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# Institutional effects on information content of US and French management earnings forecasts: Evidence from market reactions and analyst revisions

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#### ARTICLE INFO

#### ABSTRACT

The United States and France are both most developed economies in the world. Their socio-economic institutions, however, are very different. These differences are indications of their dichotomous legal regimes: common law in the US versus code law in France. The political influence of these legal regimes, in turn, leads to a dichotomized classification of accounting systems: the British–American Model and the French Continental Model. This study extends these institutional effects into the field of management earnings forecast. We find that earnings forecasts by French firms are less informative than those made by US firms matched-up by industry and firm size. We also compare US and French financial analysts' revisions of their forecasts following the management forecasts. We find that revisions by French analysts are more influenced by management forecasts. Our findings are consistent with prior studies that argue that information asymmetry in code-law countries is largely resolved through private information channels, rendering less information content in management announcements and less demand and incentives for original research by financial analysts.

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#### 1. Introduction

The international accounting literature in general recognizes the existence of different accounting models around the world. Frank (1979) and Nair and Frank (1980) classify countries into four groups based on their accounting practices: British Commonwealth Model; Latin American Model; Continental European Model; and United States Model. Nobes (1983) develops a simpler regime that highlights the dichotomization of accounting systems in the western world: the British–American, micro-based model versus the continental, macro-uniform model.<sup>2</sup> According to Salter and Doupnik (1992), such dichotomy in accounting systems is consistent with the contrast between the common common-law versus code code-law systems.

Recent accounting studies examine institutional factors that shape and characterize the US accounting system, and compare them with those in other countries. Guenther and Young (2000) find US accounting earnings more reflective of the underlying economic reality due to their institutional differences. Ball, Kothari, and Robin (2000) argue that the difference between common-law and code-law systems manifests in the dichotomy of shareholder and stakeholder corporate governance models. The shareholder governance model, they find, resolves the information asymmetry through public disclosures, while the stakeholder model does it through private communication. At the country level, these dichotomizations are well represented by France (code-law, continental accounting model, stakeholder governance) and the US (common-law, British–American accounting model, shareholder governance). Table 1 compares some key institutional attributes of the French and the US economies, including their capital markets. Similar information is provided for three other developed economies–Germany, Japan, and the United Kingdom (UK)–for reference.

This study extends these international institutional effects into the field of management earnings forecast and analyst behavior.<sup>3</sup> Ajinkya, Bhojraj and Sengupta (2005) investigate the linkage between institutional factors and management earnings forecasts in a US setting. Baginski et al. (2002) examine the effect of similar legal environments on properties of management earnings forecasts. Prior studies also demonstrate an association between institutional factors and analyst activities (for example, Walther, 1997), and analyst activities around the world are recently examined in Chang, Khanna and Palepu (2000). None of these studies, however, considers the more salient influences of institutional environment on the

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<sup>&</sup>lt;sup>2</sup> Nobes (1998) recently renames the two models, respectively, to class of strong equity-outsider (represented by the US) and class of weak equity-outsider (represented by France).

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<sup>&</sup>lt;sup>3</sup> Since there has been little evidence suggesting substantial changes to the disclosure and institutional environment in France and the United States since 1993, the sample year in our study, our results should be seen as relevant and meaningful for a better understanding of the management earnings forecasts and analyst revisions in those two countries.

Table 1

Institutional factors of five nations

Institutional factor	Country					
	US	Japan	Germany	France	UK	
External finance	Stock market	Banks	Banks	Banks; government	Stock market	
Legal system Political and economic ties	Common law Canada, Japan, Mexico	Code law US, Asia	Code law Europe, US	Code law Europe	Common law Europe, US, Commonwealth	
Inflation Education Uncertainty avoidance	Low High Weak	Low High Strong	Low High Strong	Low High Strong	Low High Weak	

information value of management earnings forecasts in common-law versus civil-law countries; nor do they examine an important dimension of analysts' behavior in different countries: their forecast revisions. Consistent with the extant literature, our study uses the dichotomy of code-law and common-law systems in France and the US as a proxy for the institutional differences that impact management forecasts and information processing by financial analysts.<sup>4</sup> We focus on analyst revisions of their forecasts to complement the findings in prior research about analyst behavior.

Following prior studies, we measure the information content of the management earnings forecast by magnitude of market reactions. Since France adopts a stakeholder governance structure, private channels rather than public disclosures are the preferred option for the management to reduce information asymmetry. We thus hypothesize that the market reaction to the French management forecasts should be less significant than management forecast by US firms. Consistent with the extant literature, we hypothesize significant market reaction to US management forecasts. The evidence from our examination of 160 well-matched US and French firms lends support to these hypotheses.

We report significantly smaller market reaction to the release of French management forecasts. Our result is consistent with the findings of Jennings (1987) that investors react less to news of lower credibility.<sup>5</sup> According to La Porta, Lopez-De-Silanes, Shleifer, and Vishny (1997), investor protection is the weakest in France, and accounting manipulations by managers are more likely to occur in countries with weak investor protection (Hope, 2003), leading to less credibility of French earnings. In this context, other more useful accounting information, such as sales, is likely to be more reliable for the market to assess the firm's operating performance.<sup>6</sup>

Our paper is related to Frost (2002), who documents significant market reactions to forward-looking information provided by matched firms in the US and France, among other industrialized countries. The forward-looking information in Frost (2002) includes earnings forecasts examined in this study, but also includes sales forecasts. There are several major differences in research design between Frost and ours, however. Frost (2002) does not control for earnings expectations as we do in this study, making it harder to investigate the reasons for the abnormal returns reported in her study. Because the forecast information in Frost (2002) includes both earnings and sales, it is unclear whether the abnormal returns result from market reaction to sales forecasts. This is especially so given the result in Gajewski and Quéré (2001) that shows high levels of abnormal returns around quarterly publication of (sales) turnovers for French firms.<sup>7</sup>

We also seek to shed more light on the market mechanisms in the US and France that render differential degrees of investor reactions to the management earnings forecasts. We report evidence that stock price encompasses the news about negative earnings forecasts by French firms ahead of their public announcement. This is consistent with prior findings that in code-law countries private information is more likely communicated to the markets through nonpublic channels. Apparently, such information flow through private channels preempts its effects on the market when it is formally released to the public, therefore triggering less significant market reactions. In contrast, we do not document a similar mitigating price effect for the US sample firms ahead of management forecasts.

