

## **Online Appendix for “Imperfect Accounting and Reporting Bias”**

This appendix reports supplemental analyses for “Imperfect Accounting and Reporting Bias,” with the content summarized as follows:

Table OA1: The relation between reporting bias and errors: alternative weighting of number of items and regulation ambiguity

Table OA2: The relation between reporting bias and errors: controlling for reporting objective of other executives

Table OA3: The relation between reporting bias and errors: controlling for firm-level reporting objective

Table OA4: The relation between reporting bias and errors: within-industry regressions

Table OA5: The relation between the propensity to meet/beat analyst forecast and errors

Table OA6: The relation between reporting bias and errors: alternative definitions of regulation ambiguity

Table OA7: The relation between reporting bias and errors: controlling for fundamental volatility

Table OA8: The relation between reporting bias and errors: deleting outliers

Table OA9: The relation between reporting bias and errors: alternative sample periods

Table OA10: The relation between reporting bias and errors: an alternative way of clustering

Table OA11: The effect of reporting errors on ERC: interacting UE with fixed effects

Table OA12: The effect of reporting errors on ERC: using analyst forecast to define UE

Table OA13: The effect of reporting errors on ERC: using alternative windows to measure CAR

Table OA14: Definitions of variables used in this appendix only

**JEL classifications:** G32; G34; G38; M40; M41; M48; M53

**Keywords:** Accounting Errors; Reporting Bias; Fraud; Accounting Regulation; Earnings Response Coefficient; Fraud Detection; Textual Analysis

**Table OA1 – The relation between reporting bias and errors: alternative weighting of number of items and regulation ambiguity**

Dependent Variables	(1)	(2)	(3)	(4)
			<i>Bias<sub>i,q</sub></i>	
<i>NItems_Median<sub>j,q</sub></i>	<b>12.655<sup>***</sup></b> (4.361)			
<i>NItems_Median<sup>2</sup><sub>j,q</sub></i>	<b>-5.322<sup>***</sup></b> (1.879)			
<i>RegAmbiguity_Median<sub>j,q</sub></i>		<b>0.473<sup>**</sup></b> (0.233)		
<i>RegAmbiguity_Median<sup>2</sup><sub>j,q</sub></i>		<b>-0.069<sup>**</sup></b> (0.032)		
<i>NItems_MVWeighted<sub>j,q</sub></i>			<b>2.661<sup>*</sup></b> (1.474)	
<i>NItems_MVWeighted<sup>2</sup><sub>j,q</sub></i>			<b>-1.313<sup>*</sup></b> (0.681)	
<i>RegAmbiguity_MVWeighted<sub>j,q</sub></i>				<b>0.556<sup>**</sup></b> (0.282)
<i>RegAmbiguity_MVWeighted<sup>2</sup><sub>j,q</sub></i>				<b>-0.071<sup>*</sup></b> (0.039)
Controls	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes
Number of Observations	280,609	280,609	280,609	280,609
Pseudo R <sup>2</sup>	7.49%	7.25%	7.33%	6.95%

This table reports the logit regression results on the relation between firm *i*'s bias propensity in quarter *q* (*Bias*) and alternative proxies for errors. Variance of errors is measured as the median number of non-missing items in quarterly financial statements (*NItems\_Median*) for firms in industry *j*-quarter *q* in column (1), the median degree of exposure to ambiguous accounting rules (*RegAmbiguity\_Median*) for firms in industry *j*-quarter *q* in column (2), the market value of equity-weighted average number of non-missing items in quarterly financial statements (*NItems\_MVWeighted*) for firms in industry *j*-quarter *q* in column (3), and the market value of equity-weighted average degree of exposure to ambiguous accounting rules (*RegAmbiguity\_MVWeighted*) for firms in industry *j*-quarter *q* in column (4), respectively. *NItems\_Median*<sup>2</sup>, *NItems\_MVWeighted*<sup>2</sup>, *RegAmbiguity\_Median*<sup>2</sup>, and *RegAmbiguity\_MVWeighted*<sup>2</sup> are the squared terms of *NItems\_Median*, *NItems\_MVWeighted*, *RegAmbiguity\_Median*, and *RegAmbiguity\_MVWeighted*, respectively. Controls are the same as those in table 2 of the main paper. Detailed definitions of displayed variables are in table OA14. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. <sup>\*\*\*</sup>, <sup>\*\*</sup>, and <sup>\*</sup> indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA2 – The relation between reporting bias and errors: controlling for reporting objective of other executives**

Dependent Variables	(1)	(2)	(3)
		<i>Bias<sub>i,q</sub></i>	
<i>Error%</i> <sub><i>j,q</i></sub>	<b>0.160</b> <sup>***</sup> (0.044)	<b>0.131</b> <sup>**</sup> (0.058)	<b>0.152</b> <sup>***</sup> (0.058)
<i>Error%</i> <sup>2</sup> <sub><i>j,q</i></sub>	<b>-0.012</b> <sup>***</sup> (0.003)	<b>-0.010</b> <sup>**</sup> (0.004)	<b>-0.011</b> <sup>**</sup> (0.004)
<i>Top5Tenure_avg</i> <sub><i>j,q</i></sub>	-0.090 (0.159)		
<i>Top5Tenure_std</i> <sub><i>j,q</i></sub>	0.188 (0.217)		
<i>CFOVesting_avg</i> <sub><i>j,q</i></sub>		-0.054 <sup>**</sup> (0.026)	
<i>CFOVesting_std</i> <sub><i>j,q</i></sub>		-0.032 (0.046)	
<i>CEOCFOVesting_avg</i> <sub><i>j,q</i></sub>			-0.055 <sup>**</sup> (0.025)
<i>CEOCFOVesting_std</i> <sub><i>j,q</i></sub>			-0.011 (0.028)
Controls	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes
Number of Observations	278,390	233,242	256,879
Pseudo R <sup>2</sup>	7.96%	7.66%	7.63%

This table reports the logit regression results on the relation between firm *i*'s bias propensity in quarter *q* (*Bias*) and the error rate of the firm's industry *j* in the same quarter (*Error%*), controlling for the distribution of reporting objective. *Error%*<sup>2</sup> is the squared term of *Error%*. The distribution of the reporting objective is captured using the average and the standard deviation of top five executives' tenure for industry *j*-quarter *q* (*Top5Tenure\_avg* and *Top5Tenure\_std*) in column (1), the average and the standard deviation of CFO vesting period length for industry *j*-quarter *q* (*CFOVesting\_avg* and *CFOVesting\_std*) in column (2), and the average and the standard deviation of CEO and CFO vesting period length for industry *j*-quarter *q* (*CEOCFOVesting\_avg* and *CEOCFOVesting\_std*) in column (3), respectively. Controls are the same as those in table 2 of the main paper. *Error%* is in percentage points. Detailed variable definitions are in appendix B of the main paper and table OA14. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA3 – The relation between reporting bias and errors: controlling for firm-level reporting objective**

