

Accounting Policy Disclosures and Analysts' Forecasts*

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Abstract

Using an international sample, I investigate whether the extent of firms' disclosure of their accounting policies in the annual report is associated with properties of analysts' earnings forecasts. Controlling for firm- and country-level variables, I find that the level of accounting policy disclosure is significantly negatively related to forecast dispersion and forecast error. In particular, I find that accounting policy disclosures are incrementally useful to analysts over and above all other annual report disclosures. These findings suggest that accounting policy disclosures reduce uncertainty about forecasted earnings. I find univariate but not multivariate support for the hypothesis that accounting policy disclosures are especially helpful to analysts in environments where firms can choose among a larger set of accounting methods.

Keywords Accounting policy disclosures; Financial analysts; Forecast dispersion and error; International

Condensé

Selon les normalisateurs comptables, l'information relative aux conventions comptables d'une entité publiante est essentielle aux utilisateurs des états financiers à qui elle permet d'interpréter ces états (voir, par exemple, la norme comptable internationale (IAS) 1, l'Accounting Principles Board Opinion 22 et le Statement of Standard Accounting Practice 2). L'auteur se demande si l'étendue de l'information que publient les entreprises sur leurs conventions comptables importe pour les analystes financiers, qui constituent un ensemble important d'utilisateurs des états financiers. À l'aide d'un échantillon regroupant plusieurs pays et couvrant la première moitié des années 90, l'auteur vérifie si l'étendue de l'information relative aux conventions comptables fournie dans le rapport annuel est en relation négative avec deux propriétés des prévisions de résultats des analystes : la dispersion et l'erreur. L'auteur se demande également si l'information relative aux conventions comptables que publient les entreprises est plus importante pour les analystes lorsque le contexte offre à ces entreprises un choix de méthodes comptables plus varié. Jusqu'à maintenant, les chercheurs n'ont pas étudié la relation entre la communication d'informations sur les conventions

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comptables, d'une part, et la dispersion et l'erreur des prévisions des analystes, d'autre part, et les travaux précédents faisant intervenir plusieurs pays ne se sont pas attardés à l'analyse de la relation entre l'information fournie à l'échelle de l'entreprise et les propriétés des prévisions.

Il est souvent préconisé, dans les écrits sur l'analyse des états financiers, de commencer l'évaluation de la qualité des méthodes comptables d'une entreprise par la définition de ses principales conventions comptables. Chang et Most (1985) réalisent un sondage auprès d'analystes de Nouvelle-Zélande, du Royaume-Uni et des États-Unis pour constater que leurs sujets accordent passablement plus d'importance à l'information relative aux conventions comptables qu'aux autres renseignements contenus dans le rapport annuel. Selon les observations d'autres chercheurs (dont McEwen et Hunton, 1999), d'autres éléments du rapport annuel sont jugés plus importants par les analystes. Vergoossen (1997) se demande, quant à lui, si l'attention des analystes financiers néerlandais est surtout retenue par les résultats déclarés, peu importe que l'entreprise ait modifié ses méthodes comptables. En vérifiant plus précisément si les analystes font mention des modifications comptables dans leurs rapports, il conclut que certains d'entre eux sont induits en erreur par ces modifications et que l'importance qu'ils accordent aux résultats est en relation négative avec l'étendue de l'information fournie. Vergoossen ne vérifie cependant pas directement si les analystes utilisent l'information fournie, outre le fait de mentionner dans leurs rapports financiers que des modifications ont été apportées. Un test plus direct consiste à déterminer si les propriétés des prévisions de résultats des analystes varient avec l'information fournie relativement aux conventions comptables.

L'information que fournit l'entreprise au sujet des conventions comptables peut être utile aux analystes financiers pour plusieurs raisons. Même si les méthodes utilisées par les entreprises sont constantes dans le temps, l'information fournie dans le rapport annuel sur les conventions comptables peut faciliter aux analystes la formulation de prévisions ou, à tout le moins, réduire le temps qu'ils doivent consacrer à la détermination des méthodes qui ont été suivies par l'entreprise. Si, de l'avis des analystes financiers, l'information fournie contient des renseignements utiles, il serait plausible que l'on observe une relation entre cette information et les propriétés des prévisions de résultats. Chose plus importante, il est impossible pour un utilisateur de savoir si l'entreprise applique les mêmes méthodes dans le temps si cette dernière ne fournit pas d'information sur ses conventions comptables. Au reste, les PCGR du pays dans lequel l'entreprise a son siège social doivent permettre l'adoption d'autres méthodes comptables pour que l'entreprise puisse songer à de quelconques modifications. L'auteur s'attend donc à ce que l'information relative aux conventions comptables que fournit l'entreprise se révèle le plus utile lorsque ladite entreprise peut faire un choix parmi un certain nombre de méthodes comptables pour comptabiliser un type donné d'opérations.

Compte tenu du fait que les entreprises jouissent d'une certaine latitude dans la détermination de l'ampleur des informations fournies, l'auteur contrôle cette endogénéité en testant simultanément les choix en matière d'information et les propriétés des prévisions de résultats. Bien que l'information relative aux conventions comptables ne constitue qu'une petite partie, toutes proportions gardées, de l'ensemble des renseignements communiqués par les entreprises, l'auteur constate, en procédant à des tests à une et à plusieurs variables (méthode des triples moindres carrés), que cette information, mesurée à l'échelle de l'entreprise par le Center for International Financial Analysis and Research (CIFAR, 1995 ; 1993),

est en relation négative significative avec la dispersion et l'erreur des prévisions. Cette relation persiste lorsque l'ampleur des autres informations fournies dans le rapport annuel est prise en considération. Les observations de l'auteur confirment les assertions selon lesquelles, d'une part, l'extension de l'information relative aux conventions comptables réduit l'incertitude des analystes financiers au sujet des résultats futurs de l'entreprise ou de la façon dont ces résultats sont calculés et, d'autre part, l'utilité de cette information pour les analystes est supérieure à celle des autres informations fournies dans le rapport annuel. Des tests supplémentaires confirment modérément (c'est-à-dire nettement dans le cas des tests à une variable mais faiblement dans le cas des tests à plusieurs variables) l'hypothèse selon laquelle l'information relative aux conventions comptables fournie par l'entreprise revêt davantage d'importance lorsque cette dernière jouit d'une plus grande latitude dans le choix de ses méthodes comptables.

La présente étude vient enrichir les travaux réalisés jusqu'à maintenant sur le lien entre l'information fournie par l'entreprise et les prévisions des analystes. Les chercheurs avaient jusqu'ici étudié les déterminants et les conséquences des choix des entreprises en matière d'information à fournir, de façon générale. Lang et Lundholm (1996) ont ainsi démontré, à partir d'un échantillon de sociétés des États-Unis, que l'évaluation de l'information globale fournie par les entreprises, selon les analystes, est en relation négative avec l'erreur et la dispersion des prévisions qu'ils produisent. Aucun chercheur n'a cependant procédé, jusqu'à maintenant, à une étude empirique de l'incidence de l'information relative aux conventions comptables fournie par les entreprises — une lacune surprenante, compte tenu du fait que les normalisateurs jugent cette information indispensable. Au surplus, il existe peu d'études sur les conséquences de l'information fournie en contexte international (Saudagaran et Meek, 1997). Les recherches effectuées sur les propriétés des prévisions des analystes en contexte international sont, elles aussi, limitées (Chang, Khanna et Palepu, 2000).

