README : Knit tables

Non-answers during Conference Calls

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This note replicates main results in the paper *"Non-answers during Conference Calls" by Gow, Larcker, and Zakolyukina* without control variables for data shared in `glz_share/glz_knit_tables`. All code snippets are written in `R`.

To protect proprietary data, we have done the following:

- Omitted control variables, which contain data from Equilar
- Replaced firm identifiers with `cik`, which is a Central Index Key (CIK) used on the SEC's computer systems to identify corporations
- Replaced StreetEvents transcript identifiers with random `file_name_alt` and omitted dates of conference calls

The data files are:

- `calls_set_glz.RData` contains data for call-level analyses
- `ner_set_glz.RData` contains data for question-answer-level analyses

To load the data, set path to `glz_share` directory into `path` variable.

To run the code, install the libraries below. For example, `install.packages("sandwich")`.

```
library(sandwich)
library(lmtest)
```

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```r
library(stargazer)
library(dplyr, warn.conflicts = FALSE)
library(tidyverse, warn.conflicts = FALSE)
```

Define function to set variable labels

```r
get_labels <- Vectorize(function(str, latex = FALSE)
    # This function maps variable labels

    switch(gsub("_avg|_rev|_coreneg|_core", "", str),
           "count" = "Obs.",
           "nonans_rate" = "Non-answers",
           "comp" = "Competition",
           "comp_sic3_i" = "SIC3-level comp.",
           "hhi3" = "HHI SIC3",
           "tnic3tsimm_log" = "Log Similarity",
           "ibq_to_atq" = "Return on assets", # quarterly
           "ibq_to_atq_lead" = "Return on assets, next", # quarterly
           "lossq" = "Loss", # quarterly
           "type_ib" = "Future profitability",
           "impgr3_oth3_lag" = ifelse(latex, "3-year SIC3 import growth non-US$_{t-1}$",
                                      "3-year SIC3 import growth non-US(t-1)"),
           "impgr3_us3_lag" = ifelse(latex, "3-year SIC3 import growth US$_{t-1}$",
                                     "3-year SIC3 import growth US(t-1)"),
           "is_nonans" = "Non-answer",
           "positive" = "Positive tone",
           "negative" = "Negative tone",
           "uncertainty" = "Uncertainty",
           "has_forward_brvb" = "Future-related",
           "fog" = "Fog index",
           "has_nums" = "Contains numbers",
           "has_loc" = "Contains location",
```

```
            "has_date_time" = "Contains date or time",
            "has_money_percent" = "Contains money or percent",
            "has_earn_mpr" = "Perf.-related",
            "has_product" = "Proprietary-inf.",
            "has_earn_mpr_x_lossq" =
                ifelse(latex, "Perf.-related $\\times$ Loss",
                                          "Perf.-related x Loss"),
            "has_earn_mpr_x_ibq_to_atq" =
                ifelse(latex, "Perf.-related $\\times$ Return on assets",
                                                "Perf.-related x Return on assets"),
            "has_earn_mpr_x_ibq_to_atq_lead" =
                ifelse(latex, "Perf.-related $\\times$ Return on assets, next",
                                                     "Perf.-related x Return on assets, next"),
            "has_earn_mpr_x_type_ib" =
                ifelse(latex, "Perf.-related $\\times$ Future profitability",
                                               "Perf.-related x Future profitability"),
            "has_product_x_hhi3" =
                ifelse(latex, "Proprietary-inf. $\\times$ HHI SIC3",
                                            "Proprietary-inf. x HHI SIC3"),
            "has_product_x_comp" =
                ifelse(latex, "Proprietary-inf. $\\times$ Comp.",
                                            "Proprietary-inf. x Comp."),
            "has_product_x_tnic3tsimm_log" =
                ifelse(latex, "Proprietary-inf. $\\times$ Log Similarity",
                                                  "Proprietary-inf. x Log Similarity"),
            "has_product_x_comp_sic3_i" =
                ifelse(latex, "Proprietary-inf. $\\times$ SIC3 comp.",
                                                "Proprietary-inf. x SIC3 comp."),
            str), "str")
```

Define functions to estimate regressions with year fixed effects and standard errors clustered by firm and year