Dependent Variables	(1)	(2)	(3)
		<i>Bias<sub>i,q</sub></i>	
<i>Error%</i> <sub>j,q</sub>	<b>0.196**</b> (0.084)	<b>0.233***</b> (0.079)	<b>0.217***</b> (0.080)
<i>Error%</i> <sup>2</sup> <sub>j,q</sub>	<b>-0.015**</b> (0.007)	<b>-0.019***</b> (0.007)	<b>-0.020***</b> (0.008)
<i>PPS</i> <sub>i,q</sub>	-0.000 (0.000)		
<i>PPS_std</i> <sub>i,q</sub>	0.000** (0.000)		
<i>WPS</i> <sub>i,q</sub>		-0.001** (0.001)	
<i>WPS_std</i> <sub>i,q</sub>		-0.000 (0.001)	
<i>Tenure</i> <sub>i,q</sub>			0.007 (0.008)
<i>Tenure_std</i> <sub>i,q</sub>			0.008 (0.037)
Controls	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes
Number of Observations	62,721	64,713	60,544
Pseudo R <sup>2</sup>	5.29%	5.91%	5.38%

This table reports the logit regression results on the relation between firm *i*'s bias propensity in quarter *q* (*Bias*) and the error rate of the firm's industry *j* in the same quarter (*Error%*), controlling for the distribution of reporting objective. *Error%*<sup>2</sup> is the squared term of *Error%*. The distribution of the reporting objective is captured using the CEO pay-for-performance sensitivity for firm *i*-quarter *q* (*PPS*) and its standard deviation over the last five years (*PPS\_std*) in column (1), the CEO scaled wealth-performance sensitivity for firm *i*-quarter *q* (*WPS*) and its standard deviation over the last five years (*WPS\_std*) in column (2), and CEO tenure for firm *i*-quarter *q* (*Tenure*) and its standard deviation over the last five years (*Tenure\_std*) in column (3), respectively. Controls are the same as those in table 2 of the main paper. *Error%* is in percentage points. Detailed variable definitions are in appendix B of the main paper and table OA14. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA4 – The relation between reporting bias and errors: within-industry regressions**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Energy	Materials	Capital Goods	Commercial & Professional Services	Transportation	Automobiles & Components	Consumer Durables & Apparel	Consumer Services
Dependent Variables					<i>Bias<sub>i,q</sub></i>			
<i>Error</i> <sub>o<sub>j,q</sub></sub>	<b>1.058***</b> (0.293)	<b>0.078</b> (0.345)	<b>0.505***</b> (0.178)	<b>0.449***</b> (0.148)	<b>1.442***</b> (0.399)	<b>0.200</b> (0.260)	<b>1.136***</b> (0.194)	<b>0.273***</b> (0.058)
<i>Error</i> <sub>o<sup>2</sup><sub>j,q</sub></sub>	<b>-0.118**</b> (0.060)	<b>0.036</b> (0.085)	<b>-0.096**</b> (0.039)	<b>-0.055***</b> (0.020)	<b>-0.194***</b> (0.068)	<b>0.004</b> (0.041)	<b>-0.168***</b> (0.032)	<b>-0.013***</b> (0.004)
<i>Intercept</i>	-6.612*** (0.342)	-5.616*** (0.304)	-4.803*** (0.163)	-4.817*** (0.211)	-6.350*** (0.468)	-4.472*** (0.407)	-5.734*** (0.243)	-5.309*** (0.155)
Number of Observations	24,482	32,322	28,548	20,767	8,049	6,044	18,462	13,127
Pseudo R <sup>2</sup>	1.83%	0.27%	0.20%	0.26%	2.62%	0.45%	1.36%	1.56%
Turning Point	4.48%		<b>2.63%</b>	<b>4.08%</b>	<b>3.72%</b>		<b>3.38%</b>	<b>10.50%</b>
99 <sup>th</sup> of <i>Error</i> <sub>o</sub>	3.64%	3.14%	3.76%	6.82%	5.61%	4.79%	5.69%	14.09%
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Media	Retailing	Food & Staples Retailing	Food, Beverage & Tobacco	Household & Personal Products	Health Care Equipment & Services	Pharmaceuticals , Biotechnology & Life Sciences	Banks
Dependent Variables					<i>Bias<sub>i,q</sub></i>			
<i>Error</i> <sub>o<sub>j,q</sub></sub>	<b>0.780***</b> (0.105)	<b>0.507***</b> (0.153)	<b>0.403**</b> (0.192)	<b>0.255*</b> (0.137)	<b>-0.106</b> (0.260)	<b>0.614***</b> (0.181)	<b>2.552***</b> (0.307)	<b>0.671***</b> (0.137)
<i>Error</i> <sub>o<sup>2</sup><sub>j,q</sub></sub>	<b>-0.071***</b> (0.015)	<b>-0.030***</b> (0.010)	<b>-0.026*</b> (0.013)	<b>-0.030</b> (0.024)	<b>0.035</b> (0.044)	<b>-0.065**</b> (0.033)	<b>-0.450***</b> (0.064)	<b>-0.089***</b> (0.023)
<i>Intercept</i>	-5.683*** (0.179)	-5.714*** (0.484)	-4.557*** (0.598)	-4.525*** (0.160)	-3.973*** (0.339)	-5.285*** (0.212)	-8.293*** (0.375)	-6.046*** (0.187)
Number of Observations	13,961	18,537	3,566	10,375	3,338	27,978	21,393	34,449
Pseudo R <sup>2</sup>	3.04%	1.57%	0.69%	0.24%	0.16%	0.88%	4.71%	0.56%
Turning Point	<b>5.49%</b>	<b>8.45%</b>	<b>7.75%</b>			4.72%	<b>2.84%</b>	<b>3.77%</b>
99 <sup>th</sup> of <i>Error</i> <sub>o</sub>	5.81%	18.69%	12.99%	5.18%	5.38%	4.57%	3.62%	4.75%

	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
	Diversified Financials	Insurance	Real Estate	Software & Services	Technology Hardware & Equipment	Semiconductors & Semiconductor Equipment	Telecommunication Services	Utilities
Dependent Variables					$Bias_{i,q}$			
$Error\%_{j,q}$	<b>2.252<sup>***</sup></b> (0.642)	<b>1.472<sup>***</sup></b> (0.182)	<b>0.928<sup>***</sup></b> (0.158)	<b>0.925<sup>***</sup></b> (0.293)	<b>0.239<sup>**</sup></b> (0.109)	<b>2.415<sup>**</sup></b> (1.170)	<b>0.851<sup>***</sup></b> (0.126)	<b>1.629<sup>***</sup></b> (0.287)
$Error\%^2_{j,q}$	<b>-0.437<sup>***</sup></b> (0.132)	<b>-0.161<sup>***</sup></b> (0.025)	<b>-0.131<sup>***</sup></b> (0.027)	<b>-0.091<sup>**</sup></b> (0.036)	<b>-0.001</b> (0.020)	<b>-0.366<sup>**</sup></b> (0.181)	<b>-0.067<sup>***</sup></b> (0.011)	<b>-0.238<sup>***</sup></b> (0.045)
Intercept	-7.364 <sup>***</sup> (0.650)	-6.470 <sup>***</sup> (0.307)	-6.510 <sup>***</sup> (0.216)	-5.981 <sup>***</sup> (0.552)	-4.849 <sup>***</sup> (0.123)	-7.452 <sup>***</sup> (1.807)	-6.536 <sup>***</sup> (0.357)	-6.612 <sup>***</sup> (0.385)
Number of Observations	15,620	9,570	14,308	42,139	37,944	2,642	12,118	14,098
Pseudo R <sup>2</sup>	1.06%	4.35%	1.23%	0.85%	1.11%	1.27%	4.73%	3.48%
Turning Point	<b>2.58%</b>	<b>4.57%</b>	<b>3.54%</b>	<b>5.08%</b>		<b>3.30%</b>	<b>6.35%</b>	<b>3.42%</b>
99 <sup>th</sup> of $Error\%$	3.92%	5.81%	5.52%	6.08%	5.17%	4.24%	9.12%	6.28%