1. Introduction

Financial statements must be clear and understandable. They are based on accounting policies which vary from enterprise to enterprise, both within a single country and among countries. Disclosure of the significant accounting policies on which the financial statements are based is therefore necessary so that they may be properly understood. (*International Accounting Standards No. 1*, paragraph 10)

Accounting standard setters argue that information about the accounting policies used by a reporting entity is essential for financial statement users in interpreting financial statements (e.g., *International Accounting Standard No. 1*; *Accounting Principles Board Opinion 22*; *Statement of Standard Accounting Practice 2*). In this paper, I investigate whether the extent of firms' disclosure of their accounting policies matters to financial analysts, an important user group of financial statements. Specifically, using a multicountry sample from the first half of the 1990s, I examine whether the level of accounting policy disclosures in the annual report is negatively associated with two properties of analysts' earnings forecasts: dispersion and error. I also investigate whether accounting policy disclosures are more important to analysts in environments that allow more choice among accounting methods.

Although accounting policy disclosures are a relatively small part of firms' total disclosures, I document that such disclosures, as measured at the firm level by the Center for International Financial Analysis and Research (CIFAR 1993; 1995), are significantly negatively associated with forecast dispersion and error. These results also hold when the level of other annual report disclosures is considered. My findings are consistent with assertions that increased disclosure about accounting policies reduces financial analysts' uncertainty about future earnings or how those earnings are computed, and that such disclosures are helpful to analysts over and above other annual report disclosures. Additional tests provide limited support for the hypothesis that accounting policy disclosures are more important in settings allowing greater discretion over accounting methods.

This paper adds to the literature examining the link between disclosure and analyst forecasts. Existing research has studied the determinants and consequences of firms' overall disclosure choices. For example, Lang and Lundholm (1996) document that analysts' ratings of overall firm disclosure are negatively related to analyst forecast error and dispersion for a sample of U.S. firms. However, no prior studies have empirically investigated the impact of accounting policy disclosures — a surprising lack given that standard setters view such disclosures as essential. Furthermore, there are few studies on the effects of disclosures in an international setting (Saudagaran and Meek 1997). The amount of research on the properties of analysts' forecasts in an international setting is also limited (Chang, Khanna, and Palepu 2000). In particular, no prior multicountry study has examined the association between *firm-level* disclosures and forecast properties.

The rest of this paper is organized as follows. In the next section, I discuss accounting policy disclosures in more detail and develop the hypotheses. Sections 3 and 4 present the data and empirical analyses, respectively. Finally, section 5 concludes the paper.

2. Background and hypothesis development

In this section, I first discuss the relation between firm-provided disclosures and financial analysts' earnings forecasts. Next, I review some research findings related to the importance of such disclosures to analysts and other users. Then, on the basis of this discussion, I develop the hypotheses.

Accounting policy disclosures and analysts' earnings forecasts

In general, knowing the methods and principles upon which firms base their earnings computations is essential to forecasting future earnings. I do not consider which accounting policy choices firms make, only the level of disclosure about these choices. Gietzmann and Trombetta (2001) discuss effects of firms' specific choices of accounting policies. If investors and analysts are unsure about the accounting policies used in measuring income, they face more uncertainty in forecasting future earnings numbers (and may attach less importance to financial statement information). They can obtain knowledge about accounting policies most easily from firm-specific disclosures. They may also glean this information indirectly by analyzing the time series of earnings and by having firm- and industry-specific

expertise, but learning from time series presupposes some stability of a firm's operations and industry structure.

Disclosures of accounting policies may be helpful to financial analysts for several reasons. Even if firms follow consistent methods over time, annual report disclosure of the accounting policies followed may make analysts' forecasting task easier or at least reduce the time they must spend on ascertaining which methods have been followed. More importantly, unless the firm discloses its policies, a user cannot know whether the firm is consistently following the same methods over time. Moreover, in order to change accounting methods, home-country generally accepted accounting principles (GAAP) must permit alternative methods. Thus, I expect accounting policy disclosures to be most useful when firms can choose among a number of accounting methods to account for a given type of transaction.

The importance of accounting policy disclosures: Prior evidence

Previous studies have not examined the relation between accounting policy disclosures and analyst forecast dispersion and error,¹ and no cross-country study has investigated the association between *firm-level* disclosures and forecast properties.² If financial analysts view these disclosures as containing useful information, one would expect such disclosures to be associated with properties of earnings forecasts.

Texts on financial statement analysis (e.g., Palepu, Bernard, and Healy 1996, 3–7) often advocate beginning the analysis of a firm's accounting quality by identifying the key accounting policies. Chang and Most (1985) survey analysts in New Zealand, United Kingdom, and United States and find that they rate the importance of accounting policy disclosures quite highly compared with other annual report disclosures. Other studies (e.g., McEwen and Hunton 1999) find that analysts view other items of the annual report as more important. Vergoossen (1997) investigates whether Dutch investment analysts "fixate" on reported earnings numbers regardless of whether the firm has changed its accounting methods. Focusing on whether analysts mention the accounting changes in their reports, he concludes that some were misled by accounting changes and that the degree of fixation is negatively associated with the level of disclosure. Vergoossen (1997) does not, however, directly test whether the analysts used the disclosures other than by mentioning in their investment reports that the changes had been made. A more direct test is whether the properties of analysts' earnings forecasts vary with disclosure of accounting policies.

In summary, although accounting policy disclosures are a relatively small part of firms' overall disclosures, analysts may find them useful. Whether they are associated with analysts' earnings forecasts is ultimately an empirical question.³

Hypotheses

The above discussion leads to the main hypothesis to be tested:

HYPOTHESIS 1. *The level of accounting policy disclosures is negatively associated with the dispersion and error in analysts' earnings forecasts.*

Accounting policy disclosures may serve as a proxy for other information in the annual report. This is a potential problem, especially since the relation between earnings forecasts and policy disclosures, if any, may result from information contained elsewhere in the annual report (i.e., in the basic financial statements, other notes or general information). Therefore, I also test whether accounting policy disclosures are incrementally informative beyond other annual report information.

Since managers have some discretion over accounting policy disclosures, I also test whether potential endogeneity of reporting choice affects my results. For this purpose, I include several variables to explain variation in disclosure in a system of equations that captures both the effects and determinants of disclosure variations.

