

TABLE 3

Earnings' Differential Informativeness in Bad-News Quarters and Good-News Quarters

Panel A: Univariate Tests

	<i>Ln(NEWS_RATIO)</i>			t-stat. with S.E. Clustered by Firm- and Year-Qtr.	t-stat. with Boot- strapped S.E.	Z-stat. from Wilcoxon Rank-Sum Test
	<i>BNEWS</i> = 1	<i>BNEWS</i> = 0	Difference			
Mean	3.542	3.414	0.128***	3.78	3.82	
Implied Mean Ratios	34.546	30.396	4.151			
Median	3.573	3.400	0.173***			18.28
Implied Median Ratios	35.623	29.964	5.659			

Panel B: Earnings' Differential Informativeness—Multivariate Tests

	Predicted Sign	Dependent Variable			
		<i>Ln(NEWS_RATIO)</i> Model 1	<i>Ln(NEWS_RATIO)</i> Model 2	<i>Ln(NEWS_RATIO)</i> Model 3	<i>Ranked NEWS_RATIO</i> Model 4
Intercept		2.771*** (0.043)	3.326*** (0.081)	3.342*** (0.073)	3.877*** (0.095)
<i>BNEWS</i>	+	0.097*** (0.029)	0.110*** (0.028)	0.120*** (0.028)	0.226*** (0.046)
<i>BIAS_ADJ</i>		0.216*** (0.006)	0.214*** (0.006)	0.216*** (0.006)	0.256*** (0.006)
<i>RInfoAsymm</i>			−0.030*** (0.004)	−0.039*** (0.006)	−0.060*** (0.007)
<i>INSALE</i>			0.072*** (0.017)	0.031** (0.014)	0.075*** (0.021)
<i>TRADE_DAYS</i>			−0.006*** (0.001)	−0.006*** (0.001)	−0.005*** (0.001)
<i>RBTM</i>			−0.002 (0.002)	−0.001 (0.003)	−0.006* (0.003)
<i>RLEV</i>			−0.010** (0.002)	−0.001 (0.003)	−0.019*** (0.003)
<i>HITECH</i>			0.042*** (0.015)		0.095*** (0.028)
Firm Fixed Effects		No	No	Yes	No
S.E. Clustered by Year-Qtr		No	No	Yes	No
S.E. Clustered by Firm- and Year-Qtr		Yes	Yes	No	Yes

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TABLE 3 (continued)

	Model 1	Model 2	Model 3	Model 4
n of observations	152,257	152,257	152,257	152,257
Adjusted R ²	4.78%	5.41%	7.36%	7.22%
Implied Ratios				
<i>BNEWS</i> = 1	17.60	17.83	17.80	
<i>BNEWS</i> = 0	15.97	15.98	15.78	

Panel C: Short-Horizon Forecasts and Earnings' Differential Informativeness

		Dependent Variable: <i>Ln(NEWS_RATIO)</i>		
		Model 1	Model 2	Model 3
	Predicted Sign for Models 1 and 3	Subsample from 1995	Subsample of Forecasters (from 1995)	Subsample of Non- Forecasters (from 1995)
Intercept		3.328*** (0.092)	3.017*** (0.161)	3.366*** (0.090)
<i>BNEWS</i>	+	0.106*** (0.032)	-0.095* (0.058)	0.144*** (0.031)
<i>BIAS_ADJ</i>		0.216*** (0.007)	0.239*** (0.008)	0.211*** (0.007)
<i>RInfoAsymm</i>		-0.031*** (0.004)	-0.035*** (0.008)	-0.036*** (0.004)
<i>INSALE</i>		0.069*** (0.014)	0.064* (0.035)	0.070*** (0.015)
<i>TRADE_DAYS</i>		-0.006*** (0.001)	-0.004 (0.003)	-0.006*** (0.001)
<i>RBTM</i>		-0.002 (0.002)	-0.011** (0.005)	-0.001 (0.002)
<i>RLEV</i>		-0.011*** (0.002)	-0.002 (0.005)	-0.012*** (0.002)
<i>HITECH</i>		0.042** (0.016)	0.000 (0.029)	0.056*** (0.017)
S.E. Clustered by Firm- and Year-Qtr		Yes	Yes	Yes
n of observations		134,658	14,152	119,051
Adjusted R ²		5.48%	6.74%	5.49%
Implied Ratios				
<i>BNEWS</i> = 1		17.78	12.57	18.85
<i>BNEWS</i> = 0		15.99	13.83	16.32

*, **, *** Represent statistical significance at a minimum 0.1, 0.05, and 0.01 levels, respectively.