This table reports the logit regression results on the relation between firm  $i$ 's bias propensity in quarter  $q$  ( $Bias$ ) and the error rate of the firm's industry  $j$  in the same quarter ( $Error\%$ ) for the 24 GICS industry groups.  $Error\%^2$  is the squared term of  $Error\%$ .  $Error\%$  is in percentage points. Detailed variable definitions are in appendix B of the main paper. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by firm are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests. We calculate the turning point for an industry if the results suggest the existence of a hump-shaped relation between  $Bias$  and  $Error\%$ , and bold the turning point if it falls below the 99<sup>th</sup> of the error rate in the industry.

**Table OA5 – The relation between the propensity to meet/beat analyst forecast and errors**

Dependent Variables	(1)	(2)	(3)	(4)	(5)
			<i>BeatIct<sub>i,q</sub></i>		
<i>Error%</i> <sub><i>j,q</i></sub>	<b>0.093***</b> (0.032)	<b>0.127***</b> (0.031)	<b>0.110***</b> (0.029)	<b>0.143***</b> (0.051)	<b>0.163***</b> (0.050)
<i>Error%</i> <sup>2</sup> <sub><i>j,q</i></sub>	<b>-0.006**</b> (0.003)	<b>-0.006**</b> (0.003)	<b>-0.005**</b> (0.002)	<b>-0.008**</b> (0.004)	<b>-0.008**</b> (0.004)
Controls		Yes	Yes	Yes	Yes
Industry Fixed Effects			Yes		Yes
Year-Quarter Fixed Effects				Yes	Yes
Number of Observations	155,238	144,834	144,834	144,834	144,834
Pseudo R <sup>2</sup>	0.14%	0.98%	1.63%	1.14%	1.76%

This table reports the logit regression results on the relation between firm *i*'s propensity to meet or marginally beat analyst consensus forecast in quarter *q* (*BeatIct*) and the error rate of the firm's industry *j* in the same quarter (*Error%*). *Error%*<sup>2</sup> is the squared term of *Error%*. Controls are the same as those in table 2 of the main paper. *Error%* is in percentage points. Detailed variable definitions are in appendix B of the main paper and table OA14. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA6 – The relation between reporting bias and errors: alternative definitions of regulation ambiguity**

Panel A: Change-based regulation ambiguity indexes

Dependent Variables	(1)	(2)	(3)	(4)
			<i>Bias<sub>i,q</sub></i>	
<i>RegAmbiguity_chg1996%</i> <sub>j,q</sub>	<b>1.282<sup>***</sup></b> (0.395)			
<i>RegAmbiguity_chg1996%</i> <sup>2</sup> <sub>j,q</sub>	<b>-0.328*</b> (0.188)			
<i>RegAmbiguity_chg%</i> <sub>j,q</sub>		<b>9.302<sup>**</sup></b> (4.128)		
<i>RegAmbiguity_chg%</i> <sup>2</sup> <sub>j,q</sub>		<b>-12.994*</b> (7.133)		
<i>RegAmbiguity_chg1996%</i> <sub>i,q</sub>			<b>0.686<sup>***</sup></b> (0.198)	
<i>RegAmbiguity_chg1996%</i> <sup>2</sup> <sub>i,q</sub>			<b>-0.147<sup>***</sup></b> (0.045)	
<i>RegAmbiguity_chg%</i> <sub>i,q</sub>				<b>1.905<sup>**</sup></b> (0.881)
<i>RegAmbiguity_chg%</i> <sup>2</sup> <sub>i,q</sub>				<b>-2.041*</b> (1.225)
Controls	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes
Number of Observations	280,609	280,609	233,631	233,631
Pseudo R <sup>2</sup>	7.94%	7.29%	7.75%	6.86%

This panel reports the logit regression results on the relation between firm *i*'s bias propensity in quarter *q* (*Bias*) and alternative proxies for errors. Variance of errors is measured as the change in the degree of exposure to ambiguous accounting rules from 1996 scaled by the rules' total number of interpretations in 1996 (*RegAmbiguity\_chg1996%*) in column (1), and as the change from the prior year scaled by the rules' total number of interpretations in the prior year (*RegAmbiguity\_chg%*) in column (2), respectively, both averaged for firms in industry *j*-quarter *q*. Variance of errors is measured as the change in the degree of exposure to ambiguous accounting rules scaled by the rules' total number of interpretations in 1996 (*RegAmbiguity\_chg1996%*) in column (3), and as the change from the prior year scaled by the rules' total number of interpretations in the prior year (*RegAmbiguity\_chg%*) in column (4), respectively, both computed for firm *i*-quarter *q*. Controls are the same as those in table 2 of the main paper. Detailed definitions of displayed variables are in table OA14. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.



**Table OA6 – Continued**

Panel B: Unscaled regulation ambiguity index

Dependent Variables	(1)	(2)	(3)	(4)
			<i>Bias<sub>i,q</sub></i>	
<i>RegAmbiguity_chg1996<sub>j,q</sub></i>	<b>0.256**</b> (0.130)			
<i>RegAmbiguity_chg1996<sup>2</sup><sub>j,q</sub></i>	<b>-0.011**</b> (0.005)			
<i>RegAmbiguity_chg<sub>j,q</sub></i>		<b>1.206***</b> (0.457)		
<i>RegAmbiguity_chg<sup>2</sup><sub>j,q</sub></i>		<b>-0.208**</b> (0.100)		
<i>RegAmbiguity_chg1996<sub>i,q</sub></i>			<b>0.070***</b> (0.025)	
<i>RegAmbiguity_chg1996<sup>2</sup><sub>i,q</sub></i>			<b>-0.002**</b> (0.001)	
<i>RegAmbiguity_chg<sub>i,q</sub></i>				<b>0.324**</b> (0.128)
<i>RegAmbiguity_chg<sup>2</sup><sub>i,q</sub></i>				<b>-0.029*</b> (0.016)
Controls	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes
Number of Observations	280,609	280,609	233,631	233,631
Pseudo R <sup>2</sup>	7.99%	7.37%	7.74%	6.85%