I also examine whether the usefulness of these disclosures varies with the degree of flexibility managers have in choosing among accounting methods. This flexibility depends on home-country accounting standards. The financial reporting environment varies considerably across countries (e.g., Ball, Kothari, and Robin 2000; Basu, Hwang, and Jan 1998). For instance, U.S. GAAP are generally more rigid than other countries' GAAP with respect to the number of choices allowed among accounting methods (e.g., Basu et al. 1998; Nobes and Parker 1998). I investigate whether the role of accounting policy disclosures in explaining forecast dispersion and error depends on the number of allowable accounting methods. In the extreme, if firms have no choice about which accounting methods to employ, annual report disclosure about the "chosen" policy should be of little value. If, however, a number of methods are acceptable, users of financial statements will, at a minimum, have to spend less time and effort on scrutinizing the financials if sufficient disclosures are provided. From this contrast follows the second hypothesis:

HYPOTHESIS 2. The level of accounting policy disclosures is more negatively associated with forecast dispersion and error in environments that have a large set of allowable accounting methods compared with settings that have fewer allowable accounting methods.

Hypothesis 2 draws on cross-country heterogeneity of financial reporting practices. O'Brien (1998) raises the question whether analysts' abilities to forecast earnings are "important" outside the United States. Her argument is that financial statements in some countries have historically been prepared to satisfy legal (including tax) requirements, rather than to inform investors. Although countries have different traditions, different degrees of capital market development, and so on, this does not necessarily imply that analysts' earnings forecasts lack importance in a country such as Germany, where financing comes mostly from sources other than equity investors. Consistent with the perceived need for the information provided by earnings forecasts, Germany has a relatively large number of analysts following each firm.⁴ Furthermore, Capstaff, Paudyal, and Rees (2000) show that forecast revisions of German analysts are associated with subsequent abnormal stock returns; the same is true of French and UK forecast revisions.⁵ Hence, there are reasons to believe that these forecasts are important for investors in settings outside the United States.

3. Data and control variables

In this section, I describe the disclosure measures, analyst forecast data, the measure of extent of flexibility in choosing among accounting methods, and control variables. Then I discuss sample selection and descriptive statistics. Table 1 summarizes variable definitions and data sources.

Disclosure data

The starting point for this study is CIFAR evaluations of annual report disclosure levels among leading non-financial companies worldwide (CIFAR 1993; 1995).

TABLE 1
Variables used in the study

Variable	Explanation	Data source(s)
<i>Forecast dispersion</i>	The standard deviation of analysts' forecasts (averaged over fiscal months 4–6), scaled by stock price. (Winsorized at 1.)	I/B/E/S
<i>Forecast error</i>	The absolute value of the difference between mean forecast and actual EPS (averaged over fiscal months 4–6), scaled by stock price. (Winsorized at 1.)	I/B/E/S
<i>Accounting policy disclosures (APD)</i>	Firm-level measure of comprehensiveness of disclosures in the annual report related to accounting policies. See the appendix.	CIFAR 1993, 1995
<i>Nonaccounting policy disclosures</i>	Firm-level measure of comprehensiveness of disclosures in the annual report other than those related to accounting policies. Computed as a weighted average of the six CIFAR annual report categories other than APD. See the appendix.	CIFAR 1993, 1995
<i>Earnings change</i>	The absolute value of the change in earnings over previous year scaled by last year's earnings.	I/B/E/S
<i>Negative earnings</i>	Indicator variable for loss firms.	See note 1
<i>Leverage</i>	Total liabilities divided by total assets.	See note 1
<i>Percent new forecasts</i>	A measure of the "staleness" of analysts' forecasts. Using I/B/E/S summary files, it is not possible to determine whether forecasts that were not updated in a given month still reflect the analyst's best estimate or not, and consequently there may be some "stale" forecasts included (see Lang and Lundholm 1996). Computed as the number of forecasts revised during the month plus the number of first-time forecasts issued during the month divided by the number of forecasts at month-end, averaged over the number of months included in the tests	I/B/E/S

(The table is continued on the next page.)

TABLE 1 (Continued)

Variable	Explanation	Data source(s)
<i>Income smoothing</i>	Country-level measure of income smoothing. Computed as the ratio of small (5%) positive earnings surprises to small negative earnings surprises.	Brown and Higgins 2001
<i>Earnings guidance</i>	Country-level measure of managers' guidance for analysts' forecasts. Computed as the coefficient of variation of small profit surprises as a percent of "other surprises".	Brown and Higgins 2001
<i>Industry</i>	Nine indicator variables for I/B/E/S industry sectors.	I/B/E/S
<i>Firm size</i>	Market value of equity in millions of 1993 U.S. dollars.	See note 1
<i>Stock exchange listings</i>	A weighted number of stock exchanges a firm is listed on. Summarizes all the major stock exchanges on which a firm was listed during the sample period. Listings on local (i.e., domestic) exchanges, European (other than London), London, Asian, and American listings are recorded. For U.S. firms, listings on London Stock Exchange and Tokyo Stock Exchange have been recorded in addition to domestic listings. Listings on U.S. exchanges are given weight of 1.5, whereas all other listings, including ADRs (without exchange listing), are given weight 1, and the scores for each firm are summed.	See note 1; various Web-based sources; direct contact with firms
<i>Flexibility in accounting standards</i>	A country-level measure of the extent of choice among accounting methods (i.e., the number of methods allowed).	Basu, Hwang and Jan 1998
<i>Auditor</i>	Indicator variable for Big 6 auditor.	See note 1
<i>Government</i>	Indicator variable for government-controlled firms.	See note 1
<i>Parent-only</i>	Indicator variable for firms that issue parent-only financial statements rather than consolidated group statements.	See note 1
<i>Common law</i>	Indicator variable for common-law (as opposed to code-law) system.	La Porta et al. 1997
<i>Control</i>	Country-level measure of ownership concentration. Fraction of the firms' voting rights owned by the controlling shareholder.	La Porta et al. 1997

Note:

Firm-level data are from a number of sources: Datastream, Global Vantage, COMPUSTAT/CRSP, Moody's International, Economica, Global Access/ISI, S&P, CIFAR *Global Company Handbook*, various stock exchanges, Bank of New York, I/B/E/S, ETLA, and others.

CIFAR measures, on a scale from 0 to 100, firms' disclosure *levels* based on the inclusion or exclusion of 85 annual report items for the total disclosure index and 20 items for the accounting policy disclosure score.⁶ Firms are not penalized for not disclosing nonapplicable items.

The appendix contains details on the items CIFAR includes in the various categories. In addition to scoring accounting policy disclosures, CIFAR also measures the comprehensiveness of the basic financial statements as well as the extent of disclosures of general information, stockholders' information, and supplementary information. I compute nonaccounting policy disclosures as a weighted average of these categories. Consistent results are obtained when using factor analysis to extract a composite measure.