```r
# The variance-covariance matrix must be reweighted with
# dfcw = (N - k)/((N - k) - (M - 1)) if data is de-meaned for fixed effects
reg_year_fe <- function(y, x, mcw, data) {

    # Estimate linear regression
    model <- paste0(y, " ~ ", paste0(x, collapse = " + "), " + factor(fyear)")
    fm <- lm(as.formula(model), data)

    # Compute two-way clustered SE
    dfcw <- fm$df/(fm$df - (mcw - 1))
    se <- coeftest(fm, vcov = dfcw*vcovCL(fm, cluster = data[, c("cik", "fyear")]))
    return(list(fm, se = se[, 2], pval = se[, 4]))
}

reg <- function(y, x, mcw, data) {

    # Estimate linear regression
    model <- paste0(y, " ~ ", paste0(x, collapse = " + "))
    fm <- lm(as.formula(model), data)

    # Compute two-way clustered SE
    dfcw <- fm$df/(fm$df - (mcw - 1))
    se <- coeftest(fm, vcov = dfcw*vcovCL(fm, cluster = data[, c("cik", "fyear")]))
    return(list(fm, se = se[, 2], pval = se[, 4]))
}
```

Call-level analyses

Call-level analyses are in Tables 3, 5, and 7 of the paper.

Load data and display summary stats reported in Table 1 of the paper.

```
load(paste0(path, "glz_knit_tables/calls_set_glz.RData")) # Loads calls_set_glz

# Summary stats
ndigits <- 3
var_order <- c("nonans_rate",
               "lossq", "ibq_to_atq", "ibq_to_atq_lead", "type_ib",
               "hhi3", "tnic3tsimm_log", "comp", "comp_sic3_i",
               "impgr3_us3_lag", "impgr3_oth3_lag")

# Print table
calls_set_glz %>%
    summarise_at(.vars = vars(-cik, -file_name_alt, -fyear),
                 .funs = funs(nobs = formatC(sum(!is.na(.)), format = "d", big.mark = ","),
                              mean = mean(., na.rm = TRUE),
                              sd = sd(., na.rm = TRUE),
                              p5 = quantile(., 0.05, na.rm = TRUE),
                              p25 = quantile(., 0.25, na.rm = TRUE),
                              p50 = quantile(., 0.50, na.rm = TRUE),
                              p75 = quantile(., 0.75, na.rm = TRUE),
                              p95 = quantile(., 0.95, na.rm = TRUE))) %>%
    mutate_at(.vars = vars(-matches("_nobs|_nmiss")),
              .funs = funs(formatC(., format = "f", big.mark = ",", digits = ndigits))) %>%
    # Reshape summary stats table
    gather(var_stat, value) %>%
    # Extract stats from variable name
    extract(var_stat, c("var", "stat"), "([[:alnum:]_]+_*)_([[:alnum:]]+)$") %>%
    spread(stat, value) %>%
```

```r
    # Reorder variables
    slice(match(var_order, var)) %>%
    mutate(var = get_labels(var, latex = FALSE)) %>%
    select(var, nobs, mean, sd, p5, p25, p50, p75, p95) %>%
    print(n = Inf)
```