This panel reports the logit regression results on the relation between firm  $i$ 's bias propensity in quarter  $q$  ( $Bias$ ) and alternative proxies for errors. Variance of errors is measured as the change in the degree of exposure to ambiguous accounting rules from 1996 ( $RegAmbiguity\_chg1996$ ) in column (1), and as the change from the prior year ( $RegAmbiguity\_chg$ ) in column (2), respectively, both averaged for firms in industry  $j$ -quarter  $q$ . Variance of errors is measured as the change in the degree of exposure to ambiguous accounting rules ( $RegAmbiguity\_chg1996$ ) in column (3), and as the change from the prior year ( $RegAmbiguity\_chg$ ) in column (4), respectively, both computed for firm  $i$ -quarter  $q$ . Controls are the same as those in table 2 of the main paper. Detailed definitions of displayed variables are in table OA14. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA6 – Continued**

Panel C: Regulation ambiguity indexes excluding merger and/or hedge rules

Dependent Variables	(1)	(2)	(3)	(4)	(5)	(6)
				<i>Bias<sub>i,q</sub></i>		
<i>RegAmbiguity_exMA<sub>j,q</sub></i>	<b>2.134<sup>***</sup></b>					
	(0.825)					
<i>RegAmbiguity_exMA<sup>2</sup><sub>j,q</sub></i>	<b>-0.365<sup>**</sup></b>					
	(0.168)					
<i>RegAmbiguity_exHedge<sub>j,q</sub></i>		<b>1.815<sup>***</sup></b>				
		(0.497)				
<i>RegAmbiguity_exHedge<sup>2</sup><sub>j,q</sub></i>		<b>-0.231<sup>***</sup></b>				
		(0.077)				
<i>RegAmbiguity_exMAHedge<sub>j,q</sub></i>			<b>2.999<sup>**</sup></b>			
			(1.304)			
<i>RegAmbiguity_exMAHedge<sup>2</sup><sub>j,q</sub></i>			<b>-0.588<sup>*</sup></b>			
			(0.326)			
<i>RegAmbiguity_exMA<sub>i,q</sub></i>				<b>0.361<sup>**</sup></b>		
				(0.151)		
<i>RegAmbiguity_exMA<sup>2</sup><sub>i,q</sub></i>				<b>-0.038<sup>*</sup></b>		
				(0.023)		
<i>RegAmbiguity_exHedge<sub>i,q</sub></i>					<b>0.289<sup>**</sup></b>	
					(0.143)	
<i>RegAmbiguity_exHedge<sup>2</sup><sub>i,q</sub></i>					<b>-0.039<sup>*</sup></b>	
					(0.022)	
<i>RegAmbiguity_exMAHedge<sub>i,q</sub></i>						<b>0.423<sup>***</sup></b>
						(0.148)
<i>RegAmbiguity_exMAHedge<sup>2</sup><sub>i,q</sub></i>						<b>-0.071<sup>*</sup></b>
						(0.039)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	280,609	280,609	280,609	233,631	233,631	233,631
Pseudo R <sup>2</sup>	8.26%	8.53%	8.50%	8.30%	7.86%	8.20%

This panel reports the logit regression results on the relation between firm  $i$ 's bias propensity in quarter  $q$  ( $Bias$ ) and alternative proxies for errors. In columns (1)-(3), variance of errors is measured as the degree of exposure to ambiguous accounting rules, averaged for firms in industry  $j$ -quarter  $q$ . In columns (4)-(6), variance of errors is measured as the degree of exposure to ambiguous accounting rules for firm  $i$ -quarter  $q$ . *RegAmbiguity\_exMA* considers rules on hedge, lease, and warranty; *RegAmbiguity\_exHedge* considers rules on merger, lease, and warranty; and *RegAmbiguity\_exMAHedge* considers rules on lease and warranty. *RegAmbiguity\_exMA<sup>2</sup>*, *RegAmbiguity\_exHedge<sup>2</sup>*, and *RegAmbiguity\_exMAHedge<sup>2</sup>* are the squared terms of *RegAmbiguity\_exMA*, *RegAmbiguity\_exHedge*, and *RegAmbiguity\_exMAHedge*, respectively. Controls are the same as those in table 2 of the main paper. Detailed definitions of displayed variables are in table OA14. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. <sup>\*\*\*</sup>, <sup>\*\*</sup>, and <sup>\*</sup> indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA7 – The relation between reporting bias and errors: controlling for fundamental volatility**

Dependent Variables	(1)	(2)	(3)
		<i>Bias<sub>i,q</sub></i>	
<i>Error%</i> <sub>j,q</sub>	<b>0.171***</b> (0.048)	<b>0.164***</b> (0.049)	<b>0.164***</b> (0.048)
<i>Error%</i> <sup>2</sup> <sub>j,q</sub>	<b>-0.012***</b> (0.004)	<b>-0.012***</b> (0.004)	<b>-0.012***</b> (0.004)
<i>EarningsVolatility</i> <sub>i,q</sub>	0.001 (0.001)		0.001 (0.001)
<i>EarningsVolatility</i> <sub>j,q</sub>		-0.001 (0.001)	-0.001 (0.001)
Controls	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes
Number of Observations	280,609	280,609	280,609
Pseudo R <sup>2</sup>	8.01%	8.00%	8.03%

This table reports the logit regression results on the relation between firm *i*'s bias propensity in quarter *q* (*Bias*) and the error rate of the firm's industry *j* in the same quarter (*Error%*), controlling for firms' fundamental volatility. *Error%*<sup>2</sup> is the squared term of *Error%*. In column (1), fundamental volatility is measured as the standard deviation of firm *i*'s quarterly net income over the five years prior to quarter *q*. In column (2), fundamental volatility is measured as the standard deviation of all firms' net income in industry *j*-quarter *q*. Column (3) includes both proxies for fundamental volatility. Controls are the same as those in table 2 of the main paper. *Error%* is in percentage points. Detailed definitions of displayed variables are in appendix B of the main paper and table OA14. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA8 – The relationship between reporting bias and errors: deleting outliers**

	(1)	(2)	(3)	(4)
	Deleting 99 <sup>th</sup> of <i>Error%</i>	Deleting 95 <sup>th</sup> of <i>Error%</i>	Deleting four industry groups with highest error rates	Deleting firms with both bias and errors
Dependent Variables	<i>Bias<sub>i,q</sub></i>			
<i>Error%</i> <sub><i>j,q</i></sub>	<b>0.174***</b> (0.058)	<b>0.313**</b> (0.138)	<b>0.336**</b> (0.150)	<b>0.135**</b> (0.058)
<i>Error%</i> <sup>2</sup> <sub><i>j,q</i></sub>	<b>-0.013**</b> (0.005)	<b>-0.035*</b> (0.020)	<b>-0.036*</b> (0.020)	<b>-0.009**</b> (0.005)
Controls	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes
Number of Observations	275,798	266,323	251,857	278,762
Pseudo R <sup>2</sup>	8.16%	8.18%	8.35%	7.71%

