

Internet Appendix for
“The Effects of a U.S. Approach to Enforcement: Evidence from China”

IA1. Implementing LDA analysis in Chinese

We download CL replies, annual reports, and amended annual reports from the websites of Shanghai Securities News (www.cnstock.com) and Securities Times (www.stcn.com). Our final sample for textual analysis consists of 929 CL replies, 929 CL-year's annual reports for which CLs were issued, and 912 annual reports for the year after CL receipts.¹ As far as we are aware, we are one of the first conducting textual analysis using CL replies and annual reports in Chinese. For replicability, we describe how we process documents in Chinese and train the LDA model.

1. Preprocessing CL replies

- Step 1: Convert CL replies in pdf to text using the Python package pdftotext (<https://pypi.org/project/pdftotext/>). Remove the header of each CLR.
 - Figures are removed, and text and numbers within tables are retained in this step.
- Step 2: Run the Chinese segmenter jieba (<https://github.com/fxsjy/jieba>) on the text file from Step 1 to convert sentences into words.² The default setting of jieba is used (i.e., jieba.cut() is called for segmentation).
- Step 3: Run Stanford CoreNLP (<https://stanfordnlp.github.io/CoreNLP/>) on the text file from Step 1 to identify named entities.
 - Use the following command line:

```
java -mx4g -cp "*" edu.stanford.nlp.pipeline.StanfordCoreNLP -props
StanfordCoreNLP-chinese.properties -annotators tokenize,ssplit,pos,lemma,ner -
outputFormat conll -file text.txt
```

which will run tokenization, sentence splitting, pos tagging and named entity recognition jointly.
 - A list of named entities (PERSON, LOCATION, ORGANIZATION, MISC, MONEY, NUMBER, ORDINAL, PERCENT, DATE, TIME, DURATION, and SET) is generated.
- Step 4: Remove the following words from the output in Step 2:
 - Stop words:
 - Punctuation marks in Chinese, e.g., ?, !, and ¥.
 - Word lists from <https://github.com/goto456/stopwords>.
 - Words with a single Chinese character.
 - Any word starting with numbers (i.e., 0-9) or letters (i.e., a-z, A-Z).
 - Named entities from Step 3

¹ There are a number of reasons for us not having the same number of annual reports for the year after CL receipts: 1) six firms were either delisted from the SSE in the following year or delayed their annual report filings due to the COVID-19 pandemic; and 2) 11 firms have missing values for control variables in our regression analysis.

² Jieba is an open source Chinese parser with its initial corpus based on 1998 People's Daily and modern novels in Chinese. Over time, it adds the 2006 Edition of sogou dictionary and dict.txt (<https://github.com/fxsjy/jieba/issues/7>).

- Names of Chinese provinces, autonomous regions, cities, and counties, at <https://zh.wikipedia.org/wiki/中华人民共和国县级以上行政区列表>
<https://zh.wikipedia.org/wiki/中华人民共和国城市列表>
- Units of measure and ordinals
- Words showing up fewer than five times

2. Running LDA analysis

The goal of topic modeling is to automatically discover the topics from a collection of documents (in our first application, to identify issues raised in a set of CL replies). The documents themselves are observed, while the topic structure—the topics, per-document topic distributions, and per-document per-word topic assignments—is hidden structure.

The key computational challenge for topic modeling is using the observed documents to infer the hidden topic structure. LDA analysis relies on latent Dirichlet allocation in which all the documents in the collection share the same set of topics, but each document covers those topics in different proportions. To fit an LDA model, the researcher needs to specify only the total number of K topics, and the estimation routine produces two outputs: (i) word frequencies for each of the K topics, and (ii) frequencies with which the topics are covered in each document. If the number of topics is too many then some topics might be either duplicative or split narrowly into subtopics; and if the number is too few then some key topics might be omitted. Applying LDA analysis to CLs on prospectuses, Lowry et al. (2020) identify eight distinct topics. Applying LDA analysis to 10K filings, Brown, Crowley, and Elliott (2020) identify 31 topics.