```
## # A tibble: 11 x 9
##    var                          nobs   mean  sd    p5     p25   p50   p75   p95
##    <chr>                        <chr>  <chr> <chr> <chr>  <chr> <chr> <chr> <chr>
##  1 Non-answers                  78,968 0.112 0.078 0.000  0.057 0.100 0.154 0.261
##  2 Loss                         78,968 0.269 0.444 0.000  0.000 0.000 1.000 1.000
##  3 Return on assets             78,968 0.003 0.044 -0.087 -0.0~ 0.011 0.022 0.049
##  4 Return on assets, next       78,968 0.002 0.045 -0.090 -0.0~ 0.011 0.022 0.048
##  5 Future profitability         78,968 0.009 0.151 -0.287 -0.0~ 0.042 0.083 0.167
##  6 HHI SIC3                     78,968 0.156 0.138 0.038  0.058 0.108 0.207 0.429
##  7 Log Similarity               78,968 1.295 0.661 0.707  0.804 1.048 1.547 2.885
##  8 Competition                  78,968 0.033 0.038 0.000  0.000 0.023 0.051 0.111
##  9 SIC3-level comp.             78,968 0.033 0.016 0.009  0.022 0.032 0.042 0.061
## 10 3-year SIC3 import growth ~ 42,796 0.374 0.483 -0.424 0.181 0.380 0.659 1.041
## 11 3-year SIC3 import growth ~ 42,907 0.343 0.489 -0.476 0.096 0.367 0.654 1.080
```

Replicate Table 3: Non-answers and performance.

Continuous independent variables are standardized to zero mean and unit standard deviation. Year fixed effects are included but not reported. Robust standard errors clustered by firm and year are in parentheses.

```
# Convert non-answers to % and standardize continous independent variables
reg_data <-
    calls_set_glz %>%
    mutate(nonans_rate = 100*nonans_rate) %>%
    mutate_at(.vars = vars(ibq_to_atq, ibq_to_atq_lead, type_ib),
              .funs = funs(scale(., center = TRUE, scale = TRUE)))

# Regression with year fixed effects and standard errors clustered by {firm, year}
rhs <- list("lossq",
            "ibq_to_atq",
            "ibq_to_atq_lead",
            c("ibq_to_atq", "ibq_to_atq_lead"),
            "type_ib",
            c("ibq_to_atq", "type_ib"))

# Estimate regressions
mcw <- 1
reg_list <- lapply(rhs, reg_year_fe, y = "nonans_rate", mcw = mcw, data = reg_data)

# Collect models and standard errors
fm_list <- lapply(reg_list, `[[`, 1)
se_list <- lapply(reg_list, `[[`, 2)
pvalues_list <- lapply(reg_list, `[[`, 3)

# Print table
custom_coef_names <- get_labels(gsub("TRUE", "", unlist(rhs)), latex = FALSE) %>% unique()
stargazer(fm_list,
```

```
        se = se_list,
        p = pvalues_list,
        header = FALSE,
        omit = "(factor*)|(Intercept)|Constant",
        covariate.labels = custom_coef_names,
        keep.stat = c("n", "rsq", "chi2"),
        # Table formatting
        title = "\\textbf{Non-answers and performance: Replication}",
        dep.var.caption = "Non-answers(\\%)",
        dep.var.labels.include = FALSE
        )
```

Table 1: **Non-answers and performance: Replication**

	Non-answers(%)					
	(1)	(2)	(3)	(4)	(5)	(6)
Loss	0.614***					
	(0.147)					
Return on assets		−0.302***		−0.153***		−0.166***
		(0.066)		(0.042)		(0.052)
Return on assets, next			−0.323***	−0.219***		
			(0.070)	(0.051)		
Future profitability					−0.304***	−0.176**
					(0.076)	(0.084)
Observations	78,968	78,968	78,968	78,968	78,968	78,968
R^2	0.002	0.002	0.003	0.003	0.002	0.003

Note: *p<0.1; **p<0.05; ***p<0.01

Replicate Table 5: Non-answers and competition.

Continuous independent variables are standardized to zero mean and unit standard deviation. Year fixed effects are included but not reported. Robust standard errors clustered by firm and year are in parentheses.