This table reports the logit regression results on the relation between firm *i*'s bias propensity in quarter *q* (*Bias*) and the error rate of the firm's industry *j* in the same quarter (*Error%*). *Error%*<sup>2</sup> is the squared term of *Error%*. In columns (1) and (2), we remove industry-quarters with *Error%* equal to or above the 99<sup>th</sup> percentile and the 95<sup>th</sup> percentile of the sample, respectively. In column (3), we remove firm-quarters from Consumer Services, Retailing, Food & Staples Retailing, and Telecommunication Services, the four industry groups with the highest *Error%* in the sample. In column (4), we remove firm-quarters associated with the 55 firms that engaged in both intentional and unintentional misstatements within four consecutive quarters. Controls are the same as those in table 2 of the main paper. *Error%* is in percentage points. Detailed variable definitions are in appendix B of the main paper. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA9 – The relation between reporting bias and errors: alternative sample periods**

	(1)	(2)	(3)	(4)
	1996Q1-2005Q2	1995Q1-2004Q2	1995Q1-2004Q4	1992Q1-2006Q2
Dependent Variables	<i>Bias<sub>i,q</sub></i>			
<i>Error%</i> <sub><i>j,q</i></sub>	<b>0.172<sup>***</sup></b> (0.049)	<b>0.200<sup>***</sup></b> (0.053)	<b>0.186<sup>***</sup></b> (0.055)	<b>0.178<sup>***</sup></b> (0.056)
<i>Error%</i> <sup>2</sup> <sub><i>j,q</i></sub>	<b>-0.012<sup>***</sup></b> (0.004)	<b>-0.014<sup>***</sup></b> (0.004)	<b>-0.013<sup>***</sup></b> (0.004)	<b>-0.012<sup>***</sup></b> (0.004)
Controls	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes
Number of Observations	267,240	263,098	276,659	366,148
Pseudo R <sup>2</sup>	7.60%	8.41%	8.23%	11.00%

This table reports the logit regression results on the relation between firm *i*'s bias propensity in quarter *q* (*Bias*) and the error rate of the firm's industry *j* in the same quarter (*Error%*). *Error%*<sup>2</sup> is the squared term of *Error%*. Controls are the same as those in table 2 of the main paper, except that the average percentage of independent board directors (*IndBoard%*) is excluded in columns (2)-(4) due to data coverage. *Error%* is in percentage points. Detailed variable definitions are in appendix B of the main paper. The sample period is between 1996Q1 and 2005Q2 in column (1), between 1995Q1 and 2004Q2 in column (2), between 1995Q1 and 2004Q4 in column (3), and between 1992Q1 and 2006Q2 in column (4). Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. <sup>\*\*\*</sup>, <sup>\*\*</sup>, and <sup>\*</sup> indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA10 – The relation between reporting bias and errors: an alternative way of clustering**

Dependent Variables	(1)	(2)	(3)	(4)	(5)
			<i>Bias<sub>i,q</sub></i>		
<i>Error%</i> <sub><i>j,q</i></sub>	<b>0.170**</b> (0.072)				
<i>Error%</i> <sup>2</sup> <sub><i>j,q</i></sub>	<b>-0.012**</b> (0.005)				
<i>NItems</i> <sub><i>j,q</i></sub>		<b>7.741**</b> (3.272)			
<i>NItems</i> <sup>2</sup> <sub><i>j,q</i></sub>		<b>-3.953***</b> (1.409)			
<i>RegAmbiguity</i> <sub><i>j,q</i></sub>			<b>0.862**</b> (0.335)		
<i>RegAmbiguity</i> <sup>2</sup> <sub><i>j,q</i></sub>			<b>-0.088*</b> (0.052)		
<i>NItems</i> <sub><i>i,q</i></sub>				<b>4.072***</b> (1.189)	
<i>NItems</i> <sup>2</sup> <sub><i>i,q</i></sub>				<b>-1.203***</b> (0.444)	
<i>RegAmbiguity</i> <sub><i>i,q</i></sub>					<b>0.321***</b> (0.088)
<i>RegAmbiguity</i> <sup>2</sup> <sub><i>i,q</i></sub>					<b>-0.029***</b> (0.010)
Controls	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes	Yes
Number of Observations	280,609	280,609	280,609	259,761	233,631
Pseudo R <sup>2</sup>	7.99%	7.57%	7.93%	7.70%	7.79%

This table reports the logit regression results on the relation between firm *i*'s bias propensity in quarter *q* (*Bias*) and the error rate of the firm's industry *j* in the same quarter (*Error%*), as well as alternative proxies for errors. In column (2), variance of errors is measured as the number of non-missing items in quarterly financial statements (*NItems*), averaged for firms in industry *j*-quarter *q*. In column (3), variance of errors is measured as the degree of exposure to ambiguous accounting rules (*RegAmbiguity*), averaged for firms in industry *j*-quarter *q*. In column (4), variance of errors is measured as *NItems* for firm *i*-quarter *q*. In column (5), variance of errors is measured as *RegAmbiguity* for firm *i*-quarter *q*. *Error%*<sup>2</sup>, *NItems*<sup>2</sup>, and *RegAmbiguity*<sup>2</sup> are the squared terms of *Error%*, *NItems*, and *RegAmbiguity*, respectively. Controls are the same as those in table 2 of the main paper. *Error%* is in percentage points, and *NItems* is in hundreds. Detailed variable definitions are in appendix B of the main paper. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by firm and year-quarter are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA11 – The effect of reporting errors on ERC: interacting UE with fixed effects**

Dependent Variables	(1)	(2)	(3)
		$CAR_{i,q}$	
$UE_{i,q}$	0.120*** (0.039)	0.141*** (0.037)	0.142*** (0.037)
$Error\%_{j,q}$		-0.000** (0.000)	
$Error\%_{j,q} \times UE_{i,q}$		<b>-0.004**</b> (0.002)	
$Error\%_{j,q-1}$			-0.000 (0.000)
$Error\%_{j,q-1} \times UE_{i,q}$			<b>-0.004**</b> (0.002)
Controls	Yes	Yes	Yes
Interaction between Fixed Effects and $UE$	Yes	Yes	Yes
Number of Observations	221,241	221,241	221,241
Adjusted $R^2$	3.06%	3.06%	3.06%

This table reports the ordinary least squares (OLS) regression results on the relation between the market reaction at earnings announcements ( $CAR$ ) and the unexpected earnings ( $UE$ ), and the relation between  $CAR$  and  $UE$ 's interaction with variance of errors. Variance of errors is measured as industry  $j$ 's percentage of firms that engage in unintentional misstatements ( $Error\%$ ) in quarter  $q$  and quarter  $q-1$  in columns (2) and (3), respectively. Controls are the same as those in table 7 of the main paper.  $Error\%$  is in percentage points. Detailed variable definitions are in appendix B of the main paper. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA12 – The effect of reporting errors on ERC: using analyst forecast to define UE**

