).

We first analyze CEO turnover-to-performance sensitivities separately for the adopting and the local standards samples with model (2) below (firm subscripts are suppressed).

Prob [CEO_Turnover$_t$ = 1]= Logit (a_0 + a_1 DROA$_{t-1}$ + a_2 DRET$_{t-1}$ + a_3 Post + a_4 Post*DROA$_{t-1}$ + a_5 Post*DRET$_{t-1}$ + $\sum b_j$Control variable$_j$) (2)

The dependent variable, *CEO_Turnover$_t$*, is an indicator equal to one if there is a CEO turnover in year t, and zero otherwise. *Post* is an indicator variable, equal to one if the firm-year is post-event year zero, and equal to zero otherwise (event year zero itself is removed from the analysis). We include the explanatory variables from our earlier adoption decision regression (except for *ROA* and *RET*) to control for firms' incentives to adopt international accounting standards and their potential impact on CEO turnover. These variables are measured around year t. We also include country, year, and industry dummy variables in the regression. Statistical tests are conducted using robust standard errors clustered by firm.

H1 predicts that the CEO turnover sensitivity to poor accounting performance increases after the adoption of international accounting standards. We therefore expect a positive coefficient on *Post*DROA$_{t-1}$* for the adopting sample, while we do not expect the same for the local standards firms, for which the event year zero is randomly selected. The results for model (2) are reported in Panel A of Table 4. Consistent with H1, *Post*DROA$_{t-1}$* has a positive coefficient that is significant at the 1% level for the adopting sample. On the other hand, *Post*DROA$_{t-1}$* is insignificantly different from zero for the local standards sample. We do not have specific predictions regarding stock returns, although the insignificant coefficient on *Post*DRET$_{t-1}$* is inconsistent with an *overall*

increase in the performance sensitivities of CEO turnover at the adopting firms that might result

from concurrent organizational changes other than accounting changes.

[Insert Table 4 Here]

To statistically assess the differences reported in Panel A between the adopting and local

standards firms, we combine the two samples in a "difference-in-differences" test based on model

(2') below and report the results in Panel B of Table 4.

Prob [CEO_Turnover$_t$ = 1]= Logit (a$_0$ + a$_1$ DROA$_{t-1}$ + a$_2$ DRET$_{t-1}$ + a$_3$ Adopt + a$_4$ Adopt*DROA$_{t-1}$ + a$_5$ Adopt*DRET$_{t-1}$ + a$_6$ Post + a$_7$ Post*DROA$_{t-1}$ + a$_8$ Post*DRET$_{t-1}$ + a$_9$ Post*Adopt + a$_{10}$ Post*Adopt*DROA$_{t-1}$ + a$_{11}$ Post*Adopt*DRET$_{t-1}$ + $\sum$b$_j$Control variable$_j$)   (2')

Adopt is an indicator, equal to one for firms in the adopting sample, and zero for the local standards

sample. To allow all coefficients from model (2) to vary with *Adopt*, the control variables in model

(2) are also interacted with it. The coefficients a_1, on *DROA$_{t-1}$*, and a_2, on *DRET$_{t-1}$*, measure the

turnover sensitivity to poor accounting performance and poor stock performance, respectively, for

the 'base category' of *local standards firms prior to event year zero*. The significant and positive

coefficient on *DRET$_{t-1}$* suggests that CEO turnover is sensitive to poor stock performance. The

coefficient on *DROA$_{t-1}$* is positive, although insignificant. Overall, these results are in line with the

inferences from prior studies that the governance system in Continental Europe disciplines poorly

performing managers (e.g., Kaplan 1994; Franks and Mayer 2001; and Volpin 2002).

The coefficients on *Adopt*DROA$_{t-1}$* and *Adopt*DRET$_{t-1}$* measure the incremental

sensitivities of CEO turnover to poor accounting and stock performances at the *adopting firms prior

to their adoption* of international accounting standards. Neither coefficient is significantly different

from zero, indicating that the adopting and local standards firms have no differential sensitivities of

CEO turnover to poor performance before event year zero.[20] The coefficients on $Post*DROA_{t-1}$ and $Post*DRET_{t-1}$ measure the incremental sensitivities of CEO turnover to poor accounting and stock performances at the *local standards firms post event year zero*. Neither coefficient is significantly different from zero, suggesting the turnover-to-performance sensitivities do not change for the local standards firms from before to after event year zero, consistent with our expectations.

The coefficient on the triple interactive term, $Post*Adopt*DROA_{t-1}$, measures the difference between the adopting and local standards samples, in the changes of their turnover-to-poor accounting performance sensitivities from pre- to post-event year zero. The coefficient on $Post*Adopt*DRET_{t-1}$ captures the corresponding difference-in-differences in the sensitivity of CEO turnover to poor stock performance. H1 predicts a positive coefficient on $Post*Adopt*DROA_{t-1}$, i.e., the increase in the sensitivity of CEO turnover to poor accounting performance at the adopting firms from pre- to post-adoption is greater than that experienced by the local standards firms. The positive coefficient on $Post*Adopt*DROA_{t-1}$, which is significant at the 5% level, supports H1 and corroborates the evidence reported in Panel A that at the adopting firms CEO turnover is more responsive to poor accounting performance post-adoption. The insignificant coefficient on $Post*Adopt*DRET_{t-1}$ suggests that the changes in the sensitivities of CEO turnover to stock performance from pre- to post-event year zero do not differ between the adopting and local standards samples. On the control variables, we find that target firms ($Target_3$) experience more frequent CEO turnover; while CEO turnover rates are lower for high growth firms ($Growth_{t-1}$).[21]

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[20] The earlier results in Table 4 Panel A seem to suggest that prior to adoption, the adopting firms have lower performance sensitivities in CEO turnover than local standards firms. However, the difference-in-differences analysis in Panel B of Table 4 does not suggest a *statistically significant* difference between the two groups, i.e., neither $Adopt*DROA_{t-1}$ nor $Adopt*DRET_{t-1}$ are significant.