To determine the appropriate number of interpretable topics in the set of CL replies, we measure the “perplexity” of the topic model (Blei, Ng, and Jordan 2003) – lower perplexity indicates that the model is a better fit for the observed data.³ We also manually inspect the top words under each topic when the number of topics ranges from six to twelve. Figure IA1 in the Internet Appendix presents perplexity scores as we vary the number of topics when fitting different LDA models to the set of 929 CL replies. Based on both the ease of interpretability and Figure IA1, we conclude that the optimal number of topics in the set of CL replies is nine.

To label those nine topics, we take a multi-pronged approach. We start with an encompassing list of topics emphasized by the SSE through various press releases during our sample period and a list of topics from a pilot project in which we go over a subset of CL replies and classify the topics manually. Figure 2 presents the word cloud for each CLR topic.

We repeat LDA analysis to a sample of 929 CL-year’s annual reports. Figure IA2 presents the perplexity score when we vary the number of topics in annual reports.⁴ Based on both the

³ The perplexity score is a function of the per-word likelihood and the number of words in each document, and decreases as the likelihood of the model increases, i.e., when the statistical fit improves.

⁴ The reason for the U-shaped perplexity score plot is as follows. When we increase the number of topics, the LDA model gains more flexibility and power in fitting the data. This implies that if we train the model for a long enough time, allowing a larger number of topics is always more likely to result in a lower perplexity score. However, this comes at a cost of a much longer training time. For example, an LDA model with ten topics may give a perplexity

perplexity score and our manual inspection of top words for each topic, we conclude that the optimal number of topics in annual reports is 27.

LDA analysis provides us with not only clusters of topic words but also an estimate of the importance of each topic. Using CL replies as an example, for each firm, we have the document loading on a topic, i.e., the fraction of words devoted to addressing a particular issue raised by the SSE (see Table 5 Panel A).

Our LDA model is coded in C++ and estimated via Gibbs sampling. Our choices of the model's hyperparameters by default are: 0.1 for the prior of document-topic distribution, 0.01 for the prior of topic-word distribution. When estimating the model, we start the number of topics at 20, and the number of iterations by default at 300. Our code is available upon request.

3. Identifying common topics between CL replies and CL-year's annual reports

Regulatory objectives are achieved when targeted firms amend their annual reports in response to issues raised by regulators. Our methodology largely follows Lowry et al. (2020).

We first fit an LDA topic model to the set of 929 CL-year's annual reports, taking similar steps as those required to fit an LDA model to the set of CL replies. To select a topic in annual reports that corresponds to a topic in CL replies, we use KL-divergence (Kullback and Leibler 1951), which represents the amount of incremental information that a topic in CL replies adds, relative to that matched topic in annual reports. Specifically, we calculate the KL-divergence between a topic in CL replies and each of the 27 topics in annual reports, and the topic in annual reports with the minimum KL-divergence is the matched topic.⁵

To capture changes in disclosure relating to each CLR topic in the amended annual reports, we apply the same LDA model (fit to the set of CL-year's annual reports) to the set of 351 amended annual reports, focusing on those nine topics closest to the CLR topics by KL-divergence. Now we have two LDA outputs: the nine annual report topics closest to the CLR topics, and the nine amended annual report topics closest to the CLR topics, and their respective fraction of words in each of those topics. The change in disclosure is the fraction change in words on a specific topic between the two annual reports.

To capture changes in disclosure relating to each CLR topic in next-year's annual reports, we apply the same LDA model (obtained from fitting the set of CL-year's annual reports) to the set of 912 next-year's annual reports, focusing on those nine topics closest to the CLR topics by KL-divergence. We end up with nine next-year annual report topics closest to the nine CLR topics,

score of 300 in 30 minutes, while an LDA model with 100 topics may give a perplexity score of 50 at a cost of 5 hours. To provide a fair comparison across different LDA models with different numbers of topics, we use a fixed amount of training time, which results in the U-shaped perplexity score plot. We pick the optimum number of topics based on the lowest perplexity score.

⁵ For each of the nine CLR topics (characterized as 9 vectors), we calculate the KL-divergence with each of the 27 annual report topics (analogously characterized as 27 vectors). Thus, we form a 9 x 27 matrix of KL-divergence measures, where the KL metric represents a measure of the incremental information in each CLR topic relative to each annual report topic.

and their respective fraction of words in each of those topics. If enforcement has any bite, one would expect targeted firms to improve their future disclosures in response to CLs, as predicted by both the market efficiency hypothesis (*H1b*) and the incongruency hypothesis (*H2b*).