Dependent Variables	(1)	(2)	(3)
		$CAR_{i,q}$	
$UE_{aly_{i,q}}$	0.500*** (0.034)	0.501*** (0.034)	0.501*** (0.034)
$Error\%_{o_{j,q}}$		-0.000 (0.000)	
$Error\%_{o_{j,q}} \times UE_{aly_{i,q}}$		<b>-0.001**</b> (0.000)	
$Error\%_{o_{j,q-1}}$			-0.000 (0.000)
$Error\%_{o_{j,q-1}} \times UE_{aly_{i,q}}$			<b>-0.001**</b> (0.000)
Controls	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes
Number of Observations	109,261	109,261	109,261
Adjusted R <sup>2</sup>	2.40%	2.40%	2.40%

This table reports the OLS regression results on the relation between the market reaction at earnings announcements ( $CAR$ ) and the unexpected earnings ( $UE_{aly}$ ), and the relation between  $CAR$  and  $UE_{aly}$ 's interaction with variance of errors. Variance of errors is measured as industry  $j$ 's percentage of firms that engage in unintentional misstatements ( $Error\%$ ) in quarter  $q$  and quarter  $q-1$  in columns (2) and (3), respectively. Controls are the same as those in table 7 of the main paper.  $Error\%$  is in percentage points. Detailed variable definitions are in appendix B of the main paper and table OA14. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.



**Table OA13 – The effect of reporting errors on ERC: using alternative windows to measure CAR**

Dependent Variables	(1)	(2)	(3)	(4)	(5)
	$CAR[-1,5]_{i,q}$	$CAR[-1,10]_{i,q}$	$CAR[-1,20]_{i,q}$	$CAR[-1,30]_{i,q}$	$CAR[-1,40]_{i,q}$
$UE_{i,q}$	0.240*** (0.024)	0.268*** (0.028)	0.322*** (0.034)	0.393*** (0.039)	0.443*** (0.039)
$Error\%_{j,q}$	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
$Error\%_{j,q} \times UE_{i,q}$	<b>-0.004**</b> (0.002)	<b>-0.004*</b> (0.002)	<b>-0.005*</b> (0.003)	<b>-0.006*</b> (0.003)	<b>-0.007*</b> (0.004)
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes	Yes
Number of Observations	221,011	220,735	220,126	219,394	218,600
Adjusted R <sup>2</sup>	2.94%	3.25%	3.85%	4.60%	5.05%

This table reports the OLS regression results on the relation between the market reaction at earnings announcements ( $CAR$ ) and the unexpected earnings ( $UE$ ), and the relation between  $CAR$  and  $UE$ 's interaction with variance of errors. Market reaction is measured from one trading day before the earnings announcement date of firm  $i$ -quarter  $q$  to the 5<sup>th</sup>, 10<sup>th</sup>, 20<sup>th</sup>, 30<sup>th</sup>, and 40<sup>th</sup> trading day after the announcement in columns (1) to (5), respectively. Variance of errors is measured as industry  $j$ 's percentage of firms that engage in unintentional misstatements ( $Error\%$ ) in quarter  $q$ . Controls are the same as those in table 7 of the main paper.  $Error\%$  is in percentage points. Detailed variable definitions are in appendix B of the main paper and table OA14. The sample period is between 1996Q1 and 2005Q4. Standard errors clustered by industry and year-quarter are displayed below the coefficient estimates. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively, using two-tailed tests.