```
# Convert non-answers to % and standardize continous independent variables
reg_data <-
    calls_set_glz %>%
    mutate(nonans_rate = 100*nonans_rate) %>%
    mutate_at(.vars = vars(hhi3, tnic3tsimm_log, comp, comp_sic3_i),
              .funs = funs(scale(., center = TRUE, scale = TRUE)))

# Regression with year fixed effects and standard errors clustered by {firm, year}
rhs <- list("hhi3", "tnic3tsimm_log", "comp", "comp_sic3_i")

# Estimate regressions
mcw <- 1
reg_list <- lapply(rhs, reg_year_fe, y = "nonans_rate", mcw = mcw, data = reg_data)

# Collect models and standard errors
fm_list <- lapply(reg_list, `[[`, 1)
se_list <- lapply(reg_list, `[[`, 2)
pvalues_list <- lapply(reg_list, `[[`, 3)

# Print table
custom_coef_names <- get_labels(gsub("TRUE", "", unlist(rhs)), latex = FALSE) %>% unique()
stargazer(fm_list,
          se = se_list,
          p = pvalues_list,
          header = FALSE,
          omit = "(factor*)|(Intercept)|Constant",
          covariate.labels = custom_coef_names,
```

```
        keep.stat = c("n", "rsq", "chi2"),
        # Table formatting
        title = "\\textbf{Non-answers and competition: Replication}",
        dep.var.caption = "Non-answers(\\%)",
        dep.var.labels.include = FALSE
        )
```

Table 2: **Non-answers and competition: Replication**

	Non-answers(%)			
	(1)	(2)	(3)	(4)
HHI SIC3	-0.357^{***}			
	(0.082)			
Log Similarity		0.540^{***}		
		(0.083)		
Competition			0.956^{***}	
			(0.053)	
SIC3-level comp.				0.300^{***}
				(0.056)
Observations	78,968	78,968	78,968	78,968
R^2	0.003	0.006	0.016	0.002
Note:		*p<0.1; **p<0.05; ***p<0.01		

Replicate Table 7: Non-answers and growth in import from China.

Second-stage continuous independent variables are standardized to zero mean and unit standard deviation. Year fixed effects are included but not reported. Robust standard errors clustered by firm and year are in parentheses.

```
# Convert non-answers to % and standardize continous independent variables
reg_data <-
    calls_set_glz %>%
    select(cik, fyear, nonans_rate, impgr3_oth3_lag, impgr3_us3_lag) %>%
    na.omit() %>%
    mutate(nonans_rate = 100*nonans_rate) %>%
    # 2nd stage independent variables are standardized
    mutate(impgr3_us3_lag = scale(impgr3_us3_lag, center = TRUE, scale = TRUE))

# Regression with year fixed effects and standard errors clustered by {firm, year}

# Estimate first stage
mcw <- 1
fm <- lm("impgr3_us3_lag ~ impgr3_oth3_lag + factor(fyear)", data = reg_data)
# Compute two-way clustered SE
dfcw <- fm$df/(fm$df - (mcw - 1))
se <- coeftest(fm, vcov = dfcw*vcovCL(fm, cluster = reg_data[, c("cik", "fyear")]))

# Print table
custom_coef_names <- get_labels("impgr3_oth3_lag")
stargazer(fm,
          se = list(se[, 2]),
          p = list(se[, 4]),
          header = FALSE,
          omit = "(factor*)|(Intercept)|Constant",
          covariate.labels = custom_coef_names,
          keep.stat = c("n", "rsq", "chi2"),
```

```
          # Table formatting
          title = "Panel A: First stage",
          dep.var.caption = get_labels("impgr3_us3_lag"),
          dep.var.labels.include = FALSE
          )
```

Table 3: Panel A: First stage

	3-year SIC3 import growth US(t-1)
3-year SIC3 import growth non-US(t-1)	1.409***
	(0.177)
Observations	42,500
R^2	0.564
Note:	*p<0.1; **p<0.05; ***p<0.01