[21] The lack of significance for the other control variables should not cause concern because they are included to control for firms' incentives to adopt international accounting standards. Performance measures (accounting earnings and stock returns) are the primary explanatory variables of CEO turnover in our study, as is the case in prior research (e.g., Warner et al. 1988; and Engel et al. 2003 using U.S. data; and Kaplan 1994; and DeFond and Hung 2004 in the international setting). Model (2') includes the interactive terms of *Adopt* with the control variables. To save space,

The R^2 from the regression is around 6%, in line with prior studies of European firms (e.g., Volpin 2002).

VI. EMPLOYEE LAYOFFS

Our second hypothesis involves the sensitivities of employee layoffs to accounting earnings before and after the adoption of international accounting standards. Similar to the CEO turnover analysis, we use *DROA* and *DRET* (defined in the previous section) as performance measures for accounting earnings and stock returns, respectively. Among the 10,158 firm-year observations included in the layoff tests, about 10% are with earnings losses (*DROA* = 1) and 22% have stock returns below -20% (*DRET* = 1).

We first conduct an analysis of layoff-to-performance sensitivities separately for the adopting and local standards samples with model (3) below (firm subscripts are suppressed).

$$Prob\ [Layoff_t = 1] = Logit\ (a_0 + a_1\ DROA_{t-1} + a_2\ DRET_{t-1} + a_3\ Post + a_4\ Post^*DROA_{t-1} + a_5\ Post^*DRET_{t-1} + \sum b_j Control\ variable_j) \quad\quad (3)$$

The dependent variable, *Layoff_t*, is an indicator, equal to one if there is a reduction of a firm's employee headcount of more than 5% in year t, and zero otherwise. The explanatory variables on the right-hand side are the same as those in model (2) on management turnover, except for the addition of several control variables. Since the change in employee headcount can reflect *contemporaneous* changes in a firm's overall scale of operations, we include sales growth (*Growth*), change in foreign sales (Δ*Foreign_Sales*), and an indicator variable for fixed assets disposal (*Fix_Disposal*), for year t. Continental European countries are known for their strong employment protection laws and powerful labor unions (e.g., Grubb and Wells 1993; and Nicoletti et al. 1999);

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their coefficients are not reported in Table 4. Most of the interactive terms are insignificant, except for *Adopt*Target3*, which has a marginally significant negative coefficient.

as a result, we also include a variable on the intensity of union activities (*Union*).[22] Similar to the

CEO turnover analysis, statistical tests are conducted using robust standard errors clustered by firm.

H2 predicts that the employee layoff sensitivity to poor accounting performance increases

after the adoption of international accounting standards. We therefore expect a positive coefficient

on *Post*DROA$_{t-1}$* for the adopting sample, while we do not expect the same for the local standards

firms. The results for model (2) are reported in Panel A of Table 5. Consistent with H2,

Post*DROA$_{t-1}$ has a positive coefficient, which is significant at the 5% level, for the adopting

sample. On the other hand, *Post*DROA$_{t-1}$* is not significantly different from zero for the local

standards sample. We do not have specific predictions regarding stock returns, although the

insignificant coefficient on *Post*DRET$_{t-1}$* is inconsistent with an *overall* increase in the performance

sensitivities of employee layoffs at the adopting firms that might result from concurrent

organizational changes other than accounting changes.

[Insert Table 5 Here]

To statistically assess the differences reported in Panel A between the adopting and local

standards firms, we combine the two samples in a "difference-in-differences" test based on model

(3') below and report the results in Panel B of Table 5.

*Prob [Layoff$_t$ = 1]= Logit (a$_0$ + a$_1$ DROA$_{t-1}$ + a$_2$ DRET$_{t-1}$ + a$_3$ Adopt + a$_4$ Adopt*DROA$_{t-1}$ + a$_5$
Adopt*DRET$_{t-1}$ + a$_6$ Post + a$_7$ Post*DROA$_{t-1}$ + a$_8$ Post*DRET$_{t-1}$ + a$_9$ Post*Adopt + a$_{10}$
Post*Adopt*DROA$_{t-1}$ + a$_{11}$ Post*Adopt*DRET$_{t-1}$ + ∑b$_j$Control variable$_j$)*   (3')

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[22] Union intensity information is obtained from the European Social Survey Round One (Jowell et al. 2003), based on
surveys of 42,359 individuals from European Union countries over the period of 2002-2003. Participants of the survey
were asked whether they were a member of a trade union in the past 12 months. We measure union density for each
one-digit SIC industry in each country with the percentage of participants indicating they are trade union members. The
resulting measure of union intensity is at the country-industry level. Because the information on union intensity is
available at only one point in time (2002-2003), we apply it to our entire sample period under the assumption that union
participation levels change slowly overtime.