The CIFAR disclosure scores for both accounting policy disclosure scores and overall disclosure have undergone extensive validity tests (see Hope 2003b). For example, Frost and Ramin's 1997 country-level rankings of accounting policy disclosures for five countries corroborate those of CIFAR. Comparing my own scoring of accounting policy disclosures against CIFAR's for a sample of 21 firms indicates substantial overlap (correlation 0.82). I have also compared CIFAR's overall disclosure scores vis-à-vis various countries' "Best Annual Report Awards" and with Botosan's 1997 scores.⁷ These comparisons provide further support for the validity of the CIFAR scores. On the basis of these examinations, I conclude that the CIFAR scores capture meaningful variation in corporate disclosure.

Analyst forecast data

All data on analysts' forecasts are from the I/B/E/S Domestic and International Summary Files. I define forecast dispersion as:

$$\frac{\text{Standard deviation of forecasted EPS}}{\text{Beginning-of-fiscal-year stock price}}$$

Similarly, I define forecast error as the error in the mean forecast:⁸

$$\frac{|\text{Actual EPS} - \text{Mean forecasted EPS}|}{\text{Beginning-of-fiscal-year stock price}}$$

The mean forecast error and the standard deviation of forecasts are computed as the simple average across the fourth through sixth month following the fiscal year-end. For the forecast dispersion tests, the number of forecasts must exceed three. The focus of this study is on assessing the impact of disclosure generally, rather than at a particular announcement date. Thus, the annual report data need to be available to analysts when their forecasts are prepared. However, accounting policy disclosures are unlikely to be significantly associated with forecasts made immediately prior to the next earnings announcement.⁹

Flexibility in home-country GAAP

For the extent of flexibility managers have in choosing among accounting methods, I use the measure developed by Basu et al. 1998.¹⁰ This index is based on an equal weighting of nine accounting areas that represent some of the major differences in international financial reporting practices in the first half of the 1990s. For each of the accounting dimensions, Basu et al. (1998) assigned a score between 0 and 2, then summed the scores across all dimensions and finally assigned ranks to countries. For example, during the sample period, Australia required amortization of purchased goodwill but France permitted either writing it off to reserves or amortizing it over its useful life. This difference gave France a higher score for flexibility than Australia in the area of amortization of goodwill. With the Basu et al. 1998 index, Japan and the Netherlands rank as the sample countries with the highest degree of flexibility and the United States, Hong Kong, and Canada as the least flexible.

Control variables

Table 1 provides definitions and data sources for the firm- and country-level control variables I employ. At the firm level, I control for three factors that proxy for analysts' difficulty in forecasting earnings, and for industry and the age of the earnings forecast. Variability in earnings should increase the difficulty of forecasting, so I expect a positive relation between earnings change and forecast dispersion and error. Moreover, because previous research documents that analysts find it difficult to forecast earnings for firms that show losses, I expect an indicator variable for negative earnings to be positively correlated with forecast dispersion and error. Firms that are highly leveraged tend to have more variable earnings, and hence I predict a positive sign for leverage. I include indicator variables for industry (i.e., I/B/E/S sectors), as some industries may be more stable over time than others. I also include a variable, percentage new forecasts, that controls for possible staleness of the I/B/E/S forecasts.¹¹ I expect a positive relation with forecast dispersion and error.

In addition to the firm-level control variables, I include variables that attempt to capture cross-country variation in the difficulty in forecasting earnings. To the extent that income smoothing and managers' guidance to analysts vary by country, controlling for these factors is important. I include country-level measures of income smoothing and earnings guidance from Brown and Higgins 2001.¹² Both of these variables should be negatively related to forecast dispersion and forecast error.

Sample and descriptive statistics

Table 2 presents data on sample selection and descriptive statistics for the disclosure scores, analyst data, and control variables. The table also lists the number of observations, the mean forecast error and dispersion, and the mean accounting policy disclosure scores by country.

Accounting policy disclosure scores and forecast data are available for a total of 1,490 firm-years (or 1,059 firms). After a loss of 285 observations because of missing control variables and explanatory variables for variations in disclosure levels, the final

sample comprises 1,205 observations (or 811 firms) for tests of forecast error and 1,169 observations (or 783 firms) for tests of forecast dispersion.¹³

Panel B of Table 2 reports that the average (median) earnings forecast dispersion and error are 1.1 percent (0.5 percent) and 4.1 percent (0.8 percent) of stock price, respectively. Panel C shows that firms in Japan and the United States have the lowest mean forecast dispersion, whereas Norway and Finland have the highest dispersion. Similarly, the mean forecast error is lowest for firms in Japan and the United States, and highest in Switzerland and Finland. Ireland, Finland, and the United Kingdom have the highest mean scores for accounting policy disclosures, and Austria, Hong Kong, and Denmark the lowest.¹⁴

4. Empirical analysis

I first discuss correlations among variables and a univariate test of Hypothesis 2. Then I present multivariate tests. Finally, I report the results of robustness and specification tests.

TABLE 2
Sample and descriptive statistics

Panel A: Sample					
Firm-years in CIFAR 1993, 1995 with accounting policy disclosure scores					1,991
Less: Firm-years with missing forecast data					<u>501</u>
Firm-years with disclosure and analyst data					1,490
Less: Firm-years with missing data on control variables and explanatory variables for variations in disclosure levels					<u>285</u>
Number of observations for multivariate test of forecast error					1,205
Less: Firm-years with fewer than three analyst forecasts					<u>36</u>
Number of observations for multivariate test of forecast dispersion					1,169
Panel B: Descriptive statistics					
	Mean	Std. d.	Percentiles		
			25	50	75
Test and dependent variables					
<i>APD</i>	73.3	15.6	65.0	75.0	85.0
<i>Forecast dispersion</i>	0.011	0.037	0.003	0.005	0.010
<i>Forecast error</i>	0.041	0.119	0.002	0.008	0.027
Control and moderating variables					
<i>Non-APD</i>	74.9	7.9	70.2	75.7	80.3
<i>Leverage</i>	0.66	0.16	0.56	0.66	0.77
<i>Earnings change</i>	0.36	0.35	0.09	0.22	0.62
<i>Income smoothing</i>	1.54	0.42	1.18	1.62	1.99
<i>Earnings guidance</i>	-0.16	0.04	-0.17	-0.15	-0.13
<i>Flexibility in accounting standards</i>	5.4	2.9	2	6	7.5

(The table is continued on the next page.)

TABLE 2 (Continued)

Panel C: Mean accounting policy disclosure scores, mean forecast dispersion and forecast error, and number of observations by country				
	APD	Dispersion	Error	<i>n</i> *
Australia	78.3	0.008	0.026	39
Austria	64.7	0.019	0.100	15
Belgium	73.5	0.018	0.031	14
Canada	72.7	0.008	0.039	17
Denmark	68.8	0.015	0.066	15
Finland	84.7	0.031	0.118	18
France	75.2	0.010	0.046	69
Germany	75.5	0.017	0.071	50
Hong Kong	66.3	0.009	0.053	25
Ireland	85.4	0.007	0.028	10
Japan	75.5	0.005	0.017	190
Netherlands	77.7	0.022	0.107	28
New Zealand	72.1	0.029	0.059	12
Norway	75.7	0.037	0.102	23
Sweden	82.9	0.015	0.055	27
Switzerland	77.6	0.019	0.159	25
United Kingdom	83.2	0.007	0.046	140
United States	69.1	0.006	0.018	488
				<u>1,205</u>

Notes:

See Table 1 for explanations of variables.