Prior studies examine the information content of management earnings forecasts as the basis for subsequent analyst forecast revisions (e.g., Hassell, Jennings, and Lasser, 1988). They find that the market reaction to management forecasts is useful in predicting analyst revisions. There are two forces that are at work to shape how the market responds to management forecasts, however. As summarized in Mercer (2004), information content of management earnings forecast is jointly determined by the new information ("surprise") and believability ("credibility") of the news. As such, recent research in analyst forecasts considers both surprise and credibility as variables that impact the sign and magnitude of analyst revisions. Baginski and Hassell (1990) find the analysts forecast revisions positively associated with measures of both surprise and credibility in the previous management earnings forecasts.

Consistent with prior findings, our empirical results suggest financial analysts in both France and the US update their forecasts based upon the surprise and credibility of previous management earnings forecasts. The financial analysts from these two countries, however, differ in their consideration of the surprise and credibility of the previous management forecast that goes into the revision of their own earnings forecast. Specifically, we find that French analysts are less certain about the credibility of firms' voluntary disclosures. This is consistent with less reaction by French investors to the firm's announcement due to its lower believability. More interestingly, we show that, other things being equal, French analysts are more ready to encompass the new information contained in management forecasts into their revisions.

The latter result is consistent with Clement, Rees and Swanson (2003), who suggest that analysts in code-law countries, such as France, have less access to private information of the management, and thus more likely to rely on public information. It may also result from a lower demand for financial analyst services in France. Chang et al. (2000) argue that the demand for analyst services is lower in code-law countries due to greater ownership concentration that enables corporate news to be timely communicated via private channels.<sup>8</sup> Demand for analyst services in France is lower also because French earnings is more geared towards taxation rather than equity valuation

<sup>&</sup>lt;sup>4</sup> The employment of such a dichotomy as proxy for institutional difference across countries is prevalent in international accounting literature. See, for example, Joos and Lang (1994) and Ball et al. (2000).

<sup>&</sup>lt;sup>5</sup> Bartov, Goldberg, and Kim (2001) find that earnings of code-law countries are "generally not superior to cash flows for equity valuation". Conversely, Gajewski and Quéré (2001) report significant market reaction to mandated disclosure of sales information from French firms.

<sup>&</sup>lt;sup>6</sup> Jennings (1987) argues that "the reaction of investors' beliefs to the release of a manager's earnings forecast depends on the unexpected component (surprise) of the forecast and its believability" (p. 91). This is consistent with the assumption in Pownall and Waymire (1989) that "disclosures of lower credibility will be discounted (i.e., have less information content) in establishing securities prices in an efficient capital market" (p. 227). Note that the terms "credibility" and "believability" are used interchangeably in the disclosure literature. Mercer (2004) provides a comprehensive review of the research in this field.

<sup>&</sup>lt;sup>7</sup> Consistent with our study, Frost (2002) reports less market reactions to earnings and sales forecasts by code-law-country firms relative to those by common-lawcountry firms.

<sup>&</sup>lt;sup>8</sup> Annual reports of the CFA institute from the US and Société Française des Analystes Financiers (SFAF) in France show that at the end of the year 2004, SFAF's membership totaled 1636, against 57,900 for the CFA in the U.S. Driven by great demand, 6,200 people became new CFA members in 2004, while a mere 88 joined SFAF.

(Choi and Mueller, 1992).<sup>9</sup> The lower demand likely leads to less emphasis on independent research and more reliance on accounting information provided by the firm.<sup>10</sup>

The different patterns in French and US analyst revisions following management earnings forecasts stem from the dichotomy of shareholder and stakeholder corporate governance models in these two countries. Our result is consistent with Chang et al. (2000), who find that country-level differences, such as legal and information infrastructure, which are well captured by the dichotomy of shareholder and stakeholder models, have first-order effect on the availability and attributes of analyst forecasts. Indeed, the two governance models, argue Ball et al. (2000), dictate different channels and mechanisms for resolving the information asymmetry between the management and investors. Both Chang et al. (2000) and our result suggest that these differences not only exist for the management and investors to mitigate information asymmetry, but also apply to such important financial intermediaries as analysts following the firms.

Recent accounting studies examine the determinants of information content of management earnings forecasts and its association with the subsequent analyst revisions. Our study makes two contributions to this literature. First, we investigate the institutional effects of different accounting systems and corporate governance structures on these relationships. Second, we are the first to study the analyst revisions in a non-US setting. Our results complement the prior findings and extend the boundaries of international accounting research.

#### 2. Hypothesis development

The US-based accounting research generally recognizes the information value of management earnings forecasts as indicated by market reactions around the date of disclosures (e.g., Pownall and Waymire, 1989; Pownall, Wasley, and Waymire, 1993; Hutton, Miller, and Skinner, 2003). This is consistent with the theoretical argument that voluntary disclosures represent a discretionary means for managers to convey their private information to realign investors' expectations with those of managers, and to reduce the information asymmetry among investors (e.g., Ajinkya and Gift, 1984; King, Pownall and Waymire, 1990).

La Porta et al. (1997) establish the existence of a dichotomy between common-law and French civil-law countries in levels of capital market development and investor protections.<sup>11</sup> This dichotomy has since been extensively adopted in international accounting research to reflect institutional variations. For example, both Ball et al. (2000) and Ali and Hwang (2000) rely on this framework in their investigations of international institutional effects on earnings characteristics and value relevance of accounting information across major industrialized countries. More recently, Bushman and Piotroski (2006) consider the dichotomy as a proxy for the influence of legal and political institutions on accounting conservatism. Because the dichotomous classification of countries into code-law versus common-law systems predicts well the form of corporate finance, the legal regimes, and their enforcement, it also has effect on accounting standards and disclosure practices. La Porta et al. (1998) construct an index for accounting quality of different countries, which shows Scandinavian countries are the best, common-law countries second, German-civillaw countries the third, and the French-civil-law countries the weakest.

A recent spate of accounting studies explores the linkage between institutional environment and management earnings forecasts. Ajinkya et al. (2005) find significant associations between frequency, specificity, and biases of management earnings forecasts and corporate governance and institutional ownership. Consistent with La Porta et al. (1998), Ajinkya et al. (2005) reaffirm that institutional variables affect the properties of management earnings forecasts. Due to the international divergences in institutional effect on financial reporting and disclosures, properties of management earnings forecasts may also vary in countries with different legal and corporate governance systems. Baginski et al. (2004) report that management forecasts by firms in the US and Canada, two similar economies, differ on their time horizon and precision.<sup>12</sup>

We extend this strand of research into an international context incorporating recent works of La Porta et al. and results from accounting studies. We hypothesize that institutional environment has effect on the information content of management earnings forecasts, which serve as an important device for the firm to voluntarily convey information to the market. Unlike Baginski et al. (2004), who focus on the effect of legal liabilities on disclosure properties in common-law countries with similar accounting systems, we seek to document salient differences in the information value of management earnings forecasts in code-law versus common-law countries.