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TABLE 3 (continued)

Table 3 presents univariate and multivariate tests of earnings differential informativeness. Panel A includes univariate t-tests for the differences of means and median of $\ln(NEWS_RATIO)$ between the bad-news and the good-news quarters ($BNEWS = 1$ versus $BNEWS = 0$). t-tests are used for the comparison of the means, and the Z-statistic from the Wilcoxon rank-sum for the comparison of the medians. The first t-statistic is based on standard errors clustered by firm and fiscal year-quarter, while the second is based on bootstrapped standard errors clustered by fiscal year-quarter (obtained from drawing 152,275 observations 1,000 times with replacement). Panel B, Models 1, 2, and 4, report the results of OLS regressions with standard errors clustered by firm and fiscal year-quarter, while Panel B, Model 3, reports OLS regression results with firm fixed effects and clustering of standard errors by fiscal year-quarter. In all the regression models in Panel B (except for Model 4), we use $\ln(NEWS_RATIO)$ as the dependent variable. In Panel B, Model 4, the dependent variable is the decile rank of $NEWS_RATIO$ ($Ranked_NEWS_RATIO$). Implied Ratio is the exponent of the predicted $\ln(NEWS_RATIO)$, obtained by setting all control variables to their means except for $BIAS_ADJ$, which is set equal to 0, and $BNEWS$, equal to 1 or 0. Panel C reports the results of OLS regressions with $\ln(NEWS_RATIO)$ as the dependent variable, and with standard errors clustered by firm and fiscal year-quarter. Panel C, Model 1, includes the sample of 134,658 firm-quarters between 1995 and 2006. Panel C, Model 2, includes the subsample of 14,152 firm-quarters between 1995 and 2006 that issue forecasts of current earnings following the previous quarter's earnings announcements, or short-horizon forecasts. Panel C, Model 3, includes the subsample of 120,506 firm-quarters between 1995 and 2006 that do not issue short-horizon forecasts. Standard errors are reported in parentheses below coefficients.

All other variables are defined in the notes to Table 2.

Variable Definitions:

$\ln(NEWS_RATIO)$ = natural logarithm of $NEWS_RATIO$;

$NEWS_RATIO = 100 * ABS(EAR)/ABS(NEAR)$;

$ABS(EAR)$ = absolute value of cumulative market-adjusted returns on trading days -1 to $+1$ relative to the QEA date;

$ABS(NEAR)$ = absolute value of the cumulative market-adjusted non-earnings-announcement period returns;

$BNEWS$ = an indicator variable equal to 1 if overall quarterly return RET is negative, and 0 otherwise;

$RInfoAsymm$ = decile rank of $InfoAsymm$, which is extracted from a principal-components analysis, and is negatively associated with firm size, analyst following, and institutional ownership, and positively associated with idiosyncratic volatility and the adverse selection component of the bid-ask spread;

$RBTM$ = decile rank of beginning-of-period book-to-market; and

$RLEV$ = decile rank of beginning-of-period financial leverage.

just that including the QEA. Therefore, we control for $BIAS_ADJ$, which is defined as the natural logarithm of the ratio of news released during a random three-day window in the quarter relative to that released during the period in that quarter outside the window.²⁰

Equation (2) expands the set of control variables to capture systematic differences in earnings informativeness arising from firm characteristics. $RInfoAsymm$ is the decile rank of $InfoAsymm$ within every quarter. Greater information asymmetry between managers and shareholders, and the general uncertainty typically characterizing high-information-asymmetry firms, can significantly influence earnings informativeness relative to other sources. For example, Bamber (1987) and McNichols (1988) argue that the role of earnings in conveying information varies with the information environment of the firm, which they capture empirically with firm size.

Given that managers often possess private information, their voluntary disclosures, as well as their financial reporting choices, are likely influenced by their own trading patterns (Noe 1999). Consequently, we control for the effect of $INSALE$ on the informativeness of earnings. We control for $TRADE_DAYS$, since longer quarters can allow managers more time to disclose news before the actual earnings announcement and, thus, reduce earnings informativeness.

The nature of the investment opportunity set—in particular, the extent to which it is driven by growth options—can influence the information content of earnings (Collins and Kothari 1989). We

²⁰ Differencing $\ln(NEWS_RATIO)$ and $BIAS_ADJ$ to construct a dependent variable adjusted for bias is problematic. Each term in the difference would be a logged ratio, and differencing would yield the logarithm of a ratio of two ratios, very difficult to interpret economically.