References:

Brown, N.C., R.M. Crowley, and W.B. Elliott, 2020. What are you saying? Using topic to detect financial misreporting, *Journal of Accounting Research* 58 (1): 237–291.

Figure IA1. Perplexity by number of CLR topics

This figure plots the perplexity score by number of CLR topics. The formula for perplexity is from Blei et al. (2003). The sample consists of 929 CL replies made by firms listed on the SSE over the period 2013-2018.

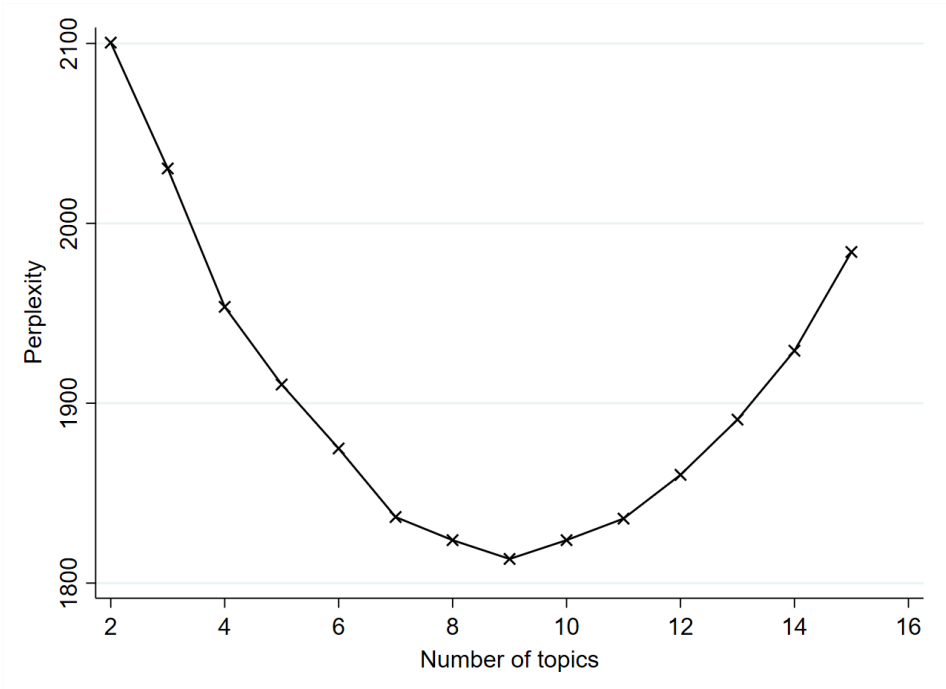
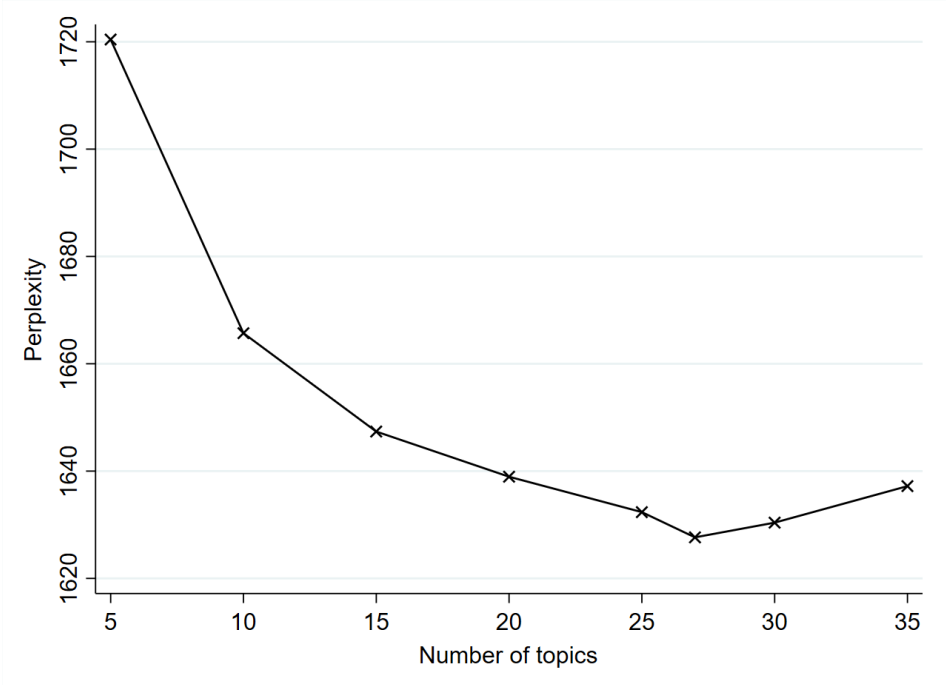