```
# Estimate second stage
impgr3_us3_lag_hat <- predict(fm, data = reg_data)
reg_data_alt <- cbind(reg_data, impgr3_us3_lag_hat)
mcw <- 1
fm <- lm("nonans_rate ~ impgr3_us3_lag_hat + factor(fyear)", data = reg_data_alt)
# Compute two-way clustered SE
dfcw <- fm$df/(fm$df - (mcw - 1))
se <- coeftest(fm, vcov = dfcw*vcovCL(fm, cluster = reg_data_alt[, c("cik", "fyear")]))

# Print table
custom_coef_names <- get_labels("impgr3_us3_lag")
stargazer(fm,
          se = list(se[, 2]),
          p = list(se[, 4]),
```

```
        header = FALSE,
        omit = "(factor*)|(Intercept)|Constant",
        covariate.labels = custom_coef_names,
        keep.stat = c("n", "rsq", "chi2"),
        # Table formatting
        title = "Panel B: Second stage",
        dep.var.caption = "Non-answers (\\%)",
        dep.var.labels.include = FALSE
        )
```

Table 4: Panel B: Second stage

	Non-answers (%)
3-year SIC3 import growth US(t-1)	0.703***
	(0.188)
Observations	42,500
R^2	0.004
Note:	*p<0.1; **p<0.05; ***p<0.01

Question-answer-level analyses

Question-answer-level analyses are in Tables 2, 4, and 6 of the paper.

Load data and display summary stats reported in Table 1 of the paper.

```
load(paste0(path, "glz_knit_tables/ner_set_glz.RData")) # Loads ner_set_glz

# Summary stats
ndigits <- 3
var_order <- c("is_nonans",
               "positive", "negative", "uncertainty", "fog",
               "has_nums", "has_money_percent", "has_loc", "has_date_time",
               "has_earn_mpr", "has_product")

# Print table
ner_set_glz %>%
    select(var_order) %>%
    summarise_at(.vars = vars(everything()),
                 .funs = funs(nobs = formatC(sum(!is.na(.)), format = "d", big.mark = ","),
                              mean = mean(., na.rm = TRUE),
                              sd = sd(., na.rm = TRUE),
                              p5 = quantile(., 0.05, na.rm = TRUE),
                              p25 = quantile(., 0.25, na.rm = TRUE),
                              p50 = quantile(., 0.50, na.rm = TRUE),
                              p75 = quantile(., 0.75, na.rm = TRUE),
                              p95 = quantile(., 0.95, na.rm = TRUE))) %>%
    mutate_at(.vars = vars(-matches("_nobs|_nmiss")),
              .funs = funs(formatC(., format = "f", big.mark = ",", digits = ndigits))) %>%
    # Reshape summary stats table
    gather(var_stat, value) %>%
    # Extract stats from variable name
    extract(var_stat, c("var", "stat"), "([[:alnum:]_]+_*)_([[:alnum:]]+)$") %>%
```

```r
    spread(stat, value) %>%
    # Reorder variables
    slice(match(var_order, var)) %>%
    mutate(var = get_labels(var, latex = FALSE)) %>%
    select(var, nobs, mean, sd, p5, p25, p50, p75, p95) %>%
    print(n = Inf)
```