Adopt is an indicator, equal to one for firms in the adopting sample, and zero for the local standards sample. To allow all coefficients from model (3) to vary with *Adopt*, the control variables in model (3) are also interacted with it. The coefficients a_1, on $DROA_{t-1}$, and a_2, on $DRET_{t-1}$, measure the layoff sensitivity to poor accounting performance and poor stock performance, respectively, for the 'base category' of *local standards firms prior to event year zero*. The significant and positive coefficients on both $DROA_{t-1}$ and $DRET_{t-1}$ suggest that employee layoffs are responsive to poor firm performance. The coefficients on *Adopt*DROA$_{t-1}$* and *Adopt*DRET$_{t-1}$* are insignificant, indicating the adopting and local standards firms have no differential sensitivities of employee layoffs to poor performance before event year zero. The coefficients on *Post*DROA$_{t-1}$* and *Post*DRET$_{t-1}$* are also insignificant, suggesting the layoff-to-performance sensitivities do not change for the local standards firms from before to after event year zero, consistent with our expectations.

H2 predicts a positive coefficient on *Post*Adopt*DROA$_{t-1}$*, i.e., the increase in the sensitivity of employee layoffs to poor accounting performance at the adopting firms from pre- to post-adoption is greater than that experienced by the local standards firms. The positive coefficient on *Post*Adopt*DROA$_{t-1}$*, which is significant at the 5% level, supports H2 and corroborates the evidence reported in Panel A that at the adopting firms employee layoffs are more responsive to poor accounting performance post-adoption. The insignificant coefficient on *Post*Adopt*DRET$_{t-1}$* suggests that the changes in the sensitivities of employee layoffs to stock performance from pre- to post-event year zero do not differ between the adopting and local standards samples. On the control variables, we find that firms with higher labor productivity, that are larger, with greater contemporaneous and lagged sales growth, and with more acquisition activities experience less

frequent layoffs. On the other hand, firms with higher leverage, more analyst following, and with divestitures have more frequent employee layoffs.[23, 24]

VII. ROBUSTNESS TESTS

Cross-sectional and inter-temporal variations in the effects of IFRS/U.S. GAAP adoption

DeFond and Hung (2004) document that the association between CEO turnover and poor performance varies with the strength of country-level law enforcement institutions. If strong law enforcement facilitates the improvement in firms' internal performance evaluations post-IFRS/U.S. GAAP adoption, we could observe a larger increase in earnings performance sensitivities at the adopting firms in countries with stronger law enforcement. We classify our sample countries into those with strong and weak law enforcement based on the sample median and set an indicator variable to one for countries with stronger law enforcement, and zero otherwise.[25] We interact it with the relevant variables in models (2') and (3'). Untabulated results suggest that the increase in the earnings sensitivities of employee layoffs post-adoption is significantly higher in countries with stronger law enforcement. However, we do not find the increase in the earnings sensitivities of CEO turnover post-adoption to vary with the strength of law enforcement. The low variation in the law enforcement score among Continental European countries can affect our test power (see footnote 25).

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[23] The union variable has a positive coefficient that is marginally significant. While the presence of union can protect employment, thus lowering the frequency of layoffs, as pointed out by Cioffi (2002), union representatives, who often have seats on the supervisory board in countries such as Germany, Denmark, Netherlands, and Sweden, may also facilitate restructuring by providing the rank and file employees "with sufficient information on the state of the business to justify drastic measures."

[24] Most of the interactive terms between *Adopt* and the control variables are insignificant, except for *Adopt*Growth_t*, which has a negative coefficient, significant at the 1% level.

[25] The law enforcement index for each country is calculated as the mean of the five legal enforcement variables in LaPorta et al. (1998): 1) efficiency of the judicial system; 2) rule of law; 3) corruption; 4) risk of expropriation; and 5) risk of contract repudiation. The mean score among our sample countries is 9.4 (median of 9.6, out of a possible 10) and varying from 7.9 (Italy, the lowest) to 9.9 (Switzerland, the highest). Since our sample countries are from Continental Europe, the variation in the score is small (standard deviation of 0.6, compared to 2.15 in DeFond and Hung 2004).

We further investigate whether the adoption of IFRS/U.S. GAAP has a transitory or a more persistent impact on firm internal performance evaluations. We create an indicator variable for the three-year period immediately after event year zero and a separate indicator for the period after that. These variables replace the single post-event year zero indicator, *Post*, in models (2') and (3'). Untabulated findings suggest that the increases in earnings performance sensitivities in both CEO turnover and employee layoffs persist beyond the initial post-adoption period, although such effects are stronger in the three years immediately after adoption.

Alternative variable specifications

Thus far we measure earnings and stock performances with indicator variables of negative ROA (*DROA*) and stock returns below -20% (*DRET*), respectively. As a robustness check, we replace the indicators with continuous measures of ROA and stock returns. The inferences on employee layoffs are unaffected. However, the results on CEO turnover are sensitive to this change in variable specification. This suggests that the increase in the sensitivity of CEO turnover to accounting performance post-adoption is primarily driven by heightened turnover sensitivity to accounting *losses*.