Figure IA2. Perplexity by number of CL-year annual report topics

This figure plots the perplexity score by number of CL-year annual report topics. The formula for perplexity is from Blei et al. (2003). The sample consists of 929 CL-year annual reports of firms listed on the SSE over the period 2013-2018.



IA2. An example of CL conversation

Henan Oriental Silver Star Investment Co.

Stock Code: 600753 Stock Short Name: Oriental Silver Star

The Reply to the Shanghai Stock Exchange' s Comment Letter Regarding the 2013 Annual Report

The board of directors and all directors of the company guarantee that the content of this reply does not contain any false records or misleading statements or major omissions, and take the individual and joint responsibility for the reality, accuracy, and completeness of its content.

Recently, the company received the Shanghai Stock Exchange's comment letter, "Post-Examination Comment Letter Regarding Henan Oriental Silver Star Investment Co. 2013 Annual Report" ([2014] No. 0380). As per the Shanghai Stock Exchange' request, the company now responds to the matters raised in the letter and provides the following explanations:

1. In April, 2010, your company purchased 16 adjacent plots of land of 109,698.04 square meters (164.55 mu), located in Tianxian, Wanzhou District, Chongqing. The transaction company was with Chongqing Tianxian Lake Real Estate Co, a related party of your controlling shareholder Chongqing Silverstar Estate Co. The land purchase price was 159,604,200 RMB. The payment was fully paid in April 2010. Your company stated, due to the district government's adjustment of the Tianxian Lake' project planning, the conditions for completing the land transfer are temporarily unavailable. Therefore, as of December 31st, 2013, the relevant land property rights transfer has not been completed yet. Your company's financial report received qualified opinions several times due to the above matter. Please explain: (1) In addition to passively waiting for the district government's planning adjustments, the precautions and procedures your board of directors has taken to address the issue that the land cannot be transferred, and whether your company's ongoing asset restructuring considers any possible solution related to this issue; (2) Your company claimed that if your company's strategic adjustments or other reasons result in the cancellation of the land transaction, Tianxian Lake Real Estate Co will refund the prepayment as well as pay interest for the prepayment period. Please explain relevant agreement regarding interest payment.

Company's reply: During each audit period, the board of directors sent personnel together with our auditors to the Wanzhou District Planning, Land and Resources Department to inquire and learn more about relevant planning adjustments and land transfer status. At the same time under the company's board of directors supervision, the company has communicated with local government departments, and Tianxian Lake Real Estate Co has hired professional organizations to develop multiple versions of its development proposals and submitted to the relevant departments, in order to speed up the district government's planning adjustment process.

The company's ongoing asset restructuring involves an overall transformation of the company, whereas the purchase of land near Tianxian Lake was to expand the development projects of our

existing business in real estate. Therefore, if the restructuring is successful, the company will retreat from the real estate business. The land purchase deal will be cancelled, and the company will recover the land payment and interest on the payment by that time.

The “Supplementary Agreement” signed between our company and Tianxian Lake Real Estate Co stipulates that if the purchased land cannot be transferred, Tianxian Lake Real Estate Co will return the prepayment to the company as well as pay interest for the prepayment period at the bank deposit interest rate, in order to protect the interests of the company and its shareholders.

2. CITIC Securities Co. increased its holdings of 20,256,001 shares of your company in the current period, accounting for 15.83% of your company’s total number of shares outstanding. Please verify the ultimate owners of the selling shareholders in this transaction, and notify them to perform their obligations to this change in ownership transaction in a timely manner.