```
## # A tibble: 11 x 9
##    var                      nobs      mean  sd    p5    p25   p50   p75    p95
##    <chr>                    <chr>     <chr> <chr> <chr> <chr> <chr> <chr>  <chr>
##  1 Non-answer               2,703,717 0.107 0.310 0.000 0.000 0.000 0.000  1.000
##  2 Positive tone            2,703,717 0.006 0.016 0.000 0.000 0.000 0.000  0.036
##  3 Negative tone            2,703,717 0.008 0.016 0.000 0.000 0.000 0.013  0.041
##  4 Uncertainty              2,703,717 0.007 0.014 0.000 0.000 0.000 0.010  0.037
##  5 Fog index                2,703,717 8.091 5.335 0.600 3.000 8.333 11.467 17.0~
##  6 Contains numbers         2,703,717 0.138 0.345 0.000 0.000 0.000 0.000  1.000
##  7 Contains money or perce~ 2,703,717 0.116 0.321 0.000 0.000 0.000 0.000  1.000
##  8 Contains location        2,703,717 0.089 0.284 0.000 0.000 0.000 0.000  1.000
##  9 Contains date or time    2,703,717 0.159 0.365 0.000 0.000 0.000 0.000  1.000
## 10 Perf.-related            2,703,717 0.301 0.459 0.000 0.000 0.000 1.000  1.000
## 11 Proprietary-inf.         2,703,717 0.118 0.322 0.000 0.000 0.000 0.000  1.000
```

Replicate Table 2: Non-answers and type of information demanded.

Continuous independent variables are standardized to zero mean and unit standard deviation. Call fixed effects are included but not reported. Robust standard errors clustered by firm and year are in parentheses.

```
# Convert non-answers to %, standardize continous independent variables,
# and de-mean all by call
reg_data <-
    ner_set_glz %>%
    mutate(is_nonans = 100*is_nonans) %>%
    mutate_at(.vars = vars(positive, negative, uncertainty, fog),
              .funs = funs(scale(., center = TRUE, scale = TRUE))) %>%
    # De-mean by call
    group_by(file_name_alt) %>%
    mutate_at(.vars = vars(is_nonans, positive, negative, uncertainty, fog,
                           has_nums, has_money_percent, has_loc, has_date_time),
              .funs = funs(scale(., center = TRUE, scale = FALSE))) %>%
    ungroup()

# Regressions with standard errors clustered by {firm, year}
# WARNING: variables are already de-meaned by call, that is call fixed effects are included
rhs <- list("positive", "negative", "uncertainty", "fog",
            "has_nums", "has_money_percent", "has_loc", "has_date_time")

# Estimate regressions
mcw <- length(unique(reg_data[["file_name_alt"]]))
reg_list <- lapply(rhs, reg, y = "is_nonans", mcw = mcw, data = reg_data)

# Collect models and standard errors
fm_list <- lapply(reg_list, `[[`, 1)
se_list <- lapply(reg_list, `[[`, 2)
pvalues_list <- lapply(reg_list, `[[`, 3)
```

```r
# Print table
custom_coef_names <- get_labels(gsub("TRUE", "", unlist(rhs)), latex = FALSE) %>% unique()
stargazer(fm_list,
          se = se_list,
          p = pvalues_list,
          header = FALSE,
          omit = "(factor*)|(Intercept)|Constant",
          covariate.labels = custom_coef_names,
          keep.stat = c("n", "rsq", "chi2"),
          # Table formatting
          title = "\\textbf{Non-answers and type of information demanded}",
          dep.var.caption = "Non-answers(\\%)",
          dep.var.labels.include = FALSE
          )
```

Table 5: **Non-answers and type of information demanded**

	Non-answers(%)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Positive tone	−0.007							
	(0.027)							
Negative tone		1.399***						
		(0.029)						
Uncertainty			2.499***					
			(0.085)					
Fog index				4.111***				
				(0.129)				
Contains numbers					4.164***			
					(0.168)			
Contains money or percent						3.994***		
						(0.173)		
Contains location							4.899***	
							(0.113)	
Contains date or time								6.357***
								(0.157)
Observations	2,703,717	2,703,717	2,703,717	2,703,717	2,703,717	2,703,717	2,703,717	2,703,717
R^2	0.00000	0.002	0.007	0.017	0.002	0.002	0.002	0.006

Note: *p<0.1; **p<0.05; ***p<0.01

Replicate Table 4: Performance-related questions, non-answers, and performance.

Continuous independent variables are standardized to zero mean and unit standard deviation. Call fixed effects are included but not reported. Robust standard errors clustered by firm and year are in parentheses.