To investigate if *increases* in employee headcount also become more sensitive to accounting earnings post-adoption, we construct an indicator for large hiring increases (5% or more *increase* in employee headcount) and substitute it for the layoff indicator in our analysis. Even though labor increases are positively associated with good performance (performance is measured either continuously or with good performance indicators), the sensitivity is not significantly higher for adopting firms post-adoption. It suggests that IFRS/U.S. GAAP earnings primarily facilitate the identification and restructuring of underperforming units.

Other robustness tests

We control for the effect of macro-economic conditions on CEO turnover and employee layoffs by including the market return in each country and year as a control variable in all regression models. The coefficients on market returns are insignificant in the various regressions and our main inferences remain unchanged. To account for any potential time trend in CEO turnover and employee layoffs, we include a time trend variable and interact it with earnings performance and stock returns in models (2') and (3'). The inferences on our main test variables are not affected. Finally, to investigate the timing of the IFRS/U.S. GAAP adoption, we analyze the changes in labor productivity at the adopting firms. A test of regressing labor productivity against a time trend variable does not show a significant decreasing trend in labor productivity over event years [-5, 0]. It could be that firms' labor productivity is persistently low, not necessarily deteriorating continuously, in the several years leading up to the adoption. Meanwhile, there is a significant increase in labor productivity over event years [0, +5].

VIII. CONCLUSIONS

While a large body of research is devoted to understanding the causes and consequences of the adoption of international accounting standards, researchers' attention thus far has focused almost exclusively on the informational benefits of the adoption. We extend the existing literature by offering a different, stewardship perspective. We hypothesize that the voluntary adoption of international accounting standards is associated with changes in the internal performance evaluation process; in particular, it is associated with increases in the sensitivities of CEO turnover and employee layoffs to accounting earnings. These predictions are built on prior literature's evidence that accounting earnings are timelier, less managed, and more conservative after the adoption of international accounting standards. As a result, the international accounting standards earnings are more effective tools for the purpose of firm internal performance evaluations and governance. We

test our hypotheses using a sample of Continental European firms and find evidence consistent with our predictions.

The above evidence does not necessarily imply that the voluntary adoption of international accounting standards *causes* the changes in internal performance evaluations in terms of higher earnings performance sensitivities. Firms that voluntarily adopt IFRS/U.S. GAAP likely experience fundamental changes in their operations, financing, and corporate governance; and the adoption of international accounting standards can simply be an instrument for these profound changes. Nevertheless, our findings suggest that the greater reporting transparency through international accounting standards likely plays an important role in improving firms' internal performance evaluations and governance.

We contribute to the literature by providing support for the long-held notion that stewardship demands substantially shape firms' accounting choices (e.g., Watts and Zimmerman 1986; Ball 2001; Watts 2003a; Bushman et al. 2006; and O'Connell 2007). Our study is an application of the contracting-related perspective to the fast-growing area of international accounting research. Furthermore, our findings highlight the multitude of implications from the adoption of international accounting standards and add to our understanding of the complex changes experienced by the adopting firms.

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Appendix: Variable definitions

Dependent and explanatory variables in the adoption decision analysis
The explanatory variables in the adoption decision analysis are measured at the end of event year -1 unless stated otherwise in the following description table. These explanatory variables are then included in the management turnover and employee layoffs analyses as control variables. In the turnover and layoffs analyses, these variables are measured at the end of event year t-1, unless stated otherwise.

Variables	Definition
Adopt	Equals one if a firm adopts IFRS or U.S. GAAP during our sample period; zero if a firm reports under local accounting standards throughout the sample period.
Close_Held	Percentage of closely held shares at the end of event year zero (event year t for the management turnover and employee layoffs analyses)
Labor_Prod	Labor productivity (sales per employee) minus the median labor productivity in the same industry group
RET	Annual raw stock return
ROA	Return on assets, accounting earnings is defined as net income before extraordinary items
Size	Natural logarithm of market capitalization
Lev	Leverage, defined as long term debt divided by total assets
Growth	Sales growth, current year's sales change divided by prior year's sales
Analyst	Number of analysts following a firm
Institution	Equals one if U.S. institutional holdings are non-zero; zero otherwise
Issue3	Equals one if there is new equity or debt issuance in the event year window [0, 2] (event year window [t, t+2] for the management turnover and employee layoffs analyses); zero otherwise
Acquirer3	Equals one if a firm acquires another firm in the event year window [0, 2] (event year window [t, t+2] for the management turnover and employee layoffs analyses); zero otherwise
Target3	Equals one if a firm is acquired in the event year window [0, 2] (event year window [t, t+2] for the management turnover and employee layoffs analyses); zero otherwise
Divest3	Equals one if there is a divestiture (including sales of divisions, spin-offs, split-offs, and carve-outs) in the event year window [0, 2] (event year window [t, t+2] for the management turnover and employee layoffs analyses); zero otherwise
Cross-list	Equals one if a firm is cross-listed in the U.S. or the U.K. in the sample period; zero otherwise
Foreign_Sales	Foreign sales divided by total sales

Additional variables in the CEO turnover analysis

CEO_Turnover	Equals one if there is a CEO turnover in event year t; zero otherwise.
DROA	Equals one if ROA of event year t-1 is negative; zero otherwise
DRET	Equals one if annual raw stock return of event year t-1 is less than -20%; zero otherwise
Post	Equals one if a firm-year observation is post-event year zero; equal to zero for pre-event year zero observations (event year zero itself is removed).