Prior accounting studies suggest that code code-law countries have less need for a mitigation of information asymmetry through public disclosures. Unlike the "shareholder" corporate governance model prevalent in the US and other common-law countries, the "stakeholder" model practiced in code-law countries dictates that information asymmetry is largely resolved through private communication between the firm and the political groups contracting with the firm (Ball et al., 2000). For example, prior studies find that French firms traditionally prefer to share information *only* with stakeholders directly involved in its day-to-day operations. Such groups typically include state, labor unions, banks and business associations.

Due to the "varying demand that accounting income satisfies under different institutional arrangements" (p. 4), argue Ball et al. (2000), accounting earnings in code-law countries are also less timely in reflecting the economic reality and more likely "smoothed" to reduce volatility. As a result, accounting information provided by firms in code-law countries does not reduce the information asymmetry, nor does their accounting earnings serve as an effective and timely measure of firm's performance to the same extent as they do in common-law countries. It follows that the information content of management earnings forecast could be less in code-law countries, such as France.<sup>13</sup>

La Porta et al. (1997) investigate a sample of 49 countries, and find that French civil-law countries have "both the weakest investor protections and the least developed capital markets". La Porta et al. (1998) attribute this prominent feature of French civil-law countries to their weakest legal enforcement and unusually high concentration of stock ownership. They also suggest that these factors contribute to the

<sup>&</sup>lt;sup>9</sup> Frost and Ramin (1996) note that code-law countries have a less demand for independent audits and sophisticated financial reporting geared towards decision-making. Mueller, Gernon, and Meck (1994) argue that demand for value-relevant accounting information is less in bank-oriented countries, which include France, as the banks have ready access to the firm's information.

<sup>&</sup>lt;sup>10</sup> Saghroun (2003) shows that French analysts rely very much on compulsory accounting information from firms and prefer standardized accounting data in their research.

<sup>&</sup>lt;sup>11</sup> Hope (2003) suggests that those internationally different disclosure practices relate to the enforcement of accounting standards.

 $<sup>^{12}</sup>$  Both countries are commonly classified as common-law countries with highly similar accounting systems.

<sup>&</sup>lt;sup>13</sup> French accounting has been characterized as "macro-uniformed, governmentdriven, tax-dominated, and plan-based" (Nobes and Parker, 1995). For example, French earnings is found to "legally serve purposes of proof and verification" (p. 91, Choi and Mueller, 1992); and French accounting information in general is "usually designed to satisfy such government-imposed requirements as computing income taxes or demonstrating compliances with the national government's macroeconomic plan" (Gernon and Meek, 2001, p. 10). Michailesco (1999) argues that there are two strong accounting values that characterize the French system: uniformity and secrecy. These values resulted from strong uncertainty avoidance in France and from the culture of rule respect (high power distance) (Hofstede, 1980).

poor accounting quality of the French civil-law countries, because "countries that for some reason have heavily concentrated ownership and small stock markets might have little use for good accounting standards, and so fail to develop them" (p. 1150). This practice has persisted in the past two decades, and seems to have become more entrenched.

French capital markets are small by international standards (see Table 2). In France, business financing was traditionally the preserve of a closed community, and highly nationally oriented. Most industries were financed by government or through close relationships with local banks and other firms (Ding, 2002). Since 1986, despite the privatization of an increasing number of listed national champions, major French firms have continued to be less exposed to the pressures from capital market by virtue of various corporate governance devices. such as state shareholding (ex. Renault, Air France, France Telecom, etc.), family ownership (ex. Carrefour, Bouygues, l'Oréal, etc.), and cross-shareholding among firms (BNP, Danone, etc.). This is consistent with Hope (2003), who argues that "managers in weak shareholder protection environments are more likely than managers in strong shareholder protection environments to manipulate earnings" (p. 243). As a result, the earnings information voluntarily provided by the French firm is likely to be less useful and credible to individual investors not privy to the news.<sup>14</sup> Our first hypothesis is:

**H**<sub>1</sub>. When information content is measured by market reactions to an unexpected component in the forecasts, earnings forecasts by French firms produce less market reactions and thus have less information content than US firms' earnings forecasts (degree of information value hypothesis).

The information value of management earnings forecasts is recognized as a force that shapes analyst forecast revisions in USbased studies (see, e.g., Baginski and Hassell, 1990). The extent of influence of management earnings forecasts on subsequent analyst revisions, however, may vary in different legal–social environments. We hypothesize that such institutional differences, as proxied by the dichotomy of civil-law versus common-law systems, lead to different patterns of analyst revisions following the management forecasts.

Schipper (1991) discusses the information processing by analysts that leads up to their earnings forecast revisions. She argues that analyst should be seen as "among the primary users of financial accounting information" (p. 105).<sup>15</sup> As a representative of the primary users of financial accounting information, analysts' exhibit attributes similar to other accounting information users, such as investors. For instance, prior research indicates a positive relationship between financial disclosures and analyst following because disclosures reduce the cost of doing research (Lang and Lundholm, 1996; Healy, Hutton, and Palepu, 1999). Note that one important measure for quality of such disclosure is its credibility. In this connection, Pownall and Waymire (1989) observe that "disclosures of lower credibility will be discounted (i.e., have less information content) in establishing securities prices in an efficient capital market" (p. 227). Moreover, Jennings (1987) finds that analyst revisions reflect the credibility of preceding management earnings forecasts, as measured by unsystematic price movements around the management forecast date beyond that contained in the news.

Given the important intermediary services provided by analysts in attaining the efficiency of the capital markets, it follows that analysts

#### Table 2

Comparison between US and French Capital Markets

ness. This leads to our second hypothesis:

	France		United	States		
	1993	1999	1993	1999		
Number of listed domestic companies Market capitalization of listed companies (% of GDP) Market capitalization of listed companies (billion US\$)	472 35.74 456	968 103.01 1,475	7246 78.02 5,136	7651 181.76 16,635		
Source: World Development Indicators 2001, World Bank.						

will discount accounting information of lower credibility and useful-

**H<sub>2</sub>.** Because the institutional differences between the US and France dictate that earnings forecasts by French firms are less useful and credible than those produced by US firms, analysts will revise their forecasts to a lesser degree following the management forecasts by French firms, holding management forecast news constant (credibility effect hypothesis).