Company’s reply: Regarding the change in ownership transaction raised above, our shareholder Yushang Group has issued a written statement. The main content from its statement is as follows: “Due to the need of our business operation, Yushang Group has pledged shares of Henan Oriental Silver Star Investment Co, totaling 19,400,000 shares, to CITIC Securities, Shanghai on 26th November, 2013, to obtain credit. As of March 31st, 2014, the total number of shares held by Yushang Group in the company was 27,794,977, accounting for 21.71% of the company’s total number of shares outstanding. Among the shareholders, Yushang Group Credit Transaction Guaranteed Account holds 19,400,000 shares of the company, accounting for 15.15% of the company’s total number of shares outstanding; Yushang Group Securities Account holds 8,394,977 shares of the company, accounting for 6.56% of the company’s total number of shares outstanding.” Yushang Group’s view is that because the above-mentioned shares are still held by Yushang Group, and the pledge is not being processed yet, Yushang Group has not yet disclosed any change of its ownership of our company’s shares.

CITIC Securities Co. customer credit guarantee account increased its holding of the company’s share by 20,256,001 in the current period, of which 19,400,000 shares were verified to be held by Yushang Group, and the remaining 856,001 shares were unaccounted for of their ultimate owners.

3. Please provide the names of the company’s top five customers and associated transactions. Please provide contracts or other supporting documents.

Company’s reply: The company’s top five customers and associated major transactions are as follows:

Chongqing Jinjia Real Estate Co., transaction amount of 6,109,664.58 RMB. The transactions were mainly our sales of wires and cables, cable trays, steel-plastic composite winding pipes, elevators, diesel generator sets, etc.

Chongqing Haoqing Materials Co., transaction amount of 975,919.70 RMB. The transactions were mainly our sales of coiled boards.

Chongqing Boyao Decoration Engineering Co., transaction amount of 879,369.07 RMB. The transactions were mainly our sales of glass and building structures.

Chongqing Tianxian Lake Real Estate Co., transaction amount of 816,529.92 RMB. The transactions were mainly our sales of anti-theft doors.

Chongqing Fangyue Construction Engineering Co., transaction amount of 478,988.46 RMB. The transactions were mainly our sales of cement.

Table IA1. Determinants of CL receipts and characteristics: Robustness checks

This table conducts robustness checks on Table 3 by using an alternative measure of institutional ownership – *QFII/MF ownership*. Variable definitions are provided in Appendix B. Standard errors clustered at the firm level are reported in parentheses. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% levels, respectively.

Variable	CL (1)	Number of CL pages (2)	Number of CL questions (3)
Internal control weakness	0.167** (0.084)	0.189** (0.077)	0.154** (0.070)
High volatility	0.147* (0.089)	0.072 (0.078)	0.084 (0.073)
Prior year stock return	-0.088 (0.093)	-0.092 (0.099)	-0.062 (0.087)
Ln(market cap)	-0.006 (0.054)	0.085* (0.048)	0.069 (0.045)
Small positive Δ EPS	0.525** (0.209)	0.402** (0.200)	0.422** (0.176)
Modified audit opinion	0.634*** (0.164)	0.403*** (0.128)	0.401*** (0.123)
Big 4	-0.413** (0.200)	-0.566*** (0.203)	-0.415** (0.187)
Auditor tenure	0.005 (0.007)	0.008 (0.007)	0.003 (0.007)
Auditor turnover	0.328** (0.143)	0.334*** (0.118)	0.275** (0.110)
CEO/COB duality	0.133 (0.103)	0.140 (0.088)	0.091 (0.085)
Board independence	-0.352 (0.969)	-0.588 (0.837)	-0.438 (0.776)
Board size	-0.054* (0.028)	-0.026 (0.028)	-0.032 (0.025)
QFII/MF ownership	-4.316*** (1.325)	-3.590** (1.562)	-3.256** (1.360)
Management ownership	-1.099** (0.433)	-0.907*** (0.334)	-0.991*** (0.329)
SOE	-0.528*** (0.092)	-0.537*** (0.091)	-0.460*** (0.085)
Firm age	0.042*** (0.009)	0.034*** (0.010)	0.034*** (0.009)
Loss	1.077** (0.116)	0.950** (0.103)	0.913*** (0.094)
Special treatment	-0.194 (0.211)	-0.409** (0.160)	-0.336** (0.161)
Sales growth	0.153 (0.102)	0.124 (0.082)	0.153* (0.081)
M&A	0.403*** (0.145)	0.397*** (0.123)	0.393*** (0.120)
Related party transaction	7.307*** (1.149)	4.836*** (0.810)	4.878*** (0.752)
Loan guarantee	0.413*** (0.121)	0.336*** (0.088)	0.373*** (0.080)
Foreign listing	0.013 (0.173)	-0.130 (0.188)	-0.123 (0.155)
Marketization index	-0.134***	-0.129***	-0.117***