Additional variables in the employee layoffs analysis

Layoff	Equals one if the percentage of change in the number of employees in event year t is less than -5%; zero otherwise
Δ*Foreign_Sales*	Change in Foreign_Sales in year t (Foreign sales is defined as above)
Fix_disposal	Equals one if fixed assets disposal in year t is non-zero; zero otherwise
Union	Percentage of European Social Survey Round One participants who indicate they are trade union members in each one-digit SIC industry and each country

Table 1: Frequency distribution of the sample

This table reports the distribution of the firms included in the adoption decision analysis by year (adoption year for adopting firms and a randomly-selected year for non-adopting firms), home country, and industry. Adopting firms refer to firms that adopt the IFRS or U.S. GAAP between 1988 and 2004. Local Standards firms are those that report under local accounting standards over our entire sample period.

Panel A: Distribution of event year zero by calendar year

Year	Adopting Frequency	Adopting %	Local Standards Frequency	Local Standards %
1988	2	1.00%	5	0.65%
1989	6	3.00%	13	1.70%
1990	4	2.00%	24	3.13%
1991	6	3.00%	42	5.48%
1992	10	5.00%	45	5.87%
1993	9	4.50%	38	4.96%
1994	2	1.00%	53	6.92%
1995	5	2.50%	52	6.79%
1996	6	3.00%	49	6.40%
1997	8	4.00%	53	6.92%
1998	11	5.50%	47	6.14%
1999	30	15.00%	50	6.53%
2000	18	9.00%	36	4.70%
2001	15	7.50%	36	4.70%
2002	26	13.00%	60	7.83%
2003	18	9.00%	68	8.88%
2004	24	12.00%	95	12.40%
	200	100%	766	100%

Panel B: Distribution of adopting and local accounting standards firms by home country

Country	Adopting # of firms	Adopting %	Local Standards # of firms	Local Standards %
AUSTRIA	12	6.00%	5	0.65%
BELGIUM	8	4.00%	33	4.31%
DENMARK	11	5.50%	43	5.61%
FINLAND	7	3.50%	51	6.66%
FRANCE	22	11.00%	274	35.77%
GERMANY	88	44.00%	188	24.54%
ITALY	4	2.00%	2	0.26%
NETHERLANDS	1	0.50%	73	9.53%
SWEDEN	7	3.50%	73	9.53%
SWITZERLAND	40	20.00%	24	3.13%
	200	100%	766	100%

Table 1. continued

Panel C: Distribution of adopting and local accounting standards firms by industry

Industry	Switching		Local Standards	
	# of firms	%	# of firms	%
Mining	7	3.50%	44	5.74%
Construction	46	23.00%	164	21.41%
Manufacturing	86	43.00%	235	30.68%
Utilities	21	10.50%	33	4.31%
Wholesale and Retail Trade	21	10.50%	125	16.32%
Finance, Insurance, and Real Estate	6	3.00%	81	10.57%
Services	13	6.50%	84	10.97%
	200	100%	766	100%

Table 2: Descriptive statistics
This table reports descriptive statistics of adopting and local standards firms around event year zero, CEO turnover rates by country, and employee layoff rates by country. Variable definitions are in the Appendix.

Panel A: Descriptive statistics of adopting and local standards firms around event year zero
Event year zero is the IFRS/U.S. GAAP adoption year for adopting firms and a randomly-selected year for local standards firms. ***,**,* indicate that the mean or the median of the adopting firms is significantly different from that of the local standards firms at the 1%, 5%, or 10% level, two-sided test.

	Adopting firms				Local standards firms			
	Mean	Median	Std	N	Mean	Median	Std	N
$Close\_Held_0$ (%)	50.4758 ***	51.0000 ***	25.1429	200	58.4130	59.9450	25.4589	766
$Labor\_Prod_{-1}$	41.0275 *	2.5000	206.7219	200	83.1079	-1.3775	474.5006	766
RET_{-1}	0.0548	0.0078	0.4008	200	0.0924	0.0136	0.4634	766
ROA_{-1}	0.0691	0.0684	0.0738	200	0.0605	0.0693	0.1009	766
$Size_{-1}$	13.0609 ***	12.9642 ***	1.6165	200	11.4225	11.3126	1.5918	766
Lev_{-1}	0.1588 ***	0.1338 ***	0.1282	200	0.1251	0.1016	0.1200	766
$Growth_{-1}$	0.0894	0.0514	0.2450	200	0.0876	0.0472	0.3046	766
$Analyst_{-1}$	11.9800 ***	2.0000 ***	17.7274	200	5.2128	0.0000	10.4186	766
$Institution_{-1}$	0.0350 **	0.0000 ***	0.1842	200	0.0052	0.0000	0.0721	766
$Issue3$	0.1650 ***	0.0000 ***	0.3721	200	0.0744	0.0000	0.2626	766
$Acquirer3$	0.4300 ***	0.0000 ***	0.4963	200	0.2272	0.0000	0.4193	766
$Target3$	0.0750	0.0000	0.2641	200	0.0705	0.0000	0.2561	766
$Divest3$	0.0200	0.0000	0.1404	200	0.0170	0.0000	0.1292	766
$Cross\text{-}list$	0.1350 ***	0.0000 ***	0.3426	200	0.0144	0.0000	0.1190	766
$Foreign\_Sales_{-1}$	0.5239 ***	0.5744 ***	0.2792	200	0.3325	0.2995	0.2946	766

Panel B: CEO turnover rates by country over the sample period
This panel reports the percentage of firm-year observations experiencing a CEO turnover in each country.