Extant literature posits that analyst revisions after management earnings forecasts are associated with both credibility of the forecasts and the news contained in them. While the difference in relationship between credibility of the firm's forecasts and the subsequent analyst revisions is straightforward for both the US and French firms, it is unknown whether the relationship between the information value of the news surprise and the following analyst revisions differs across the US and French firms. Intuitively, the latter relationship should be dictated by the information environment for capital market participants and intermediaries in both countries. For example, Chang et al. (2000) find institutional factors account for a substantial part of the variation in characteristics of analyst forecasts worldwide.

While the credibility effect hypothesis focuses on analysts as primary users, along with the investors, of financial news, the information value of the news surprise accentuates the importance of the institutional environment in defining the role of analysts as information intermediary. For example, Ball et al. argue that the shareholder governance model prevalent in common-law countries fosters more diffuse stock ownership, and more reliance on financial analysts as information intermediaries. This reliance gives the analysts the leverage to move the stock prices, which, in turn, enables them to gain wider access to private information from the management, especially if they work for large brokers. In code-law countries, however, such reliance on analysts to obtain private information is greatly diminished due to the dominance of stakeholder governance model, under which banks and other concentrated institutional owners, the primary provider of capital, have considerable access to private communication with the firm.<sup>16</sup>

Previous research finds accounting earnings in code-law countries less value-relevant in comparison with common-law countries where financial reporting is unencumbered by taxation needs and the public demand for such information is greater (Ali and Hwang, 2000; Bartov et al. 2001). French accounting, in addition, is unique in its focus on assisting the government to accomplish macro-economic goals (Joos and Lang, 1994). Since French firms' financial information is less geared towards the use of individual investors and analysts for valuation purposes, and the firms are much less inclined to offer them access to private communication, the cost of conducting research is

<sup>&</sup>lt;sup>14</sup> It is possible that some individual investors, due to their inexperience or lack of means to obtain information more efficiently, would react to earnings forecast by French firms. However, since the stock return reflects the collective movement of the market, as shown in Beaver (1968), the reactions of those investors, who are the minority in the French setting, would be completely diluted by the inaction of the majority of the investors at the announcement.

<sup>&</sup>lt;sup>15</sup> Schipper (1991) states the reason for such a role played by analysts, "given their importance as intermediaries who receive and process financial information for investors, it makes sense to view analysts – sophisticated users – as representative of the group to whom financial reporting is and should be addressed".

<sup>&</sup>lt;sup>16</sup> According to Ali and Hwang (2000), "In bank-oriented systems, businesses generally have very close ties to their banks, which supply most of their capital needs; and banks have direct access to company information... Investor-oriented systems, on the other hand, contain numerous diverse investors without direct access to company information. Investors are likely to rely heavily on financial accounting disclosures to obtain information to be used in security valuation and monitoring management." On the other hand, Gernon and Meek (2001) argue that in France and other code-law countries, "insiders" like banks, major customers, suppliers, and labor "are informed with private access to information, (and) consequently, the demand for public disclosure is low" (p. 11).

#### Table 3

Financial and market characteristics of 160 sample firms domiciled in France and the United States during 1997

	France		United States	
	Mean	Median	Mean	Median
Firm sample size	80		80	
Analysts following				
Domestic analysts	3.89	2.50	9.75	7.50
Foreign analysts	4.79	2.00	0.05	0.00
Total analysts	8.67	5.00	9.80	7.50
Market value (millions \$US)	1433.7	307.3	1,306.5	339.5
Sales (million of \$US)	2262.293	617.039	1,645.58	426.98
Net income (millions \$US)	41.289	8.296	50.413	13.188
Leverage (debt/equity)	1.007	0.665	0.514	0.400
Major shareholdings (% of O/S shares)	0.597	0.589	0.336	0.304

Data in this table are from Table 2 of Frost [2002].

accordingly higher in France. This, coupled with less public demand in general, likely leads to difference between US and French analysts' behaviors.

Clement et al. (2003) study the institutional effects on characteristics of analyst forecasts in different countries. They provide evidence that analysts in code-law countries are more likely to provide "inferior" services due to the fewer incentives, restrained demand, and the "collectivist" culture typical of code-law countries. They also find that analysts in code-law countries are allowed only limited access to private communication with the management, a far cry from the common-law countries, because outside investors are not the most important source of capital. This suggests that French analyst revisions may better reflect the news in public information, such as earnings forecasts by the firms. That is, the information value of news surprise in management earnings forecasts may be greater for French analysts relative to their US counterparts, who are better positioned to encompass private news in their revisions.<sup>17</sup> This leads to our third hypothesis:

**H<sub>3</sub>.** Because the institutional differences between the US and France create disparities in the demand and supply of analyst services in these two countries, French analyst revisions are, ceteris paribus, more reflective of the news surprise in the management earnings forecast (information value hypothesis).

Notably, we shall consider jointly the credibility effects and information value of the news in investigating analyst revisions following management earnings forecasts, as they are both pertained to the analysts' information processing before the revisions.

#### 3. Data collection and sampling

We are grateful to Professor Carol Ann Frost for providing the disclosure data for the 80 US firms and the matched-up 80 French firms in this study. Those firms were selected from the Worldscope and Compact Disclosure databases after the following screenings. First, only manufacturing firms were chosen (primary two-digit SIC codes 20 through 39, based on data from Worldscope and CRSP). Second, French candidate firms must be listed on the Paris Stock Exchange (based on Datastream database), and US sample firms had to be included in the CRSP files for NYSE/AMEX and NASDAQ throughout 1993. It was also required that financial information should be available on Worldscope for French firms and on Compact Disclosure for US firms, and the two samples matched on industry and firm size. Management earnings forecasts for the 80 US sample firms were from the *Dow Jones News Service* (DJNS), *The Wall Street Journal*, and the

#### Table 4

Types, frequencies, and accuracy of earnings forecasts made by 160 sample firms domiciled in France and the United States during 1997

Panel A						
	Forecasts by	80 French firms	Forecasts	by 80 U.S.	. firms	
Forecast type	No.	%	No.	%		
Point	36	46	11	19		
Range	5	6	20	34		
Upper bound	18	23	16	27		
Lower bound	20	25	12	20		
Total	79	100	59	100		
Panel B						
	No. of point and range forecasts		Forecast error		Absolute value of forecast error	
Country	Subsample	Analyzed	Mean	Median	Mean	Median
France	41	40	-0.061	0.028	0.342	0.164***
United States	31	31	-0.914**	-0.159	1.008***	0.333***

Adapted from Tables 4 and 5 of Frost [2002].