**Table OA14 –Definitions of variables used in this appendix only**

<b>Variable Name</b>	<b>Definition</b>
<i>NItems_Median<sub>j,q</sub></i>	<i>NItems_Median<sub>j,q</sub></i> is the median <i>NItems<sub>i,q</sub></i> for industry <i>j</i> -quarter <i>q</i> . <i>NItems<sub>i,q</sub></i> is defined in appendix B of the main paper.
<i>RegAmbiguity_Median<sub>j,q</sub></i>	<i>RegAmbiguity_Median<sub>j,q</sub></i> is the median <i>RegAmbiguity<sub>i,q</sub></i> for industry <i>j</i> -quarter <i>q</i> . <i>RegAmbiguity<sub>i,q</sub></i> is defined in appendix B of the main paper.
<i>NItems_MVWeighted<sub>j,q</sub></i>	<i>NItems_MVWeighted<sub>j,q</sub></i> is the average <i>NItems<sub>i,q</sub></i> for industry <i>j</i> -quarter <i>q</i> , weighted by each firm's market value of equity at the end of quarter <i>q</i> .
<i>RegAmbiguity_MVWeighted<sub>j,q</sub></i>	<i>RegAmbiguity_MVWeighted<sub>j,q</sub></i> is the average <i>RegAmbiguity<sub>i,q</sub></i> for industry <i>j</i> -quarter <i>q</i> , weighted by each firm's market value of equity at the end of quarter <i>q</i> . <i>RegAmbiguity<sub>i,q</sub></i> is defined in appendix B of the main paper.
<i>Top5Tenure_avg<sub>j,q</sub></i> ( <i>Top5Tenure_std<sub>j,q</sub></i> )	The average and the standard deviation of top five executive tenure for industry <i>j</i> -quarter <i>q</i> . Top five executive tenure is the number of years elapsed between the year in which an executive joined the firm and the year to which quarter <i>q</i> belongs, averaged across the five executives, as tracked in ExecuComp. Top five executives are defined as the five executives with the highest total cash compensation in the year.
<i>CFOVesting_avg<sub>j,q</sub></i> ( <i>CFOVesting_std<sub>j,q</sub></i> )	The average and the standard deviation of <i>CFOVesting<sub>i,q</sub></i> for industry <i>j</i> -quarter <i>q</i> . <i>CFOVesting<sub>i,q</sub></i> is approximated using the weighted average vesting period of a CFO's newly granted options in firm <i>i</i> -quarter <i>q</i> . The length of an option grant's vesting period is measured from the grant date to the date on which the option becomes exercisable, in years. The weight is the value of each option grant, calculated using the Black-Scholes option pricing model. All option grant data are from Thomson Reuters Insiders Data, and the inputs (i.e., dividend yield, risk-free interest rate, and volatility) to the Black-Scholes formula are obtained from the Compustat annual and quarterly files or calculated from the CRSP daily files.
<i>CEOCFOVesting_avg<sub>j,q</sub></i> ( <i>CEOCFOVesting_std<sub>j,q</sub></i> )	The average and the standard deviation of <i>CEOCFOVesting<sub>i,q</sub></i> for industry <i>j</i> -quarter <i>q</i> . <i>CEOCFOVesting<sub>i,q</sub></i> is the weighted average vesting period of a CEO's or a CFO's newly granted options for firm <i>i</i> -quarter <i>q</i> . Vesting period is calculated similarly as above.
<i>PPS<sub>i,q</sub></i> ( <i>PPS_std<sub>i,q</sub></i> )	The standard deviation of CEO's pay-for-performance sensitivity ( <i>PPS<sub>i,q</sub></i> ) for firm <i>i</i> over the five years prior to quarter <i>q</i> . <i>PPS<sub>i,q</sub></i> is defined in appendix B of the main paper.
<i>WPS<sub>i,q</sub></i> ( <i>WPS_std<sub>i,q</sub></i> )	The standard deviation of CEO's scaled wealth-performance sensitivity ( <i>WPS<sub>i,q</sub></i> ) for firm <i>i</i> over the five years prior to quarter <i>q</i> . <i>WPS<sub>i,q</sub></i> is defined in appendix B of the main paper.
<i>Tenure<sub>i,q</sub></i> ( <i>Tenure_std<sub>i,q</sub></i> )	<i>Tenure<sub>i,q</sub></i> is the number of years elapsed between the year in which the current CEO of firm <i>i</i> became CEO of the firm and the year to which quarter <i>q</i> belongs, as tracked in ExecuComp. <i>Tenure_std<sub>i,q</sub></i> is the standard deviation of <i>Tenure<sub>i,q</sub></i> for firm <i>i</i> over the five years prior to quarter <i>q</i> .
<i>Beat1ct<sub>i,q</sub></i>	An indicator variable that equals one if firm <i>i</i> has its reported EPS falling between the analyst consensus forecast and that plus one cent in quarter <i>q</i> , and zero otherwise. EPS and analyst consensus forecast are obtained from the I/B/E/S unadjusted summary file.
<i>RegAmbiguity_chg1996%<sub>j,q</sub></i> <i>RegAmbiguity_chg%<sub>j,q</sub></i> ( <i>RegAmbiguity_chg1996%<sub>i,q</sub></i> ) <i>RegAmbiguity_chg%<sub>i,q</sub></i>	<i>RegAmbiguity_chg1996%<sub>j,q</sub></i> and <i>RegAmbiguity_chg%<sub>j,q</sub></i> are the average of <i>RegAmbiguity_chg1996%<sub>i,q</sub></i> and <i>RegAmbiguity_chg%<sub>i,q</sub></i> for industry <i>j</i> -quarter <i>q</i> , respectively. <i>RegAmbiguity_chg1996%<sub>i,q</sub></i> is the sum of <i>M&amp;A<sub>i,q</sub></i> × <i>M&amp;ARuleAmbiguity_chg1996%<sub>q</sub></i> , <i>Hedge<sub>i,q</sub></i> × <i>HedgeRuleAmbiguity_chg1996%<sub>q</sub></i> , <i>Lease<sub>i,q</sub></i> × <i>LeaseRuleAmbiguity_chg1996%<sub>q</sub></i> , and <i>Warranty<sub>i,q</sub></i> × <i>WarrantyRuleAmbiguity_chg1996%<sub>q</sub></i> for firm <i>i</i> -quarter <i>q</i> . <i>RegAmbiguity_chg%<sub>i,q</sub></i> is the sum of <i>M&amp;A<sub>i,q</sub></i> × <i>M&amp;ARuleAmbiguity_chg%<sub>q</sub></i> , <i>Hedge<sub>i,q</sub></i> × <i>HedgeRuleAmbiguity_chg%<sub>q</sub></i> , <i>Lease<sub>i,q</sub></i> × <i>LeaseRuleAmbiguity_chg%<sub>q</sub></i> , and <i>Warranty<sub>i,q</sub></i> × <i>WarrantyRuleAmbiguity_chg%<sub>q</sub></i> for firm <i>i</i> -quarter <i>q</i> . <i>M&amp;A<sub>i,q</sub></i> , <i>Hedge<sub>i,q</sub></i> , <i>Lease<sub>i,q</sub></i> , and <i>Warranty<sub>i,q</sub></i> are defined in appendix B of the main paper. <i>M&amp;ARuleAmbiguity_chg1996%<sub>q</sub></i> is the sum of the number of interpretations in <i>FAS 141: Business Combinations</i> and <i>FAS 142: Goodwill and Other Intangible Assets</i> (or <i>APB 16: Business Combinations</i> and <i>APB 17: Intangible Assets</i> prior to 2001) in the year to which quarter <i>q</i> belongs, scaled by the sum of the number of interpretations in <i>APB16</i> and <i>APB17</i> in 1996 then minus one.

$M\&ARuleAmbiguity\_chg\%_q$  is the sum of the number of interpretations in FAS 141 and FAS 142 (or APB 16 and APB 17 prior to 2001) in the year to which quarter  $q$  belongs, scaled by that in the prior year then minus one.

$HedgeRuleAmbiguity\_chg1996\%_q$  is the number of interpretations in FAS 133: *Accounting for Derivative Instruments and Hedging Activities* (or the sum of the number of interpretations in FAS 80: *Accounting for Futures Contracts*, FAS 105: *Disclosure of Information about Financial Instruments with Off-Balance-Sheet Risk and Financial Instruments with Concentrations of Credit Risk*, and FAS 119: *Disclosure about Derivative Financial Instruments and Fair Value of Financial Instruments* prior to 2000) in the year to which quarter  $q$  belongs, scaled by the sum of the number of interpretations in FAS 80, FAS 105, and FAS 119 in 1996 then minus one.

$HedgeRuleAmbiguity\_chg\%_q$  is the number of interpretations in FAS 133 (or the sum of the number of interpretations in FAS 80, FAS 105, and FAS 119 prior to 2000) in the year to which quarter  $q$  belongs, scaled by that in the prior year then minus one.

$LeaseRuleAmbiguity\_chg1996\%_q$  is the number of interpretations in FAS 13: *Accounting for Leases* in the year to which quarter  $q$  belongs, scaled by that in 1996 then minus one.

$LeaseRuleAmbiguity\_chg\%_q$  is the number of interpretations in FAS 13 in the year to which quarter  $q$  belongs, scaled by that in the prior year then minus one.

$WarrantyRuleAmbiguity\_chg1996\%_q$  is the number of interpretations in FAS 5: *Accounting for Contingencies* in the year to which quarter  $q$  belongs, scaled by that in 1996 then minus one.

$WarrantyRuleAmbiguity\_chg\%_q$  is the number of interpretations in FAS 5 in the year to which quarter  $q$  belongs, scaled by that in the prior year then minus one.