* Number of observations for the multivariate test of forecast error (compare panel A).

Univariate relations

Panel A of Table 3 presents Pearson correlations among forecast dispersion, forecast error, accounting policy disclosures, and control variables. As hypothesized, the level of accounting policy disclosures is significantly negatively correlated with earnings forecast dispersion and forecast error. However, the correlation coefficients are not particularly large (-0.08 and -0.06 , respectively), which is consistent with such disclosures being only a part of the overall information set that analysts use. Nonaccounting policy disclosures are also significantly negatively correlated with forecast dispersion and error (-0.11 and -0.14). As expected, accounting policy disclosures and other annual report disclosures are positively correlated (0.36). Hence, the univariate results must be interpreted with caution and I present results of multivariate tests below.

Consistent with the expectations for earnings change, negative earnings, and leverage as proxies for the complexity of forecasting earnings, all three variables

TABLE 3
Univariate relations**Panel A: Correlations***

Variable	Dispersion	Error	APD	Non-APD	Δ Earnings	Negative earnings	Leverage	% new	Smoothing	Guidance
<i>Forecast error</i>	0.59									
<i>APD</i>	-0.08	-0.06								
<i>Non-APD</i>	-0.11	-0.14	0.36							
<i>Earnings change</i>	0.23	0.30	0.01	-0.10						
<i>Negative earnings</i>	0.27	0.17	-0.04	-0.06	0.37					
<i>Leverage</i>	0.11	0.12	0.00	-0.15	0.22	0.24				
<i>Percent new forecasts</i>	0.02	0.04	0.10	0.13	0.09	0.04	-0.05			
<i>Income smoothing</i>	-0.18	-0.18	-0.01	0.05	-0.18	0.02	-0.11	-0.09		
<i>Earnings guidance</i>	-0.18	-0.15	0.03	0.06	-0.21	-0.01	-0.06	-0.05	0.55	
<i>Flexibility</i>	0.11	0.10	0.21	-0.14	0.24	-0.04	0.26	0.05	-0.76	-0.43

(The table is continued on the next page.)

TABLE 3 (Continued)

Panel B: Univariate test of Hypothesis 2[†]

Pearson correlations between level of APD and forecast dispersion and between APD and forecast error for low and high degree of flexibility in choosing among accounting methods (Hypothesis 2)

	Low flexibility	Prediction (> or < or ?)	High flexibility	<i>p</i> -value of difference
$\rho(APD, Dispersion)$	0.01 [‡]	>	-0.13	<0.01
$\rho(APD, Forecast\ error)$	0.03 [‡]	>	-0.10	<0.01

Notes:

* See Table 1 for explanations of variables. All correlations are significant at the 5% level (two-tailed) or better except for those in italics. Spearman correlations (not shown for brevity) are consistent with the Pearson correlations presented here.

[†] The significance test is based on the Fisher *z* transformation (e.g., Jaccard, Turrisi, and Wan 1990, 68). The low and high cutoffs are based on medians.

[‡] Insignificantly different from zero.

are positively correlated with dispersion and error. Both income smoothing and earnings guidance are negative as predicted. Finally, note that the extent of accounting policy disclosure is positively correlated with the number of choices allowed by accounting standards (0.21), a finding consistent with the intuition that the more accounting methods firms can choose from, the more relevant it is for investors to know which methods were selected.

Panel B of Table 3 reports univariate results from testing whether accounting policy disclosures are more negatively correlated with forecast dispersion and forecast error when a firm is allowed to choose from a larger number of accounting methods (Hypothesis 2). The findings support the hypothesis; when flexibility is low, the correlations are 0.01 and 0.03 (both insignificant), whereas the correlations are -0.13 and -0.10 in environments where firms can choose among a larger set of acceptable accounting methods. These differences are significant at better than the 1 percent level, suggesting that the usefulness of accounting policy disclosures varies with the number of choices accounting standards allow.

Multivariate tests

Managers have some discretion over what and how much information to provide about accounting policies in the annual report. Hausman's 1978 test rejects the exogeneity of accounting policy disclosure levels to forecast dispersion and forecast error at the 5 percent level. It is thus important to control for firms' incentives to disclose their accounting policies. I do so by simultaneously testing disclosure levels and forecast dispersion (and disclosure levels and forecast error) in a system of equations (3SLS).

I include an extensive set of explanatory variables in a model where accounting policy disclosure level is the dependent variable.¹⁵ Firm-level factors in this study include stock exchange listings, firm size, Big 8 (or Big 6) auditor, leverage and indicator variables for whether the firm is government-controlled, issues only parent-company financial statements rather than consolidated group statements, and firm industry. I expect firms listed on more stock exchanges, larger firms, and firms with a brand name auditor to disclose more, and firms with parent-only financials to disclose less. I do not have predictions for leverage, government control, and industry membership.

In addition to these firm-level factors, I include three country-level variables. On the basis of recent research (e.g., La Porta et al. 1997 and 1999; Ball et al. 2000), I use an indicator variable for whether the country has a common-law tradition or not. I also include a country-level measure of firm ownership concentration. I expect common law to be positively associated with disclosure and ownership concentration to be negatively associated with disclosure. Finally, I expect firms operating in environments that permit relatively more accounting methods to provide greater accounting policy disclosures in the annual report.

Tables 4 and 5 report the 3SLS results for forecast dispersion and forecast error, respectively. Panel A includes only accounting policy disclosures and control variables. Panel B adds nonaccounting policy disclosures and terms for the way accounting policy disclosures interact with accounting method flexibility.

The main hypothesis predicts that the level of accounting policy disclosures is negatively associated with forecast dispersion and forecast error. Tables 4 and 5 (panel A) show that the estimated coefficient on the level of these disclosures is significantly negative at better than the 1 percent level for both forecast dispersion and forecast error.¹⁶ These results support Hypothesis 1 and are consistent with the argument that accounting policy disclosures provide useful information to analysts in forecasting earnings.¹⁷

The estimated coefficients on the control variables are consistent with my expectations. Both the change in earnings relative to last-year and negative earnings are strongly positively associated with forecast dispersion and error, consistent with these two variables proxying for analysts' task complexity. Similarly, leverage is positively correlated with forecast dispersion and error, consistent with highly leveraged firms reporting relatively variable earnings. As expected, the proxies for income smoothing and managers' earnings guidance are significantly negatively related to dispersion (and income smoothing is significantly negatively associated with forecast error).

