Question 1

Provide a table equivalent to GM (2016)'s table 1 with excluding two acquisition rows and including Ln (Cash) and Performance-related exit. Briefly summarize the results and compare my own table (based on new data) to those of GM (2016).

The required variables:

Ln (Assets), Return on assets, Debt/Assets (Book Leverage), 3-year asset CAGR, stock volatility, cash flow volatility, ln (Cash), Performance-related exit

Question 2

Replicate Table 2 of GM (2016)

The required variables:

Stock volatility, Performance-related exit, Operating asset volatility, cash flow volatility, Ln (Cash), BC law

Question 3

Run the regression for two different dependent variables

(1) Stock volatility
(2) Performance-related exit

$$y_{ijlst} = \sum_{\tau=-5}^{+8} \beta_\tau \, 1_{\{t=T_s+\tau\}} + \alpha_i + \delta_{lt}$$

where

α_i = firm fixed effects

δ_{lt} = state-by-year fixed effects

$1_{\{t=T_s+\tau\}}$ = a dummy variable equal to 1 if the current year t of the observation is years after the adoption

of a BC law, equal to 0 otherwise

Define 14 new dummy variables as independent variables

Report the coefficients β_τ in a table (2 columns for 2 dependent variables)

Plot them against event time τ

Interpret the coefficients

Question 4

Produce a table identical to GM`s Table 2 with replacing the dependent variable with various measures of leverage:

(1) Book leverage = (debt in current liabilities + long-term debt) / total assets = (dlc + dltt) / at
(2) Market leverage = (dlc + dltt) / (at – seq + csho * prcc_f)
(3) Short-term leverage = debt in current liabilities / total assets = dlc / at
(4) Net leverage = (debt in current liabilities + long-term debt – short-term investments) / total assets = (dlc + dltt – ivst) / at

Could a decrease in leverage be interpreted as “playing it safe”?

Do you find results consistent with GM`s hypothesis?

The required variables: dlc, dltt, at, seq, csho, prcc_f, ivst

Question 5

Provide two robustness checks of the main results (Table 2):

1. Run the regressions on the sample period 1976-1995

2. Run the regressions on the full sample period, but exclude financial firms

WRDS

1976-2006

CompStat North America – Fundamentals Annual: State, Incorp, financial variables

State, incorp, at, dlc, dltt, seq, csho, prcc_f, ivst, ch, ni, lt

the state of location = state

the state of incorporation = incorp

Ln (Assets) = ln (at)

Return on Assets = ROA = ni / at

Debt/Assets = Book Leverage = (dlc + dltt) / at

3-year asset CAGR = $\left(\left(\frac{at_t}{at_{t-3}}\right)^{\frac{1}{3}} - 1\right) * 100$

Ln(cash) = ln(ch)

CompStat North America – Fundamentals Quarterly: cash flow volatility

Cash flow volatility = the annual SD of firm`s quarterly ratio of (operating) cash flow to assets

Cash flows, assets = oancfy, atq

CRSP daily stock file: stock return volatility, performance-related exit

Stock volatility = the square root of the sum of squared daily stock returns over the year

Adjusting for differences in the number of trading days: (the raw sum * 252) / the number of trading days

Operating asset volatility = Stock volatility * [(csho * prcc_f) / (lt + (csho*prcc_f) – ch)]

Performance-related exit (indicator) = delisting codes 400-500, 550, 552, 560, 561, 572, 574, 580, 584

Ret, dlstcd, (dlret)

Code the BC law using the Table A.1 in the article of GM (2016)

BC law = 1 if the state has passed a BC law by year t

BC law = 0 otherwise