Constant	(0.021) -1.985 (1.236)	(0.020) -6.956*** (1.317)	(0.018) -1.779* (1.075)
Industry fixed effects	YES	YES	YES
Year fixed effects	YES	YES	YES
Pseudo R^2	0.122	0.265	0.178
N	6,881	6,656	6,856

Table IA2. Price reactions to CL receipts: Robustness checks

This table conducts robustness checks on Table 4 by using the market model to estimate daily abnormal returns. The sample consists of 520 announcements made by 400 SSE-listed firms over the period 2015-2018. We estimate the market model over 122 trading days ending prior to the event window. Daily abnormal return is the difference between raw return and fitted return from the estimated market model. *CAR (-2, +2)_ann_market model* is cumulative five-day abnormal daily returns centered around the CL announcement day (day 0). *CAR (-2, +2)_reply_market model* is cumulative five-day abnormal daily returns centered around the CL reply day (day 0). Panel A presents descriptive statistics of the two announcement period abnormal returns. Panel B presents OLS regression results when the dependent variable is *CAR (-2, +2)_ann_market model* and *CAR (-2, +2)_reply_market model*. Variable definitions are provided in Appendix B. Standard errors clustered at the CL announcement date level are reported in parentheses. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Descriptive statistics of *CAR (-2, +2)_ann_market model*

	N	Mean	Median	Std.Dev
<i>CAR (-2, +2)_ann_market model</i>	520	-0.023***	-0.018	0.068
<i>CAR (-2, +2)_reply_market model</i>	356	-0.005*	-0.007	0.054

Panel B: Explaining *CAR (-2, +2)_ann_market model* and *CAR (-2, +2)_reply_market model*

Variable	<i>CAR (-2, +2)_ann_market model</i> (1)	<i>CAR (-2, +2)_ann_market model</i> (2)	<i>CAR (-2, +2)_reply_market model</i> (3)
Number of CL pages	-0.005*** (0.002)		
Number of CL questions		-0.001** (0.001)	
Length of CL reply			-0.011** (0.005)
Ln (market cap)	0.004 (0.005)	0.004 (0.005)	-0.003 (0.005)
M/B	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Leverage	-0.036* (0.020)	-0.038* (0.019)	0.003 (0.014)
Operating CF	0.025 (0.035)	0.026 (0.036)	0.063* (0.037)
Institutional ownership	-0.028 (0.049)	-0.034 (0.050)	0.045 (0.047)
SOE	0.014* (0.007)	0.015** (0.007)	-0.002 (0.008)
Loss	0.006 (0.008)	0.005 (0.009)	0.012* (0.007)
Big4	0.009 (0.014)	0.011 (0.015)	-0.001 (0.012)
Foreign listing	-0.013 (0.010)	-0.014 (0.010)	0.002 (0.018)
Marketization index	-0.001 (0.002)	-0.001 (0.002)	-0.004*** (0.001)
Constant	-0.115 (0.107)	-0.111 (0.109)	0.092 (0.115)
Industry fixed effects	YES	YES	YES
Year fixed effects	YES	YES	YES
R^2	0.089	0.083	0.087
N	520	520	356

Table IA3. Price reactions to CL receipts: Additional investigation

This table examines price reactions to CL announcements. Panel A presents daily price reactions over an 11-day period centered around the CL announcement day (day 0). Panel B presents price reactions to first letter and subsequent letter(s). Variable definitions are provided in Appendix B. Standard errors clustered at the CL announcement date level are reported in parentheses. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Price reaction to CL announcements