	Adopting	Local Standards	Total	# of firm-year obs
AUSTRIA	13.16%	14.29%	13.56%	59
DENMARK	12.50%	19.42%	18.49%	119
FRANCE	19.18%	11.74%	12.67%	1160
GERMANY	17.39%	12.53%	14.46%	809
ITALY	23.29%	12.50%	22.22%	81
SWITZERLAND	17.31%	10.11%	15.15%	297
	17.93%	12.37%	14.14%	2525

Table 2. Continued.

Panel C: Employee layoff rates by country over the sample period
This panel reports the percentage of firms experiencing an employee layoff in each country. *Layoff* is a dichotomous variable as defined in the Appendix.

	Adopting	Local Standards	Total	# of firm-year obs
AUSTRIA	18.33%	38.71%	25.27%	182
BELGIUM	19.32%	18.21%	18.44%	423
DENMARK	17.12%	21.89%	20.97%	577
FINLAND	31.25%	27.59%	27.81%	525
FRANCE	22.50%	20.79%	20.95%	3422
GERMANY	19.78%	32.46%	28.64%	3006
ITALY	30.51%	20.83%	29.62%	260
NETHERLANDS	19.61%	24.30%	24.06%	985
SWEDEN	31.34%	26.02%	26.48%	778
	21.87%	25.12%	24.50%	10158

Table 3: Logistic regression of the IFRS/U.S. GAAP adoption decision

This table reports the logistic regression results to model firms' decisions to adopt IFRS/U.S. GAAP.

$Prob [Adopt = 1] = Logit (a_0 + a_1 Close\_Held_0 + a_2 Labor\_Prod_{-1} + a_3 RET_{-1} + a_4 ROA_{-1} + a_5 Size_{-1} + a_6 Lev_{-1} + a_7 Growth_{-1} + a_8 Analyst_{-1} + a_9 Institution_{-1} + a_{10} Issue3 + a_{11} Acquirer3 + a_{12} Target3 + a_{13} Divest3 + a_{14} Cross\_List + a_{15} Foreign\_Sales_{-1} + \sum b_i Country_i + \sum c_j Year_j + \sum d_k Industry_k)$ (1)

Variable definitions are in the Appendix. Marginal effects measure the changes in the predicted probability from a one standard deviation increase from the mean for a continuous variable and from zero to one for an indicator variable with the other variables measured at the mean. ***,**,* indicate that a coefficient is significantly different from zero at the 1%, 5%, 10% level, one-sided tests for coefficients with predictions and two-sided tests for those without a prediction.

	Predicted sign	Estimate	Std Error	Marginal effects
$Close\_Held_0$	-	-0.0089**	0.0052	-1.26%
$Labor\_Prod_{-1}$	-	-0.0010**	0.0005	-2.16%
RET_{-1}		-0.2269	0.2894	-0.60%
ROA_{-1}		-1.1219	1.4396	-0.63%
$Size_{-1}$		0.5319***	0.0921	8.43%
Lev_{-1}		2.6008***	0.9774	2.25%
$Growth_{-1}$		-0.5966	0.4041	-1.00%
$Analyst_{-1}$		-0.0002	0.0097	-0.01%
$Institution_{-1}$		0.3516	1.1336	2.51%
$Issue3$		0.3146	0.3809	2.16%
$Acquirer3$		0.7995***	0.2639	5.84%
$Target3$		-0.2508	0.4824	-1.41%
$Divest3$		-0.0306	0.9187	-0.19%
$Cross\text{-}list$		1.4282**	0.5680	15.49%
$Foreign\_Sales_{-1}$		2.4177***	0.4602	6.16%
Country fixed effects			Yes	
Year fixed effects			Yes	
Industry fixed effects			Yes	
# of adopting firms			200	
# of local standards firms			766	
McFadden R^2			0.44	

Table 4: CEO turnover-to-performance sensitivity analysis
This table reports the changes in CEO turnover-to-performance sensitivities around IFRS/U.S. GAAP adoption.

Panel A: CEO turnover-to-performance sensitivity pre- and post-event year zero for adopting and local standards firms, respectively

This panel reports the estimation results of model (2).

$$Prob\ [CEO\_Turnover_t = 1] = Logit\ (a_0 + a_1\ DROA_{t-1} + a_2\ DRET_{t-1} + a_3\ Post + a_4\ Post^*DROA_{t-1} + a_5\ Post^*DRET_{t-1} + \textstyle\sum b_j Control\ variable_j)\qquad\qquad (2)$$

Control variables are the explanatory variables from the adoption prediction regression (except for *ROA* and *RET*). Variable definitions are in the Appendix. ***,**,* indicate that a coefficient is significantly different from zero at the 1%, 5%, 10% level, one-sided tests for coefficients with predictions and two-sided tests for those without a prediction.