Panel A further shows that the extent of accounting policy disclosures is strongly and positively associated with stock exchange listings and firm size. As expected, common-law systems are associated with greater disclosure levels, whereas environments with high ownership concentration have low disclosure levels. Firms in countries that offer more choice among accounting methods disclose significantly more about their chosen accounting policies.¹⁸

Panel B of Tables 4 and 5 presents the results for whether accounting policy disclosures are informative in explaining forecast dispersion and error, conditional

on all other annual report disclosures. In other words, is the level of disclosures about accounting policies incrementally useful in explaining these forecast properties, given that the model also includes other CIFAR annual report scores? The estimated coefficients on accounting policy disclosures are negative and significant in both tables. The composite measure of the other annual report disclosures from CIFAR is also negative and significant (in a directional test) for both forecast dispersion and forecast error. These outcomes further support the hypothesis that disclosures of accounting policies reduce analysts' uncertainty about firms' future prospects. They also support the hypothesis that accounting policy disclosures are helpful to analysts also when considering all other annual report disclosures.

An alternative to testing with nonaccounting policy disclosures as *one* composite measure is to include each of the six CIFAR measures (i.e., income statement, balance sheet, cash/funds flow statement, general information, stockholders' information, and supplementary information) as separate variables in the regression. The coefficient on accounting policy disclosures is still negative with this specification,

TABLE 4
Simultaneous equations analysis (3SLS) of forecast dispersion and the level of accounting policy disclosures

Variable	Forecast dispersion				APD			
	Pred.	Coef.	z	p > z	Pred.	Coef.	z	p > z
<i>APD</i>	-	-0.038	-3.81	<0.01				
<i>Earnings change</i>	+	0.602	4.17	<0.01				
<i>Negative earnings</i>	+	1.877	11.50	<0.01				
<i>Leverage</i>	+	0.909	2.90	<0.01	?	5.651	1.97	0.05
<i>Percent new forecasts</i>	+	0.903	2.29	0.01				
<i>Income smoothing</i>	-	-0.512	-3.65	-0.01				
<i>Earnings guidance</i>	-	-3.790	-2.58	-0.01				
<i>Stock exchange listings</i>					+	2.215	5.87	<0.01
<i>Firm size</i>					+	0.001	3.15	<0.01
<i>Auditor type</i>					+	1.377	1.00	0.16
<i>Government-controlled</i>					?	8.149	1.42	0.16
<i>Parent-only financials</i>					-	-6.918	-0.96	0.17
<i>Common law</i>					+	8.436	5.01	<0.01
<i>Ownership concentration</i>					-	-8.722	-1.60	0.06
<i>Flexibility</i>					+	2.397	7.74	<0.01
<i>Forecast dispersion</i>					?	-0.809	-1.48	0.14
<i>Intercept</i>		2.549	3.04	<0.01		51.72	13.29	<0.01
<i>n</i>				1,169				1,169
<i>Chi-squared</i>				375				327
<i>R²</i>				0.16				0.20

(The table is continued on the next page.)

TABLE 4 (Continued)

Variable	Forecast dispersion				APD			
	Pred.	Coef.	z	$p > z $	Pred.	Coef.	z	$p > z $
	<i>APD</i>	-	-0.054	-4.62	<0.01			
<i>Non-APD</i>	-	-0.012	-1.53	0.07				
<i>APD*Flexibility*</i>	-	0.015	1.27	0.10				
<i>Flexibility*</i>	?	-1.665	-1.87	0.06	+	2.332	7.32	<0.01
<i>Earnings change</i>	+	0.620	4.21	<0.01				
<i>Negative earnings</i>	+	1.845	11.17	<0.01				
<i>Leverage</i>	+	1.315	3.95	<0.01	?	6.265	2.18	0.03
<i>Percent new forecasts</i>	+	0.751	1.85	0.03				
<i>Income smoothing</i>	-	-0.995	-5.09	<0.01				
<i>Earnings guidance</i>	-	-4.857	-3.34	<0.01				
<i>Stock exchange listings</i>					+	2.163	5.69	<0.01
<i>Firm size</i>					+	0.001	2.72	<0.01
<i>Auditor type</i>					+	1.586	1.13	0.13
<i>Government-controlled</i>					?	8.611	1.47	0.14
<i>Parent-only financials</i>					-	-7.221	-0.98	0.17
<i>Common law</i>					+	8.724	4.92	<0.01
<i>Ownership concentration</i>					-	-8.288	-1.49	0.07
<i>Forecast dispersion</i>					?	-0.877	-1.59	0.11
<i>Intercept</i>		5.339	5.48	<0.01		51.497	13.03	<0.01
<i>n</i>				1,169				1,169
<i>Chi-squared</i>				468				317
<i>R²</i>				0.10				0.20

Notes:

See Table 1 for explanations of variables. Nine industry indicator variables are included but not reported. z -values are one-sided for variables with predictions, two-sided otherwise. For the forecast dispersion equation, the coefficients are multiplied by 100 and are thus expressed as percentages.

* Flexibility is an indicator variable equal to one if the extent of flexibility in choosing among accounting methods (see Table 1) is above median, and zero otherwise.

and significant at the same levels as reported in Tables 4 and 5 (not reported in the tables).¹⁹

I conclude that these results lend support to the hypothesis that accounting policy disclosures are informative in explaining variations in analysts' forecast dispersion and error. Such disclosures also have significant incremental value in explaining earnings forecasts beyond other annual report disclosures. These findings are consistent with accounting standard setters' views that these disclosures are important to financial statement users.

To test the hypothesis that accounting policy disclosures gain importance when firms are allowed more flexibility in choosing among accounting methods (Hypothesis 2), I interact accounting policy disclosures with an indicator variable (Flexibility) for high flexibility (defined as above the median). This interaction term is, however, not significant at conventional levels (see panel B of Tables 4 and 5). Thus, the multivariate results do not support Hypothesis 2 and the univariate finding.²⁰

My results are robust to several sensitivity checks. First, when I delete observations where the absolute value of studentized residuals exceeds three, I find that the level of accounting policy disclosures has a stronger negative relation with forecast dispersion and error than reported in Tables 4 and 5, and model fit improves considerably. Second, using forecasts that are issued one or two months following the publication of the annual report does not affect results materially. Furthermore, scaling forecast dispersion and forecast error by mean earnings per

TABLE 5
Simultaneous equations analysis (3SLS) of forecast error and the level of accounting policy disclosures

Variable	<i>Forecast error</i>				<i>APD</i>			
	Pred.	Coef.	<i>z</i>	<i>p</i> > <i>z</i>	Pred.	Coef.	<i>z</i>	<i>p</i> > <i>z</i>
<i>APD</i>	-	-0.180	-2.70	<0.01				
<i>Earnings change</i>	+	3.803	4.19	<0.01				
<i>Negative earnings</i>	+	14.64	14.25	<0.01				
<i>Leverage</i>	+	3.189	1.60	0.06	?	3.516	1.20	0.23
<i>Percent new forecasts</i>	+	6.407	2.60	<0.01				
<i>Income smoothing</i>	-	-2.441	-2.72	<0.01				
<i>Earnings guidance</i>	-	-7.493	-0.81	0.21				
<i>Stock exchange listings</i>					+	2.259	5.84	<0.01
<i>Firm size</i>					+	0.001	3.11	<0.01
<i>Auditor type</i>					+	1.190	0.86	0.20
<i>Government-controlled</i>					?	8.560	1.98	0.05
<i>Parent-only financials</i>					-	-12.20	-1.91	0.03
<i>Common law</i>					+	7.570	4.55	<0.01
<i>Ownership concentration</i>					-	-14.36	-2.62	<0.01
<i>Flexibility</i>					+	2.388	7.66	<0.01
<i>Forecast error</i>					?	-0.137	-1.82	0.07
<i>Intercept</i>		13.61	2.38	0.02		57.38	14.67	<0.01
<i>n</i>				1,205				1,205
Chi-squared				418				332
<i>R</i> ²				0.21				0.20

(The table is continued on the next page.)