Trading day	N	Mean	Median	Std. Dev.
-5	579	-0.001	-0.002	0.030
-4	579	-0.002	-0.003	0.028
-3	579	-0.001	-0.002	0.025
-2	579	-0.005***	-0.005	0.023
-1	579	-0.004***	-0.004	0.027
0	579	-0.010***	-0.007	0.031
+1	579	-0.003*	-0.004	0.028
+2	579	-0.003*	-0.003	0.028
+3	579	-0.002	-0.002	0.025
+4	579	-0.001	-0.002	0.024
+5	579	-0.002	-0.002	0.026

Panel B: Price reactions to first letter and subsequent letter(s)

Event window	N	Mean	Median	Std. Dev.
CAR (-2, +2)_ann_first	394	-0.018***	-0.016	0.064
CAR (-2, +2) ann subsequent	185	-0.039***	-0.025	0.077

Table IA4. Changes in disclosure in amended and next-year's annual reports: Robustness checks

This table conducts robustness checks on Table 5 by focusing on the three annual report topics that match most or least closely to one of the CLR topics. Using LDA analysis, nine topics are extracted from the set of 929 CL replies, and twenty-seven topics are extracted from the set of 929 CL-year's annual reports. To find the three topics in CL-year's annual reports that most (least) closely match each of the nine CLR topics, we employ KL-divergence. Panel A (B) examines changes in disclosure in amended annual reports on the three topics that matches most (least) closely to the CLR topic. Each column presents the OLS regression results where the dependent variable is the change in disclosures from CL-year's annual report to amended annual report on one of the nine CLR topics, and the key explanatory variable is the fraction of words in the same CLR topic. Panel C (D) examines changes in disclosure in next-year's annual reports on the three topics that matches most (least) closely to the CLR topic. Each column presents the OLS regression results where the dependent variable is the change in disclosures from CL-year's annual report to next-year's annual report on one of the nine CLR topics, and the key explanatory variable is the fraction of words in the same CLR topic. All other control variables are the same as in Table 6. Variable definitions are provided in Appendix B. Standard errors clustered at the firm level are reported in parentheses. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Changes in disclosures in amended annual reports (Top three matched topics)

	Liquidity issues (1)	Results of operations (2)	Pro-forma financial information reporting issues (3)	Contingencies, commitment, and legal accounting issues (4)	Risk factors – competition and competitors (5)	Inventory, vendor, and/or cost of sales issues (6)	Accounts receivable and cash reporting issues (7)	Business overview issues (8)	PPE fixed assets issues (9)
CLR topic	0.035*** (0.009)	0.017*** (0.006)	-0.004 (0.006)	0.023*** (0.008)	0.060*** (0.012)	0.029*** (0.010)	0.003 (0.008)	0.015*** (0.004)	0.009 (0.008)
Constant	1.251 (3.772)	1.617 (1.234)	-3.070 (2.021)	0.784 (1.522)	-2.122 (2.851)	1.253 (1.853)	-1.180 (4.232)	1.135 (0.862)	0.114 (1.129)
Control variables	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES
R ²	0.168	0.141	0.140	0.135	0.445	0.309	0.099	0.245	0.231
N	351	351	351	351	351	351	351	351	351

Panel B: Changes in disclosures in amended annual reports (Bottom three matched topics)

	Liquidity issues (1)	Results of operations (2)	Pro-forma financial information reporting issues (3)	Contingencies, commitment, and legal accounting issues (4)	Risk factors – competition and competitors (5)	Inventory, vendor, and/or cost of sales issues (6)	Accounts receivable and cash reporting issues (7)	Business overview issues (8)	PPE fixed assets issues (9)
CLR topic	-0.000 (0.002)	-0.010 (0.012)	-0.004*** (0.001)	0.005 (0.004)	-0.036*** (0.014)	-0.004 (0.005)	-0.000 (0.002)	-0.001 (0.003)	-0.001 (0.005)
Constant	0.421	0.549	0.970	-0.266	-0.166	3.870	-3.816*	-3.166	1.580

	(1.022)	(3.842)	(0.835)	(1.301)	(3.813)	(4.060)	(2.096)	(2.254)	(2.268)
Control variables	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES
R^2	0.106	0.086	0.170	0.149	0.266	0.093	0.306	0.293	0.134
N	351	351	351	351	351	351	351	351	351