	Predicted sign	Adopting		Local Standards	
		Estimate	Std Error	Estimate	Std Error
$DROA_{t-1}$	+	-0.5222	0.4939	0.4495	0.4100
$DRET_{t-1}$	+	0.0441	0.4899	0.6007**	0.3344
$Post_t$		-0.0830	0.2912	0.0220	0.1875
$Post_t^*DROA_{t-1}$	+ (Adopting sample only)	1.6124***	0.6194	-0.0359	0.4947
$Post_t^*DRET_{t-1}$		0.1620	0.5949	-0.1415	0.3971
$Close\_Held_t$		0.0014	0.3930	0.0053	0.3870
$Labor\_Prod_{t-1}$		-0.0001	0.0004	0.0001	0.0001
$Size_{t-1}$		0.1715**	0.0812	0.0792	0.0671
Lev_{t-1}		-1.0239	1.0145	0.0792	0.6124
$Growth_{t-1}$		-0.4314	0.8127	-0.8056*	0.4599
$Analyst_{t-1}$		-0.0071	0.0058	-0.0002	0.0077
$Institution_{t-1}$		0.1770	0.3812	-0.7720	0.8946
$Issue3$		-0.5136**	0.2312	-0.1203	0.3339
$Acquirer3$		0.2392	0.2054	-0.0483	0.2270
$Target3$		-0.2418	0.3713	0.5842**	0.2844
$Divest3$		-0.9779	0.9748	-0.1998	0.4895
$Cross\text{-}list$		-0.7291**	0.3273	-0.5278	0.5834
$Foreign\_Sales_{t-1}$		-0.3898	0.4184	-0.0468	0.3521
Country fixed effects		Yes		Yes	
Year fixed effects		Yes		Yes	
Industry fixed effects		Yes		Yes	
# of obs with CEO turnover		144		213	
# of obs without CEO turnover		659		1509	
MacFadden R^2		0.05		0.05	

Panel B: CEO turnover-to-performance sensitivity pre- and post-event year zero for the pooled sample

This panel reports the estimation results of model (2').

$Prob\ [CEO\_Turnover_t = 1] = Logit\ (a_0 + a_1\ DROA_{t-1} + a_2\ DRET_{t-1}\ + a_3\ Adopt + a_4\ Adopt*DROA_{t-1} + a_5\ Adopt*DRET_{t-1}\ + a_6\ Post\ + a_7\ Post*DROA_{t-1}\ + a_8\ Post*DRET_{t-1}\ + a_9\ Post*Adopt + a_{10}\ Post*Adopt*DROA_{t-1} + a_{11}\ Post*Adopt*DRET_{t-1}\ + \sum b_j Control\ variable_j)$　　　　(2')

Control variables are the explanatory variables from the adoption prediction regression (except for *ROA* and *RET*). Variable definitions are in the Appendix. ***,**,* indicate that a coefficient is significantly different from zero at the 1%, 5%, 10% level, one-sided tests for coefficients with predictions and two-sided tests for those without a prediction.

	Predicted sign	Estimate	Std Error
$DROA_{t-1}$	+	0.4495	0.4115
$DRET_{t-1}$	+	0.6007**	0.3356
Adopt		1.3759	1.7683
$Adopt*DROA_{t-1}$		-0.9718	0.6391
$Adopt*DRET_{t-1}$		-0.5566	0.5898
$Post_t$		0.0220	0.1882
$Post_t*DROA_{t-1}$		-0.0359	0.4965
$Post_t*DRET_{t-1}$		-0.1415	0.3986
$Post_t*Adopt$		-0.1050	0.3443
$Post_t*Adopt*DROA_{t-1}$	+	1.6483**	0.7891
$Post_t*Adopt*DRET_{t-1}$		0.3035	0.7112
$Close\_Held_t$		0.0053	0.0039
$Labor\_Prod_{t-1}$		0.0001	0.0001
$Size_{t-1}$		0.0792	0.0673
Lev_{t-1}		0.0792	0.6146
$Growth_{t-1}$		-0.8056*	0.4616
$Analyst_{t-1}$		-0.0002	0.0077
$Institution_{t-1}$		-0.7720	0.8979
Issue3		-0.1203	0.3351
Acquirer3		-0.0483	0.2278
Target3		0.5842**	0.2855
Divest3		-0.1998	0.4913
Cross-list		-0.5278	0.5856
$Foreign\_Sales_{t-1}$		-0.0468	0.3534
Interaction of *Adopt* with control variables		Yes	
Country fixed effects		Yes	
Year fixed effects		Yes	
Industry fixed effects		Yes	
# of obs with CEO turnover		357	
# of obs without CEO turnover		2168	
MacFadden R^2		0.06	

Table 5: Employee layoff-to-performance sensitivity analysis
This table reports the changes in employee layoff-to-performance sensitivities around IFRS/U.S. GAAP adoption.

Panel A: Employee layoff-to-performance sensitivity pre- and post-event year zero for adopting and local standards firms respectively
This panel reports the estimation results of model (3).

$$Prob \; [Layoff_t = 1] = Logit \; (a_0 + a_1 \; DROA_{t-1} + a_2 \; DRET_{t-1} + a_3 \; Post + a_4 \; Post^*DROA_{t-1} + a_5 \; Post^*DRET_{t-1} + \sum b_j Control \; variable_j) \qquad (3)$$

Control variables include the explanatory variables from the adoption prediction regression (except for *ROA* and *RET*) and additional variables measuring contemporaneous changes in a firm's overall scale of operations and union intensity. Variable definitions are in the Appendix. ***,**,* indicate that a coefficient is significantly different from zero at the 1%, 5%, 10% level, one-sided tests for coefficients with predictions and two-sided tests for those without a prediction.

