

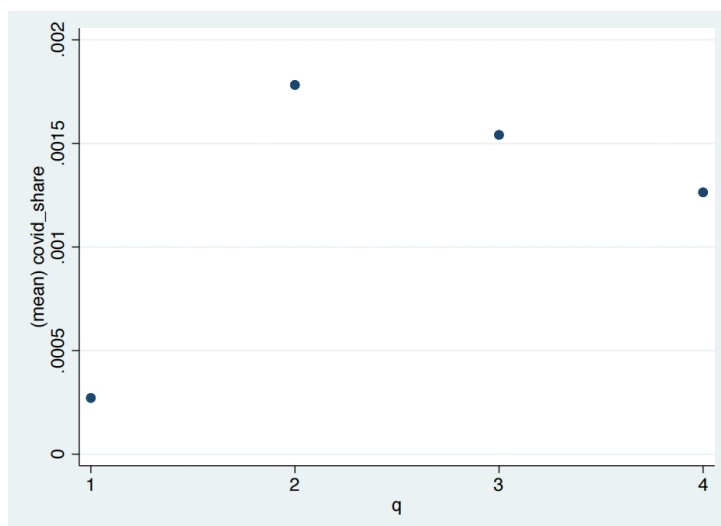
Ec745 (Fall 2023) Assignment 1 Solutions

Hongzhen Du

December 2019

Solution to Problem based on Hassan, Hollander, van Lent, and Tahoun (2021)

- The code looks for the following phrases in the transcript: Coronavirus, Corona virus, coronavirus, Covid-19, COVID-19, Covid19, COVID19, SARS-CoV-2, 2019-nCoV. The choice of phrases may drive the difference for some of you.
- The share of mentions of COVID relative to the total length of the transcript is shown below:



showing a big increase from the first to the second quarter and a very slow decline afterwards.

Results from regression are presented below

1. Model (1) shows that there is a positive association between the 3 month return and the standardized measure of covid exposure.
2. Model (2) reveals that the result in model (1) is driven by across quarter variation: after including a quarter fixed effect the sign of the coefficient reverses so that more COVID related mentions in the transcript are associated with lower returns.
3. Model (3) shows that the result strengthens by removing across sector variation.
4. Model (4) includes a firm fixed effect and model (5) looks at the average covid mentions and Year to date return also finding a negative relationship.

The regression results suggest that transcripts reflect relevant information about the covid related risks of the company. Though, as some of you mentioned this may be simply a result of poorly performing companies during covid blaming the pandemic for their problems.

	(1) return3mo	(2) return3mo	(3) return3mo	(4) return3mo	(5) returnY2D
covid exposure std	6.502*** (0.518)	-1.760*** (0.456)	-2.441*** (0.524)	-3.455*** (0.776)	
mean covid exposure std					-2.260*** (0.643)
Constant		-1.135* (0.599)	22.00*** (1.329)		
N	1914	1914	1914	1911	479
R-sq	0.065	0.516	0.541	0.598	0.017
quarterFE	no	yes	yes	yes	n/a
sectorFE	no	no	yes	n/a	n/a
firmFE	no	no	no	yes	n/a

Table 1: Note: * p<0.1, ** p<0.05, *** p<0.01