TABLE 5 (Continued)

Variable	Forecast error				APD			
	Pred.	Coef.	z	$p > z $	Pred.	Coef.	z	$p > z $
<i>APD</i>	-	-0.161	-2.22	0.02				
<i>Non-APD</i>	-	-0.066	-1.36	0.09				
<i>APD*Flexibility*</i>	-	0.039	0.53	0.60				
<i>Flexibility</i>	?	-6.218	-1.11	0.27	+	2.455	7.63	<0.01
<i>Earnings change</i>	+	3.996	4.31	<0.01				
<i>Negative earnings</i>	+	15.22	15.31	<0.01				
<i>Leverage</i>	+	4.698	2.30	0.01	?	3.508	1.19	0.23
<i>Percent new forecasts</i>	+	5.838	2.30	0.01				
<i>Income smoothing</i>	-	-4.972	-3.99	<0.01				
<i>Earnings guidance</i>	-	-11.31	-1.25	0.11				
<i>Stock exchange listings</i>					+	2.229	5.57	<0.01
<i>Firm size</i>					+	0.001	3.06	<0.01
<i>Auditor type</i>					+	1.784	1.23	0.11
<i>Government-controlled</i>					?	9.123	2.02	0.04
<i>Parent-only financials</i>					-	-13.51	-2.02	0.02
<i>Common law</i>					+	8.513	4.91	<0.01
<i>Ownership concentration</i>					-	-14.12	-2.48	<0.01
<i>Forecast error</i>					?	-0.084	-1.10	0.27
<i>Intercept</i>		20.69	3.33	<0.01		55.62	13.92	<0.01
<i>n</i>				1,205				1,205
<i>Chi-squared</i>				468				328
<i>R²</i>				0.23				0.21

Notes:

See Table 1 for explanations of variables. Nine industry indicator variables are included but not reported. z -values are one-sided for variables with predictions, two-sided otherwise. For the forecast error equation, the coefficients are multiplied by 100 and are thus expressed as percentages.

* Flexibility is an indicator variable equal to one if the extent of flexibility in choosing among accounting methods (see Table 1) is above median, and zero otherwise.

share (EPS) and mean forecast, respectively, also does not change inferences. Likewise, using only one observation per firm (to avoid issues of dependence) leaves the level of accounting policy disclosures significant for both forecast dispersion and error.

In summary, more extensive disclosure about accounting policies is associated with lower analyst forecast dispersion and error, even after other annual report disclosures are considered.

5. Conclusions

Accounting standard setters contend that in order to understand and interpret financial statements, users should be aware of the main assumptions on which the reports are based. Despite the standard setters' view that these disclosures are essential, there has been limited research on accounting policy disclosures. This paper investigates whether the level of accounting policy disclosures explains variation in the dispersion and error of analysts' earnings forecasts. Using a multicountry sample, I document that the extensiveness of accounting policy disclosure, as measured at the firm level by CIFAR, is significantly negatively associated with forecast dispersion and forecast error, and that such disclosures have incremental explanatory power over and above all other information in the annual report. These findings are consistent with the intuition that accounting policy disclosures reduce analysts' uncertainty about forecasted earnings and support the standard setters' view that such disclosures are important for users of financial statements. Univariate analyses suggest that accounting policy disclosures are more important in settings that permit managers relatively more flexibility in choosing among accounting methods. This relation, however, is not significant when using multivariate tests.

Although prior research has examined the relation between firms' overall disclosure levels and properties of analysts' forecast, there is no prior empirical evidence on the importance of accounting policy disclosures. Moreover, most prior studies have focused on the United States, whereas my study includes firms from 18–23 countries (depending on the test). Thus, the paper adds both to the literatures on disclosure and properties of analysts' forecasts and to the international accounting literature.

Future research can investigate whether disclosures of accounting policy disclosures are particularly useful to certain analysts. For example, it could be that foreign analysts find such disclosures more useful than domestic analysts, who presumably know the financial reporting environment better. It would also be interesting to examine whether the informativeness of accounting policy disclosures (or other firm-provided disclosures) varies with other aspects of the environment in which the firm operates (other than the number of accounting choices allowed). Finally, researchers can examine the relation between disclosures and other firm-level measures besides properties of analysts' forecasts.

Appendix: CIFAR Annual Report Disclosure Items (from CIFAR 1995)

Accounting policies
 Accounting Standards
 Financial Statements Cost Basis
 50% Long-Term Investments
 Starting Point for Funds Statement
 Research & Development Costs
 Pension Costs
 Reasons for Extraordinary Items
 Inventory Costing Method

20% Long-Term Investments
21-50% Long-Term Investments
Acquisition Method
Accounting for Goodwill
Deferred Taxes
Outside Manager of Pension Funds
Long-Term Financial Leases
Foreign Currency Translation Method
Foreign Currency Translation Gains/Losses
Discretionary Reserves
Minority Interest
Contingent Liabilities

The other six annual report disclosure categories comprise the non-accounting policy disclosures in the paper:

Nonaccounting policy disclosures

General information

Address/Telephone/Fax/Telex
Product Segment
Geographic Segment
Management Information
Subsidiaries Information
Future Plans/Chairman or CEO's Statement
Number of Employees
Fiscal Year-End

Income statement

Consolidated Income Statement
Cost of Goods Sold
Complete Income Statement
Sales
Selling, General and Administrative Expenses
Operating Income
Foreign Exchange Gains/Losses
Extraordinary Gains/Losses
Income Tax Expense
Minority Interest
Net Income Reported

Balance sheet

Complete Balance Sheet
Current Assets Separated from Fixed Assets
Current Liability Separated from LT Liability

Owners' Equity Separated from Liability
Separation of Non-Equity Reserves and Retained Earnings
Cash and Cash Equivalents
Accounts Receivable
Inventories
Current Assets
Fixed Assets on Asset Side
Goodwill and Other Intangibles
Total Assets Can Be Derived
Shareholders' Equity Changes
Appropriation of Retained Earnings

Funds flow/cash flow

Funds Flow Statement
Complete Funds Flow Statement
Funds from Operations
Funds Definition
Cash Flow Statement