	Predicted sign	Adopting		Local	
		Estimate	Std Error	Estimate	Std Error
$DROA_{t-1}$	+	0.5710*	0.3677	1.0252***	0.1688
$DRET_{t-1}$	+	0.4031**	0.2100	0.2770**	0.1185
$Post_t$		0.0539	0.2324	0.0773	0.0867
$Post_t{}^*DROA_{t-1}$	+ (Adopting sample only)	1.0670**	0.5256	0.0069	0.1947
$Post_t{}^*DRET_{t-1}$		0.3936	0.2806	0.1566	0.1364
$Close\_Held_t$		0.0066*	0.3870	0.0019	0.1530
$Labor\_Prod_{t-1}$		-0.0012	0.0008	-0.0002**	0.0001
$Size_{t-1}$		-0.0354	0.0579	-0.0549**	0.0262
Lev_{t-1}		0.7957	0.7662	0.6587**	0.2717
$Growth_{t-1}$		-0.2533	0.4230	-0.6068***	0.1736
$Analyst_{t-1}$		0.0017	0.0049	0.0058*	0.0031
$Institution_{t-1}$		-0.8532*	0.4644	-0.0586	0.2614
$Issue3$		0.1455	0.2135	-0.0327	0.1176
$Acquirer3$		-0.2395	0.1743	-0.3042***	0.0797
$Target3$		0.1932	0.2798	-0.0008	0.1280
$Divest3$		-0.1204	0.4763	0.5092**	0.2436
$Cross\text{-}list$		-0.1076	0.2474	0.3250	0.2240
$Foreign\_Sales_{t-1}$		-0.1126	0.3093	0.0708	0.1260
$\Delta Foreign\_Sales_t$		-0.5262	1.2439	-0.6732	0.5366
$Growth_t$		-8.3593***	1.0196	-4.7546***	0.3563
$Fix\_disposal_t$		-0.0172	0.2132	0.0669	0.0724
$Union$		-1.3019	1.9165	0.9336*	0.5658
Country fixed effects		Yes		Yes	
Year fixed effects		Yes		Yes	
Industry fixed effects		Yes		Yes	
# of obs with employee layoffs		422		2067	
# of obs without layoffs		1508		6161	
MacFadden R^2		0.27		0.17	

Panel B: Employee layoff-to-performance sensitivity pre- and post-event year zero for the pooled sample

This panel reports the estimation results of model (3').

Prob [Layoff$_t$ = 1]= Logit (a$_0$ + a$_1$ DROA$_{t-1}$ + a$_2$ DRET$_{t-1}$ + a$_3$ Adopt + a$_4$ Adopt*DROA$_{t-1}$ + a$_5$ Adopt*DRET$_{t-1}$ + a$_6$ Post + a$_7$ Post*DROA$_{t-1}$ + a$_8$ Post*DRET$_{t-1}$ + a$_9$ Post*Adopt + a$_{10}$ Post*Adopt*DROA$_{t-1}$ + a$_{11}$ Post*Adopt*DRET$_{t-1}$ + $\sum b_j$Control variable$_j$) (3')

Control variables include the explanatory variables from the adoption prediction regression (except for *ROA* and *RET*) and additional variables measuring contemporaneous changes in a firm's overall scale of operations and union intensity. Variable definitions are in the Appendix. ***,**,* indicate that a coefficient is significantly different from zero at the 1%, 5%, 10% level, one-sided tests for coefficients with predictions and two-sided tests for those without a prediction.

	Predicted sign	Estimate	Std Error
DROA$_{t-1}$	+	1.0252***	0.1692
DRET$_{t-1}$	+	0.2770**	0.1187
Adopt		2.2454	2.1641
Adopt*DROA$_{t-1}$		-0.4542	0.4017
Adopt*DRET$_{t-1}$		0.1261	0.2396
Post$_t$		0.0773	0.0869
Post$_t$*DROA$_{t-1}$		0.0069	0.1951
Post$_t$*DRET$_{t-1}$		0.1566	0.1366
Adopt*Post$_t$		-0.0234	0.2461
Post$_t$*Adopt*DROA$_{t-1}$	+	1.0602**	0.5561
Post$_t$*Adopt*DRET$_{t-1}$		0.2370	0.3098
Close_Held$_t$		0.0019	0.0015
Labor_Prod$_{t-1}$		-0.0002**	0.0001
Size$_{t-1}$		-0.0549**	0.0263
Lev$_{t-1}$		0.6587**	0.2722
Growth$_{t-1}$		-0.6068***	0.1739
Analyst$_{t-1}$		0.0058**	0.0031
Institution$_{t-1}$		-0.0586	0.2619
Issue3		-0.0327	0.1178
Acquirer3		-0.3042***	0.0798
Target3		-0.0007	0.1283
Divest3		0.5092**	0.2441
Cross-list		0.3250	0.2245
Foreign_Sales$_{t-1}$		0.0708	0.1262
ΔForeign_Sales$_t$		-0.6732	0.5376
Growth$_t$		-4.7549***	0.3570
Fix_disposal$_t$		0.0669	0.0725
Union		0.9336*	0.5668
Interaction of *Adopt* with control variables		Yes	
Country fixed effects		Yes	
Year fixed effects		Yes	
Industry fixed effects		Yes	
# of obs with employee layoffs		2489	
# of obs without layoffs		7669	
MacFadden R^2		0.19	