\*\*Significant at 0.001 level, two-tailed.

\*\*\*Significant at 0.0001 level, two-tailed.

Dow Jones "*Broad Tape*". The French earnings forecasts were gathered from the Western Europe Library of *Reuter Textline*, and several dozen other Western European news sources.

We obtained daily price data for US sample firms from the Center for Research in Securities Prices (CRSP). Daily equity returns for the French sample firms were extracted from Datastream International. The US daily market return used in estimation of Eq. (2) was gathered from the CRSP value-weighted index. We calculated daily returns of the French SBF 120 index carried on Datastream International to arrive at the proxy for the French market returns. Moreover, we obtained analyst forecasts data from I/B/E/S International.

Table 3 presents summary statistics for 160 sample firms matched on market value of equity as of late 1993 and all drawn from the manufacturing industry group (SIC code 20-39). Number of analysts following each firm was tabulated from *Nelson's Directory* [1995]. Financial and equity data are from *Compact Disclosure* for the 80 US firms and from *Worldscope* for the 80 French firms. Major shareholdings are from *Compact Disclosure* ("shares held by 5% shareholders") for US firms, and from *Worldscope* for French firms.

Both sales and net income are comparable across the two subsamples. However, the French sample firms are more heavily leveraged (with the mean debt/equity ratio 1.007, versus 0.514 of the US sample)<sup>18</sup> and their institutional ownership (the mean holding percentage is 0.597 versus 0.336 of the US sample) is also substantially greater, consistent with the differences identified in Section 1 about capital and ownership structures between French and US firms. The firms in these two subsamples are generally followed by similar numbers of financial analysts—the mean (median) is 8.67 (5) for French firms and 9.80 (7.50) for the US firms. The French firms have more than half of their following—the mean for the number of foreign analysts is 4.49 compared with 3.89 for domestic analysts—from outside of the country, while non-domestic analyst following for the US sample firms is insignificant (mean is 0.05 and median 0.00).

Of the two 80-firm subsamples, 79 earnings forecasts were made by French firms and 59 earnings forecasts by US firms, consistent with the notion that French firms are less restrained in providing forwardlooking information (Frost, 2002). More detailed information on the

<sup>&</sup>lt;sup>17</sup> Hamon and Jacquillat (1992) document French analysts revising their forecasts after they detect abnormal trading on the market (p. 430).

<sup>&</sup>lt;sup>18</sup> The differences of these two ratios across the two subsamples are statistically significant.

#### Table 5

Panel A						
Country	No. of firms	Forecasting firms as		Forecast frequency during 1993		
	making earnings forecasts	percent of 80 firms in subsample	Mean	Median		
France	54	68	2.19	1.0		
US	40	50	1.29	0.5		
Panel B						
Country	Number of ar	alysts				
	Mean	Median	Max	Min		
France (N=48) <sup>a</sup>	7.53	8.00	31.00	3.00		
France (N=36) <sup>b</sup>	9.40	7.00	28.00	3.00		

<sup>a</sup> Six firms with earnings forecasts were eliminated from the original French subsample in Panel A due to data and other problems.

<sup>b</sup> Four firms with earnings forecasts were eliminated from the original US subsample in Panel A due to data and other problems.

number of forecasts over each of their four types is available in Panel A of Tables 4 and 5. In summary, 54 French firms made 41 point-or-range earnings forecasts and 38 lower-or-upper-bound forecasts whereas 40 US firms made 31 point-or-range forecasts and 28 lower-or-upperbound forecasts during 1993. Panel B of Table 4 presents statistics about the forecast error, measured by  $\frac{EARN_i - ME_i}{|EARN_i|}$ , where EARN<sub>i</sub> is the actual earnings of firm *i* for the same quarter as the earlier management forecast ME<sub>i</sub>. The absolute mean and median forecast errors are significantly greater for the US firms, which provide optimistic earnings forecasts. To the extent that the absolute forecast error is positively related to earnings predictability, a much smaller forecast error for French firms suggests French earnings being more predictable. This is consistent with a finding in Ball et al. (2000) that earnings in code-law countries are more "smoothed" (p. 16). Chang et al. (2000) argue that such smoothing of earnings prevalent in codelaw countries results from their less sophisticated financial reporting standards and weaker legal enforcements, which make it easier to manage earnings to meet analyst expectations, leading to lower forecast errors (p. 15).

Panel B of Table 4 reports statistics about the analyst following for the 48 French firms and 36 US firms investigated in this study. Six French firms and 4 US firms from the original subsamples are excluded due to (1) nonavailability of analyst forecasts in the 1993 I/B/E/S tape; or (2) having fewer than three analysts according to the I/B/E/S tape; and/or (3) having simultaneous earnings forecasts on the announcement date.<sup>19</sup> For these firms, the mean (median) number of financial analysts following the firm is 7.53 (8.00) for the French companies and 9.40 (7.00) for the US companies, similar to the reported result in Table 1 for the two original, 80-firm subsamples.

# 4. Research design information content of management earnings forecast

Consistent with prior studies, we use release date stock price returns to measure information content. We perform an event study to investigate the information content of the US and French management earnings forecasts. Following Francis, Philbrick, and Schipper (1994), we estimate, respectively, the following pooled OLS conditional market model for the two subsamples of 80 US and French firms<sup>20</sup>:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \lambda \delta_{it} + \varepsilon_{it}, \tag{1}$$

where

- $R_{it}$  Firm *i*'s return on day *t*.
- *R<sub>mt</sub>* daily stock return index developed by either Paris Stock Exchange (as applied to French sample firms) or NYSE (as applied to the US sample firms).
- $\delta_{it}$  -1(1) if the unexpected component of firm *i*'s earnings forecast UNE<sub>*i*t</sub> is negative (positive) on day *t*; 0 otherwise.

We estimate the unexpected component of firm *i*'s earnings forecast  $UNE_{it}$  on day *t* by

$$UNE_{it} = ME_{it} - ANAE_{i(t-1)}$$
<sup>(2)</sup>

where

ME<sub>*it*</sub> earnings forecast by firm *i* on date *t*;

ANAE<sub>i(t-1)</sub> consensus financial analysts' forecast for firm *i* in the month preceding management earnings forecast on date *t*.