$RegAmbiguity\_chg1996_{j,q}$   
 $RegAmbiguity\_chg_{j,q}$   
 $(RegAmbiguity\_chg1996_{i,q}$   
 $RegAmbiguity\_chg_{i,q})$

$RegAmbiguity\_chg1996_{j,q}$  and  $RegAmbiguity\_chg_{j,q}$  are the average of  $RegAmbiguity\_chg1996_{i,q}$  and  $RegAmbiguity\_chg_{i,q}$  for industry  $j$ -quarter  $q$ , respectively.  $RegAmbiguity\_chg1996_{i,q}$  is the sum of  $M\&A_{i,q} \times M\&ARuleAmbiguity\_chg1996_q$ ,  $Hedge_{i,q} \times HedgeRuleAmbiguity\_chg1996_q$ ,  $Lease_{i,q} \times LeaseRuleAmbiguity\_chg1996_q$ , and  $Warranty_{i,q} \times WarrantyRuleAmbiguity\_chg1996_q$  for firm  $i$ -quarter  $q$ .  $RegAmbiguity\_chg_{i,q}$  is the sum of  $M\&A_{i,q} \times M\&ARuleAmbiguity\_chg_q$ ,  $Hedge_{i,q} \times HedgeRuleAmbiguity\_chg_q$ ,  $Lease_{i,q} \times LeaseRuleAmbiguity\_chg_q$ , and  $Warranty_{i,q} \times WarrantyRuleAmbiguity\_chg_q$  for firm  $i$ -quarter  $q$ .  $M\&A_{i,q}$ ,  $Hedge_{i,q}$ ,  $Lease_{i,q}$ , and  $Warranty_{i,q}$  are defined in appendix B of the main paper. All of them are scaled by ten in the regressions for ease of presentation of estimated coefficients and standard errors.

$M\&ARuleAmbiguity\_chg1996_q$  is the sum of the number of interpretations in FAS 141: *Business Combinations* and FAS 142: *Goodwill and Other Intangible Assets* (or APB 16: *Business Combinations* and APB 17: *Intangible Assets* prior to 2001) in the year to which quarter  $q$  belongs minus the sum of the number of interpretations in APB 16 and APB 17 in 1996, the first year of our sample period.

$M\&ARuleAmbiguity\_chg_q$  is the sum of the number of interpretations in FAS 141 (or APB 16 and APB 17 prior to 2001) in the year to which quarter  $q$  belongs minus that in the prior year.

$HedgeRuleAmbiguity\_chg1996_q$  is the number of interpretations in FAS 133: *Accounting for Derivative Instruments and Hedging Activities* (or the sum of the number of interpretations in FAS 80: *Accounting for Futures Contracts*, FAS 105: *Disclosure of Information about Financial Instruments with Off-Balance-Sheet Risk and Financial Instruments with Concentrations of Credit Risk*, and FAS 119: *Disclosure about Derivative Financial Instruments and Fair Value of Financial Instruments* prior to 2000) in the year to which quarter  $q$  belongs minus the sum of the number of interpretations in FAS 80, FAS 105, and FAS 119 in 1996.

$HedgeRuleAmbiguity\_chg_q$  is the number of interpretations in FAS 133 (or the sum of the number of interpretations in FAS 80 and FAS 119 prior to 2000) in the year to which

quarter  $q$  belongs minus that in the prior year.

$LeaseRuleAmbiguity\_chg1996_q$  is the number of interpretations in *FAS 13: Accounting for Leases* in the year to which quarter  $q$  belongs minus that in 1996.

$LeaseRuleAmbiguity\_chg_q$  is the number of interpretations in *FAS 13* in the year to which quarter  $q$  belongs minus that in the prior year.

$WarrantyRuleAmbiguity\_chg1996_q$  is the number of interpretations in *FAS 5: Accounting for Contingencies* in the year to which quarter  $q$  belongs minus that in 1996.

$WarrantyRuleAmbiguity\_chg_q$  is the number of interpretations in *FAS 5* in the year to which quarter  $q$  belongs minus that in the prior year.

$RegAmbiguity\_exMA_{j,q}$ ,  
 $RegAmbiguity\_exHedge_{j,q}$ ,  
 $RegAmbiguity\_exMAHedge_{j,q}$   
( $RegAmbiguity\_exMA_{i,q}$ ,  
 $RegAmbiguity\_exHedge_{i,q}$ ,  
 $RegAmbiguity\_exMAHedge_{i,q}$ )

$RegAmbiguity\_exMA_{i,q}$ ,  $RegAmbiguity\_exHedge_{i,q}$ , and  $RegAmbiguity\_exMAHedge_{i,q}$  are the average of  $RegAmbiguity\_exMA_{i,q}$ ,  $RegAmbiguity\_exHedge_{i,q}$ , and  $RegAmbiguity\_exMAHedge_{i,q}$  for industry  $j$ -quarter  $q$ , respectively.

$RegAmbiguity\_exMA_{i,q}$  is the sum of  $Hedge_{i,q} \times HedgeRuleAmbiguity_q$ ,  $Lease_{i,q} \times LeaseRuleAmbiguity_q$ , and  $Warranty_{i,q} \times WarrantyRuleAmbiguity_q$ ;

$RegAmbiguity\_exHedge_{i,q}$  is the sum of  $M\&A_{i,q} \times M\&ARuleAmbiguity_q$ ,  $Lease_{i,q} \times LeaseRuleAmbiguity_q$ , and  $Warranty_{i,q} \times WarrantyRuleAmbiguity_q$ ; and

$RegAmbiguity\_exMAHedge_{i,q}$  is the sum of  $Lease_{i,q} \times LeaseRuleAmbiguity_q$  and  $Warranty_{i,q} \times WarrantyRuleAmbiguity_q$ .

$M\&ARuleAmbiguity_q$  is the sum of the number of interpretations in *FAS 141* and *FAS 142* (or *APB 16* and *APB 17* prior to 2001) in the year to which quarter  $q$  belongs, scaled by the sum of the number of interpretations in *APB 16* and *APB 17* in 1996.

$HedgeRuleAmbiguity_q$  is the number of interpretations in *FAS 133* (or the sum of the number of interpretations in *FAS 80*, *FAS 105*, and *FAS 119* prior to 2000) in the year to which quarter  $q$  belongs, scaled by the sum of the number of interpretations in *FAS 80*, *FAS 105*, and *FAS 119* in 1996.

$LeaseRuleAmbiguity_q$  is the number of interpretations in *FAS 13* in the year to which quarter  $q$  belongs, scaled by that in 1996.

$WarrantyRuleAmbiguity_q$  is the number of interpretations in *FAS 5* in the year to which quarter  $q$  belongs, scaled by that in 1996.

$EarningsVolatility_{i,q}$

$EarningsVolatility_{i,q}$  is the standard deviation of firm  $i$ 's quarterly net income (NIQ) over the five years prior to quarter  $q$ .

$EarningsVolatility_{j,q}$

$EarningsVolatility_{j,q}$  is the standard deviation of quarterly net income (NIQ) of all firms in industry  $j$ -quarter  $q$ .

$UE\_aly_{i,q}$

The EPS of firm  $i$ -quarter  $q$  minus the latest mean analyst consensus EPS forecast prior to the earnings announcement, scaled by price ten days before the earnings announcement date of firm  $i$ -quarter  $q$ .

$CAR[-1,n]_{i,q}$

The cumulative market-adjusted return from one trading day before the earnings announcement date of firm  $i$ -quarter  $q$  to the  $n^{\text{th}}$  trading day after the announcement,  $n = 5, 10, 20, 30,$  and  $40$ , with the daily market-adjusted return calculated as the raw return minus the corresponding return on CRSP value-weighted index.

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