Stockholders' information

Dividends per Share
Earnings per Share
Number of Shares Outstanding
Multiple Shares
Par Value
Total Dividends
Stock Split/Dividend/Rights Issues
Stock Price
Stock Exchange Listing
Volume Traded
Diluted Earnings per Share
Quarterly/Interim Dividends
Changes in Capital
Different Dividends for Multiple Classes of Shares
EPS for Multiple Classes of Shares
Significant Shareholders
Composition of Shareholdings

Supplementary information

Earnings per Share Numerator
Earnings per Share Denominator
Notes to Accounts
Disclosure of Subsequent Events
Remuneration of Directors and Officers
Research & Development Costs

Capital Expenditure
 List of Board Members and Their Affiliations
 Exports
 Financial Summary

Endnotes

1. To the extent that firm-provided disclosures are informative about firms' prospects or accounting practices, enhanced disclosures should be associated with lower errors in earnings forecasts. The relation between disclosures and forecast dispersion is, however, less obvious. Each analyst has access to private information in addition to what is publicly disclosed. An increase in corporate disclosure should reduce dispersion because analysts now have more information that is similar. Alternatively, if forecast dispersion is primarily due to analysts' using different forecasting models, an increase in disclosure could increase dispersion since more information is fed into analyst-specific forecasting models. (See Lang and Lundholm 1996 and the references therein.)
2. The extant literature has either examined some firm-specific disclosure measure (other than accounting policies) within a single country or cross-country differences in average disclosure levels. The empirical evidence from these studies is mixed. Lang and Lundholm (1996) find, after controlling for other factors, a significant (insignificant) negative association between total annual report disclosure ratings by the Association for Investment Management and Research and forecast dispersion (error) in the United States. Also for the United States, Barron, Kile, and O'Keefe (1999) document a significantly negative relation between ratings of the management discussion and analysis in the annual report and forecast dispersion and error. After controlling for earnings changes, Eng and Teo (2000) find no significant relationship between annual report disclosures and dispersion (but a significant negative relationship with forecast error) for firms listed on the Singapore Stock Exchange. Chang et al. (2000) report an insignificant (significant) association between country-level annual report disclosures and dispersion (error) in a multicountry sample. Finally, Hope (2003a) finds evidence suggesting that analyst coverage is positively impacted by firm disclosure (especially disclosure in the notes to the annual report).
3. Not finding an association with forecast dispersion or forecast error does not imply that accounting policy disclosures have no economic effects. For example, such disclosures could be useful for intercompany comparisons. In addition, the requirement to disclose accounting policies could constrain some potentially harmful managerial actions.
4. Frost and Ramin (1997) document that analyst following in France, Germany, and the United Kingdom is comparable to that in the United States. The number of analysts per firm is, of course, not necessarily a perfect proxy for analyst activity. Both the complexity of the firms followed and the number of firms each analyst follows are also important factors.
5. Similarly, Bercel (1994) shows that changes in analysts' EPS forecasts and the number of analysts changing their forecasts are related to abnormal returns in six international markets (France, Germany, Japan, Netherlands, Switzerland, and United Kingdom), as

well as in the United States. Furthermore, financial analysts can presumably affect the extent of stock trading through their buy and sell recommendations. In 1994, the turnover of Germany's DAX-100 was twice that of the UK FTSE-100, and the turnover value of all domestic equity was 25 percent higher in Germany than in the United Kingdom, even though capitalization was 50 percent less in the former (Capstaff, Paudyal, and Rees 1998).

6. Such quantitative scoring is standard in the disclosure literature (see, e.g., Marston and Shrives 1996). Disclosure quality is also important but difficult to assess (Botosan 1997).
7. I thank Christine Botosan for providing me with the raw disclosure scores used in her 1997 paper.
8. Using the median rather than mean forecast does not change any results.
9. CIFAR (1995, vol. II) has countrywide statistics on how soon annual reports are published after the fiscal year-end. These data relate to the same firms for which CIFAR has disclosure scores and are corroborated by Frost and Ramin 1997 (exhibit 18.2).
10. The Basu et al. (1998) index covers ten countries. To increase the sample size, I score (and average across) the Nordic countries using the same sources as Basu et al. (1998). I limit the self-scoring to these countries because of the availability of sources to score choice and of data on other variables for them. In addition, I assume that choice in Austria and Switzerland equals that in Germany, that New Zealand equals Australia, and that Belgium equals France. Including or excluding observations from these countries does not affect the empirical results.
11. Including this control variable should reduce any systematic variation in forecast error and dispersion due solely to differences in the proportion of recently revised forecasts (Lang and Lundholm 1996, 478). As an alternative, I have rerun tests after excluding observations in the lowest quartile of percent new forecasts (where staleness should be most severe) and find consistent results.
12. Brown and Higgins (2001) measure income smoothing as the ratio of small (5 percent) positive earnings surprises to small negative earnings surprises. Earnings guidance is computed as the coefficient of variation of small profit surprises as a percent of "other surprises".
13. In section 4, I test whether the potential dependence arising from having the sample include some firms twice affects reported results.
14. Absent data requirements to measure flexibility, the sample would also include observations from Brazil, Italy, Portugal, Spain, and South Africa. Without flexibility, Brazil, Portugal, and Spain have the lowest scores on accounting policy disclosures. Similarly, South Africa has the second lowest forecast dispersion (after Japan) and Spain and Italy have the highest. Forecast error is highest in Spain and Portugal. The reported results hold also with this extended sample.
15. See Marston and Shrives 1996, Saudagaran and Meek 1997, and Hope 2003c for an overview of research on the determinants of firm disclosure.
16. These results hold both in the U.S. and non-U.S. subsamples (not reported in the table).
17. The magnitude of the estimated coefficients suggests that increasing the accounting policy disclosure score from the 25th to the 75th percentile, an increase of 20 points,

- would reduce forecast dispersion and error by approximately 0.7 percent and 2 percent of stock price, respectively. This interpretation should be viewed with caution, however, given the endogenous nature of disclosure levels.
18. Tables 4 and 5 further show that the level of disclosure about accounting policies is negatively related to dispersion and error in earnings forecasts. However, these associations are not statistically significant at conventional levels. Thus, the evidence does not lend strong support to the notion that managers consider these forecast properties when making disclosure decisions.
 19. "Supplemental information" and "stockholders' information" are also significantly negative, whereas the other annual report disclosure components are not significant. The correlations between accounting policy disclosures and the components of non-APD range from 0.09 to 0.29 (not tabulated).
 20. To check the possibility that the lack of significance is caused by the high correlation between flexibility and the country-level control variables, I reran the analysis without income smoothing and earnings guidance. With this specification, the coefficient on the interaction term is negative as hypothesized but insignificantly different from zero. When flexibility is excluded as a separate variable, the interaction term is significantly negative, consistent with Hypothesis 2. However, with this specification, it is difficult to ascribe the negative coefficient to the interaction effect rather than the (omitted) main effect (e.g., Gupta and Govindarajan 1993, 463).

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