```
# Convert non-answers to %, standardize continous independent variables,
# and de-mean all by call
reg_data <-
    ner_set_glz %>%
    mutate(is_nonans = 100*is_nonans) %>%
    mutate_at(.vars = vars(ibq_to_atq, ibq_to_atq_lead, type_ib),
              .funs = funs(scale(., center = TRUE, scale = TRUE))) %>%
    # Create iteraction terms
    mutate(has_earn_mpr_x_lossq = has_earn_mpr*lossq,
           has_earn_mpr_x_ibq_to_atq = has_earn_mpr*ibq_to_atq,
           has_earn_mpr_x_ibq_to_atq_lead = has_earn_mpr*ibq_to_atq_lead,
           has_earn_mpr_x_type_ib = has_earn_mpr*type_ib) %>%
    # De-mean by call
    group_by(file_name_alt) %>%
    mutate_at(.vars = vars(is_nonans, has_earn_mpr,
                           lossq, ibq_to_atq, ibq_to_atq_lead, type_ib,
                           has_earn_mpr_x_lossq, has_earn_mpr_x_ibq_to_atq,
                           has_earn_mpr_x_ibq_to_atq_lead, has_earn_mpr_x_type_ib),
              .funs = funs(scale(., center = TRUE, scale = FALSE))) %>%
    ungroup()

# Regressions with standard errors clustered by {firm, year}
# WARNING: variables are already de-meaned by call, that is equivalent
# to inclusion of call fixed effects. Because of de-meaning by call
# (i.e., including call fixed effects), call-level variables such as
# {lossq, ibq_to_atq, ibq_to_atq_lead, type_ib} drop out
rhs <- list("has_earn_mpr",
```

```r
            c("has_earn_mpr", "has_earn_mpr_x_lossq"),
            c("has_earn_mpr", "has_earn_mpr_x_ibq_to_atq"),
            c("has_earn_mpr", "has_earn_mpr_x_ibq_to_atq_lead"),
            c("has_earn_mpr", "has_earn_mpr_x_type_ib"))

# Estimate regressions
mcw <- length(unique(reg_data[["file_name_alt"]]))
reg_list <- lapply(rhs, reg, y = "is_nonans", mcw = mcw, data = reg_data)

# Collect models and standard errors
fm_list <- lapply(reg_list, `[[`, 1)
se_list <- lapply(reg_list, `[[`, 2)
pvalues_list <- lapply(reg_list, `[[`, 3)

# Print table
custom_coef_names <- get_labels(gsub("TRUE", "", unlist(rhs)), latex = FALSE) %>% unique()
stargazer(fm_list,
          se = se_list,
          p = pvalues_list,
          header = FALSE,
          omit = "(factor*)|(Intercept)|Constant",
          covariate.labels = custom_coef_names,
          keep.stat = c("n", "rsq", "chi2"),
          # Table formatting
          title = "\\textbf{Performance-related questions, non-answers, and performance}",
          dep.var.caption = "Non-answers(\\%)",
          dep.var.labels.include = FALSE
          )
```

Table 6: **Performance-related questions, non-answers, and performance**

	Non-answers(%)				
	(1)	(2)	(3)	(4)	(5)
Perf.-related	5.876***	5.797***	5.881***	5.882***	5.883***
	(0.159)	(0.153)	(0.157)	(0.157)	(0.157)
Perf.-related x Loss		0.358***			
		(0.132)			
Perf.-related x Return on assets			−0.143**		
			(0.070)		
Perf.-related x Return on assets, next				−0.182**	
				(0.078)	
Perf.-related x Future profitability					−0.153*
					(0.086)
Observations	2,703,717	2,703,717	2,703,717	2,703,717	2,703,717
R^2	0.008	0.008	0.008	0.008	0.008

Note: *p<0.1; **p<0.05; ***p<0.01

Replicate Table 6: Proprietary-information questions, non-answers, and competition.

Continuous independent variables are standardized to zero mean and unit standard deviation. Call fixed effects are included but not reported. Robust standard errors clustered by firm and year are in parentheses.