A positive value of UNE reflects a "positive" news announcement by management relative to analysts' forecast, while a negative number will indicate "upward" bias in the analysts' estimation relative to management forecast.

Consistent with Pownall et al. (1993), we consider four alternative types of earnings forecasts made by management: (1) point estimate; (2) range; (3) upper limit; and (4) lower limit. When the forecast is of range type, the mid-point of the range is used for  $ME_{it}$ . For both point and range forecasts, the mean of the analyst forecasts is used as  $ANAE_{it}$  to arrive at the UNE<sub>it</sub>. If the forecast is in the form of lower or upper bound of the coming fiscal year's earnings, the lowest or highest analyst earnings forecasts are used as proxy for earnings expectations accordingly.

The coefficient  $\lambda$  in Eq. (1) is our measure for information content in management earnings forecasts, as it represents the average amount of price changes following the positive or negative unexpected earnings news conveyed in the release of management earnings forecasts.<sup>21</sup> The higher the value of  $\lambda$ , the greater the information content in management earnings forecast. Based on our hypothesis development earlier in the paper, H<sub>1</sub> can be reformulated as the null hypothesis: H<sub>1</sub>\*:  $\lambda$ US  $\leq \lambda$ France.

Eq. (1) assumes semi-strong market efficiency for both US and French capital markets.  $^{\rm 22}$ 

#### 4.1. Analyst forecast revisions

(1984) and Hamon and Jacquillat (1992).

To examine the analyst's updating of their forecasts following the release of the management earnings forecast, we consider a pooled

<sup>&</sup>lt;sup>19</sup> Having simultaneous earnings forecasts would make it hard to determine the sign of unexpected earnings as defined in Eq. (2), and thus to interpret its coefficient in Eq. (1). None of the forecasts used in this study coincided with the actual earnings release; therefore there is no need to control for any confounding effect in this aspect.

<sup>&</sup>lt;sup>20</sup> According to Campbell, Lo, and MacKinlay (1997), when the event windows overlap, a dummy-variable approach as used by Francis et al. [1994] is superior to alternative event study models.

<sup>&</sup>lt;sup>21</sup> In this paper we focus on the qualitative – i.e., negative or positive – nature of the management earnings forecasts from the point of view of market participants. In a separate test, we calibrate the deflated unexpected earnings for each firm and substitutes it for the dummy variable in Eq. (1), and the tenor of the results is the same. <sup>22</sup> Since its inception in the late 1960s, the efficient market hypothesis (EMH) has been found to be a valid characterization of capital markets in at least 15 countries (Ball, 1995). For evidence that supports French market efficiency, please see Hawawini

cross-sectional regression following Williams (1996) and Baginski and Hassell (1990):

$$ANAUP_{i(t+1)} = \beta_0 + \beta_1 UNED_{it} + \beta_2 CAR_{it} + \varepsilon_{it}$$
(3)

where

- ANAUP to be a measure of analyst revision following the management earnings and forecast, and
- UNED a measure for the unexpected component in the management forecast.

Both are deflated by  $P_{i(t-5)}$  the stock price of firm *i* five days ahead of the management earnings forecast. Specifically,

$$ANAUP_{i(t+1)} = \frac{ANAE_{i(t+1)} - ANAE_{i(t-1)}}{P_{i(t-5)}},$$
(4)

$$\text{UNED}_{it} = \frac{\text{UNE}_{it}}{P_{i(t-5)}},\tag{5}$$

where

ANAE is consensus financial analysts' forecast in the month following the release of management forecast. UNE is the same variable as defined in Eq. (2).

The control variable CAR is cumulative abnormal return over a four-day window (i.e., day -1, 0, +1, +2) around the date of

$$\mathsf{CAR} = \sum_{t=1}^{2} U_{it},\tag{6}$$

where

- *U* is the unexpected market return for the firm, specifically,  $U_{it}=R_{it}-R_{mt}$ ,
- $R_{it}$  is the stock return on date *t* of the firm *i* and

management forecast. It is determined as follows:

*R<sub>mt</sub>* is the weighted market index of New York (for the US sample) or Paris (for the French sample) exchange, as defined in Eq. (1).

Univariate statistics of regression variables

Panel A: French subsample							
Variable	Mean	Median	Max	Min	S.D.	Ν	<0
R <sub>it</sub>	0.0015	0.0000	0.4760	-0.3322	0.2217	19,662	
R <sub>mt</sub>	0.0010	0.0010	0.0270	-0.0240	0.0080	19,662	
ANAUP <sub>i(t+1)</sub>	-0.0047	-0.0045	0.0033	-0.0132	0.0029	62	43
UNED <sub>it</sub>	-0.0052	-0.0048	0.0014	-0.0137	0.0033	62	41
CAR <sub>it</sub>	-0.0019	-0.0013	0.1175	-0.0641	0.0506	62	40

Panel B: US subsample								
Variable	Mean	Median	Max	Min	S.D.	Ν	<0	
R <sub>it</sub>	0.0013	0.0000	0.7500	-0.4286	0.0389	20,339		
R <sub>mt</sub>	0.0004	0.0006	0.0153	-0.0259	0.0050	20,339		
$ANAUP_{i(t+1)}$	-0.0061	-0.0055	0.0047	-0.0226	0.0042	45	32	
UNED <sub>it</sub>	-0.0082	-0.0064	0.0035	-0.0457	0.0030	45	39	
CAR <sub>it</sub>	-0.0529	-0.0355	0.1270	-0.2168	0.0748	45	40	

 $R_{it}$ =firm *i*'s daily stock return on date *t*.

#### Table 7

Tests for information content of management earnings forecasts during 1993

Panel A: French subsample							
Coefficient	Pooled estimate	p-value	Adj. R <sup>2</sup>	F-statistic	Ν		
α β λ	0.0011 0.4526 0.0103	<0.0001 <0.0001 0.0313	0.023	238.27***	19,662		
Panel B: US su	ıbsample						
Coefficient	Pooled estimate	<i>p</i> -value	Adj. R <sup>2</sup>	F-statistic	Ν		
α β λ	0.0015 0.8122 0.0510	0.0002 <0.0001 <0.0001	0.012	124.75***	20,239		

Eq. (1):  $R_{i,t} = \alpha_i + \beta_i R_{M,t} + \lambda \delta_{i,t} + \varepsilon_{i,t}$ .