Panel C: Changes in disclosures in next-year's annual reports (Top three matched topics)

Variable	Liquidity issues (1)	Results of operations (2)	Pro-forma financial information reporting issues (3)	Contingencies, commitment, and legal accounting issues (4)	Risk factors – competition and competitors (5)	Inventory, vendor, and/or cost of sales issues (6)	Accounts receivable and cash reporting issues (7)	Business overview issues (8)	PPE fixed assets issues (9)
CLR topic	0.015 (0.011)	-0.003 (0.006)	-0.004 (0.010)	0.037** (0.016)	0.009 (0.012)	0.014 (0.009)	-0.019 (0.013)	-0.005 (0.005)	-0.008 (0.008)
Constant	-5.494 (4.870)	1.238 (1.772)	0.737 (2.258)	-12.205*** (3.661)	0.543 (3.372)	1.761 (2.061)	-5.348 (5.208)	-0.049 (1.826)	3.355 (3.450)
Control variables	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES
R^2	0.448	0.052	0.386	0.762	0.133	0.107	0.182	0.090	0.066
N	912	912	912	912	912	912	912	912	912

Panel D: Changes in disclosures in next-year's annual reports (Bottom three matched topics)

Variable	Liquidity issues (1)	Results of operations (2)	Pro-forma financial information reporting issues (3)	Contingencies, commitment, and legal accounting issues (4)	Risk factors – competition and competitors (5)	Inventory, vendor, and/or cost of sales issues (6)	Accounts receivable and cash reporting issues (7)	Business overview issues (8)	PPE fixed assets issues (9)
CLR topic	-0.002 (0.002)	-0.006 (0.012)	-0.000 (0.004)	0.000 (0.005)	-0.007 (0.016)	-0.009 (0.011)	0.005 (0.004)	-0.008 (0.005)	0.003 (0.005)
Constant	-0.622 (1.494)	-1.638 (6.079)	4.359 (3.327)	4.751 (3.464)	4.246 (5.406)	1.474 (6.922)	6.064 (3.732)	4.489 (4.364)	1.964 (2.223)
Control variables	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES
R^2	0.066	0.098	0.069	0.079	0.287	0.157	0.072	0.065	0.098
N	912	912	912	912	912	912	912	912	912

Table IA5. The roles of firms' reporting incentives and regulators' enforcement incentives

This table examines whether there are any differences in targeted firms' length of CL reply, likelihood of CL-triggered restatement, and likelihood of receiving another CL when we vary the level of firms' relational contracting or the level of regulators' political incentive. Panel A compares targeted firms' length of CL reply, likelihood of CL-triggered restatement, and likelihood of receiving another CL between firm-years with high relational contracting and firm-years with low relational contracting. Panel B compares targeted firms' length of CL reply, likelihood of CL-triggered restatement, and likelihood of receiving another CL between firm-years with high regulators' political incentive and firm-years with low regulators' political incentive. Variable definitions are provided in Appendix B. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Firms' relational contracting, length of CL reply, likelihood of CL-triggered restatement, and likelihood of receiving another CL

	High relational contracting				Low relational contracting				Test of differences t-test
	N	Mean	Median	Std. Dev.	N	Mean	Median	Std. Dev.	
Length of CL reply	154	1.736***	1.726	0.554	758	1.831***	1.865	0.521	-0.094*
CL-triggered amendment	168	0.339***	0.000	0.475	805	0.453***	0.000	0.498	-0.114***
Repeated CLs	91	0.780***	0.000	0.964	499	0.625***	0.000	0.922	0.155

Panel B: Regulators' political incentive, targeted firms' length of CL reply, likelihood of CL-triggered restatement, and likelihood of receiving another CL

	High political incentive				Low political incentive				Test of differences t-test
	N	Mean	Median	Std. Dev.	N	Mean	Median	Std. Dev.	
Length of CL reply	643	1.813***	1.842	0.532	269	1.820***	1.831	0.517	-0.007
CL-triggered amendment	673	0.391***	0.000	0.488	300	0.530***	1.000	0.500	-0.139***
Repeated CLs	387	0.556***	0.000	0.823	203	0.828***	0.000	1.083	-0.272***