```
# Convert non-answers to %, standardize continous independent variables,
# and de-mean all by call
reg_data <-
    ner_set_glz %>%
    mutate(is_nonans = 100*is_nonans) %>%
    mutate_at(.vars = vars(hhi3, tnic3tsimm_log, comp, comp_sic3_i),
              .funs = funs(scale(., center = TRUE, scale = TRUE))) %>%
    # Create iteraction terms
    mutate(has_product_x_hhi3 = has_product*hhi3,
           has_product_x_tnic3tsimm_log = has_product*tnic3tsimm_log,
           has_product_x_comp = has_product*comp,
           has_product_x_comp_sic3_i = has_product*comp_sic3_i) %>%
    # De-mean by call
    group_by(file_name_alt) %>%
    mutate_at(.vars = vars(is_nonans, has_product,
                           hhi3, tnic3tsimm_log, comp, comp_sic3_i,
                           has_product_x_hhi3, has_product_x_tnic3tsimm_log,
                           has_product_x_comp, has_product_x_comp_sic3_i),
              .funs = funs(scale(., center = TRUE, scale = FALSE))) %>%
    ungroup()

# Regressions with standard errors clustered by {firm, year}
# WARNING: variables are already de-meaned by call, that is equivalent
# to inclusion of call fixed effects. Because of de-meaning by call
# (i.e., including call fixed effects), call-level variables such as
# {hhi3, tnic3tsimm_log, comp, comp_sic3_i} drop out
rhs <- list("has_product",
```

```r
            c("has_product", "has_product_x_hhi3"),
            c("has_product", "has_product_x_tnic3tsimm_log"),
            c("has_product", "has_product_x_comp"),
            c("has_product", "has_product_x_comp_sic3_i"))

# Estimate regressions
mcw <- length(unique(reg_data[["file_name_alt"]]))
reg_list <- lapply(rhs, reg, y = "is_nonans", mcw = mcw, data = reg_data)

# Collect models and standard errors
fm_list <- lapply(reg_list, `[[`, 1)
se_list <- lapply(reg_list, `[[`, 2)
pvalues_list <- lapply(reg_list, `[[`, 3)

# Print table
custom_coef_names <- get_labels(gsub("TRUE", "", unlist(rhs)), latex = FALSE) %>% unique()
stargazer(fm_list,
          se = se_list,
          p = pvalues_list,
          header = FALSE,
          omit = "(factor*)|(Intercept)|Constant",
          covariate.labels = custom_coef_names,
          keep.stat = c("n", "rsq", "chi2"),
          # Table formatting
          title = "\\textbf{Proprietary-information questions, non-answers, and competition}",
          dep.var.caption = "Non-answers(\\%)",
          dep.var.labels.include = FALSE
          )
```

Table 7: **Proprietary-information questions, non-answers, and competition**

	Non-answers(%)				
	(1)	(2)	(3)	(4)	(5)
Proprietary-inf.	6.534***	6.518***	6.488***	6.505***	6.522***
	(0.097)	(0.098)	(0.097)	(0.091)	(0.092)
Proprietary-inf. x HHI SIC3		−0.221**			
		(0.089)			
Proprietary-inf. x Log Similarity			0.451***		
			(0.114)		
Proprietary-inf. x Comp.				0.558***	
				(0.082)	
Proprietary-inf. x SIC3 comp.					0.270***
					(0.080)
Observations	2,703,717	2,703,717	2,703,717	2,703,717	2,703,717
R^2	0.004	0.004	0.005	0.005	0.005

Note: *p<0.1; **p<0.05; ***p<0.01