 $H_1^*$ :  $\lambda US \leq \lambda France$ 

N=number of observations in the pooled subsample of 80 firms.

 $R_{it}$ =Firm *i*'s daily stock return on date *t*.

 $R_{mt}$ =daily stock index developed by either Paris Stock Exchange (for French sample firms) or NYSE (for US sample firms).

 $\delta_{i,t}$ =-1 (1) if the unexpected component of earnings forecast UNE as revealed by the firm is negative (positive) on day *t*; 0 otherwise.

\*\*Significant at less than 0.0001.

We consider two pooled subsamples of US and French firms that each had at least 3 financial analysts following them at the time when the management forecasts were announced. There are two variables of interest in this equation, corresponding to the two hypotheses relating to analyst revisions. The first,  $\beta_1$ , indicates the degree of association between surprise news in the management forecast and the analysts' subsequent revisions. Others being equal, the greater the  $\beta_1$ , the larger are the analyst revisions given the pre-announced earnings surprise in the management forecast. The second is  $\beta_2$ , a measure for the revisions due to how credible the information is to the investing public. Controlling for the news surprise per se, market reaction around the management earnings forecast as proxied by CAR suggests the credibility of the news (for example, Pownall and Waymire, 1989). The coefficient  $\beta_2$  in this setting therefore shows the adjustment made by the analysts based on the believability of the news. Intuitively, a positive  $\beta_2$  indicates that revisions are aligned with the credibility of the news. That is, the more credible the news, the greater the amount of revisions by analysts, others being equal. Accordingly, we rephrase the second and third hypotheses in the null form as follows:

 $H_2^*: \beta_2$  France  $\geq \beta_2 US$ , and

 $H_3^*$ :  $\beta_1$  France  $\leq \beta_1$  US.

The above two hypotheses, equivalents of original hypotheses  $H_1$  and  $H_2$ , will be tested in a multivariate equation.

#### 5. Results

We estimate Eqs. (1) and (3) to test the three hypotheses formulated earlier. Descriptive statistics that describe the characteristics of the variables in Eqs. (1) and (3) are provided in Table 6. *F*-statistics for Eqs. (1) and (3) as reported in Tables 7 and 9 suggest that the models are well-specified.

5.1. Market test of investor reaction to management earnings forecasts

Table 7 reports the results of estimating Eq. (1), on each of the pooled 80-firm French and US subsamples.<sup>23</sup> The coefficients on

 $R_{mt}$ =daily stock index developed by either Paris Stock Exchange (for French sample firms) or NYSE (for US sample firms).

ANAUP<sub>i(t+1)</sub> = analyst forecast revision in the month following management earnings forecast deflated by the share price of firm *i* 5 days ahead of the management announcement.

 $UNED_{it}$ =forecast deviation, or, the difference between the EPS projections made by the management and analysts deflated by the price of firm *i* 5 days preceding the management forecast. See Eq. (5) for details.

 $CAR_{it}$  = cumulative abnormal returns from the day preceding through two days following the management earnings forecast. See Eq. (6) for details.

<sup>0&</sup>lt;refers to the number of observations in the sample that are negative.

<sup>&</sup>lt;sup>23</sup> Regression results on truncated French and US subsamples that include only the 48 French and 36 US firms making management earnings forecasts and each having more than three financial analysts following it are not substantially different from the results reported in Table 6.

market index  $R_{mt}$  are 0.4526 and 0.8122 for the French and US samples, both highly significant. The difference between these two coefficients is consistent with the general perception that the US capital markets exhibit a higher level of variations, although a thorough examination of the issue is beyond the scope of this paper.

The coefficient  $\lambda$  for the US subsample is 0.0510, highly significant (with *p*-value of 0.0001 by two-tailed test), whereas the same coefficient for the French subsample is 0.0103, also significant (with *p*-value of 0.0313 by two-tailed test). The result is the rejection of H<sub>1</sub><sup>\*</sup>, which hypothesizes that the coefficient should be larger for the French sample. The result also lends support to our first hypothesis that markets react less to earnings forecast releases by French firms.

#### 5.2. Pre-earnings-forecast CAR

We investigate CAR's preceding the management earnings forecasts over 10-day, 20-day, and 30-day windows alternatively. We segregate CAR's into two groups-those ahead of positive earnings forecast announcements and those ahead of negative earnings forecast announcements-and report the statistics accordingly. The results are summarized in Table 8. Overall, we provide evidence somewhat supportive of market movements being consistent with the tone of subsequent management forecast, but the result is not statistically significant. There is one exception: We report statistically significant negative CAR (with p-value of 0.10 by two-tailed test) over a 10-day window for the French subsample ahead of negative forecast news by the firm. This result suggests that the bad news has been somehow conveyed to certain number of investors shortly before its formal release and triggered, their small magnitude notwithstanding, market reactions preemptive of the upcoming news announcement. This preemption of the news surprise for French firms is consistent with less market reaction at the news announcement. It also supports the argument that private news is more likely transmitted through nonpublic channels before being made public in code-law countries, such as France.

#### 5.3. Credibility effect in analyst revisions

We conducted empirical tests about analyst revisions; the results are reported in Table 9. The coefficient  $\beta_2$  for the French subsample is 0.0276 (with *p*-value of 0.0059 by two-tailed test), and 0.0503 for the US subsample (with *p*-value of 0.0034 by two-tailed test). The result rejects null hypothesis H<sub>2</sub><sup>\*</sup> and support our second hypothesis that

#### Table 8

CAR ahead of management earnings forecasts

Panel A: French subsample							
	Mean	Median	Max	Min	S.D.		
$(+)CAR_{i,(-10,0)} (-)CAR_{i,(-10,0)} (+)CAR_{i,(-20,0)} (-)CAR_{i,(-20,0)} (+)CAR_{i,(-30,0)} (-)CAR_{i,(-30,0)} (-)CAR_{i,(-30,0)} \\(-)CAR_{i,(-30,0)} \\(-)C$	0.0440 -0.0208 <sup>*</sup> 0.0354 -0.0082 0.0516 -0.0214	0.03419 -0.0313 0.0512 -0.0161 0.0339 -0.0228	0.1308 0.0946 0.1274 0.1170 0.1998 0.1141	-0.0166 -0.1231 -0.0629 -0.1380 -0.0371 -0.2508	0.0375 0.0114 0.0312 0.0326 0.0685 0.0496		
Panel B: US subsample							
	Mean	Median	Max	Min	S.D.		
$\begin{array}{l} (+) CAR_{i,(-10,0)} \\ (-) CAR_{i,(-10,0)} \\ (+) CAR_{i,(-20,0)} \\ (-) CAR_{i,(-20,0)} \\ (+) CAR_{i,(-30,0)} \\ (-) CAR_{i,(-30,0)} \end{array}$	0.0165 -0.0482 0.0658 -0.0027 0.0412 -0.0393	-0.0087 -0.0501 -0.0094 -0.0124 -0.0044 -0.0633	0.1188 0.0632 0.2333 0.1334 0.1619 0.1105	-0.0386 -0.1775 -0.0266 -0.1853 -0.0338 -0.1612	0.0886 0.0776 0.1455 0.0937 0.1055 0.0898		

(+)CAR<sub>*i*,(-*k*,0)</sub> is cumulative abnormal returns for a *k*-day period before the announcement of a positive management earnings forecast, i.e., when UNED<sub>*i*</sub>>=0. (-)CAR<sub>*i*,(-*k*,0)</sub> is cumulative abnormal returns for a *k*-day period before the announcement of a negative management earnings forecast, i.e., when UNED<sub>*i*</sub><0. \*Significant at 0.10, two-tailed test.

#### Table 9

Test of analyst updating on unexpected earnings

1	Jamal	۸.	Franch	6	$(\mathbf{N}, \mathbf{C}_{2})$
- 1	anel	A:	French	nrms	(N = 62)

Panel A: French firms (N=62)				
Coefficient	Estimate	<i>p</i> -value	Adj. R <sup>2</sup>	F-statistic
β <sub>0</sub> β <sub>1</sub> β <sub>2</sub>	-0.0011 0.5945 0.0276	0.0342 <0.0001 0.0059	0.6578	27.8491***
Panel B: US firms (N=45)				
Coefficient	Estimate	p-value	Adj. R <sup>2</sup>	F-statistic
$\beta_0$ $\beta_1$ $\beta_2$	-0.0013 0.1970 0.0503	0.0885 0.0013 0.0034	0.3181	18.5873***

Model: ANAUP<sub>i(t+1)</sub>= $\beta_0$ + $\beta_1$ UNED<sub>it</sub>+ $\beta_2$ CAR<sub>it</sub>+ $\varepsilon_{it}$ .

 $H_2^*$ :  $\beta_2$ France  $\geq \beta_2$ US, and  $H_3^*$ :  $\beta_1$ France  $\leq \beta_1$ US.

ANAUP<sub>*i*(t+1)</sub> = analyst forecast revision in the month following management earnings forecast deflated by the share price of firm *i* five days ahead of the management announcement.

 $UNED_{it}$  = forecast deviation, or, the difference between the EPS projections made by the management and analysts deflated by the price of firm *i* five days preceding the management forecast. See Eq. (3) for details.

 $CAR_{it}$ = cumulative abnormal returns from the day preceding through two days following the management earnings forecast. See Eq. (3) for details.

All the *p*-values herein are based on two-tailed tests.

\*\*Significant at 0.0001, two-tailed test.

given the same amount of news surprise French analysts deem the surprise less credible, and make less adjustments in their revisions accordingly. This is also consistent with the notion raised in Schipper (1991) that financial analysts, as primary users of financial information, behave in a manner similar to investors when it comes to belief revisions based on credibility of news.

#### 5.4. Information value effect in analyst revisions

Table 9 reports results on our test for the information value effect in analyst revisions. Coefficient  $\beta_1$  is 0.5945 (with *p*-value at 0.0001 by two-tailed test) for the French subsample and 0.1970 (with *p*-value at 0.0013 by two-tailed test) for the US subsample. These results are consistent with prior literature (e.g., Baginski and Hassell, 1990; Williams, 1996) that demonstrates a positive association between management forecasts and subsequent analyst revisions.

Although  $\beta_1$  is found to be positive and significant for both French and US firms, it is apparent that the coefficient is significantly greater for the French subsample, suggesting a higher proportion of news surprise being incorporated into the revisions by French analysts.<sup>24</sup> It shows that in the short term (e.g., one month from the management announcement), the management forecast seems to have a larger impact on the work of financial analysts following French firms.<sup>25</sup>The result supports our third hypothesis that less market demand and less access to private news make French analysts more reliant on public news for their short-run revisions.

#### 6. Conclusions and future research

This study is motivated by the dichotomy between the British– American and Continental accounting models. It draws on findings in recent international studies on the effects of institutional variables on the capital markets. By documenting different levels of market reactions to the

 $<sup>^{24}</sup>$  A Student's *t*-test over the sampling distributions of  $\beta_1$  produces  $\beta_1$ France larger than  $\beta_1 US$  with significantly high statistical significance. We also estimate Equation (3) in a joint test inclusive of the U.S. and French subsamples concurrently, and the result is similar to the t-test. Overall, these diagnostics corroborate the results illustrated in Table 9.

<sup>&</sup>lt;sup>25</sup> Stickel (1989) finds that US financial analysts would rather wait until more information is available to revise their forecasts, usually towards the end of their forecast period, or the last fiscal quarter in the case of annual projection provisions.

management earnings forecasts by 160 well-matched US and French manufacturing firms during 1993, it corroborates conjectures that the information content of those management earnings forecasts may differ due to substantial institutional differences in common-law and code-law countries. For the same institutional reasons, patterns in analyst revisions following the management forecast announcements could also differ. Specifically, we find pricing of securities less responsive to management earnings forecasts in France due to the preemption by nonpublic information channels in code-law economies and the less credibility of the news in the eyes of the market participants. This is in contrast to more efficient incorporation of the news by French analysts in their revisions thanks to their more reliance on public information as a result of less market demand for their service and their less access to private news.

These results are consistent with the effect of institutional differences between the US and French accounting systems, and other institutional variables, such as legal regime, capital market regulation, corporate ownership and governance structure, and state-firm as well as labormanagement relationships, etc. Because of the architypical accounting systems in the US and France that well capture the socio-economic differences between the code-law and common-law countries, we expect the evidence documented in our study to be generalizable, to a large extent, to other countries following those two dichotomous accounting models.

With the continuing integration of global capital markets and the growing convergence and harmonization of different accounting systems, the institutional factors attributable to the difference in the information content of the management forecast and in the subsequent analyst revisions may likely change, or coverage. This process, however, is gradual, as with any social changes. Before then, research into these institutional differences is meaningful and helpful to improve our understanding of these important issues.

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