## THE EFFECT OF WRITING LONGER PAPERS

ECON 480 - ECONOMETRICS - FALL 2018

Ryan Safner

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• As a student writing an empirical research paper, does writing a longer paper attain a higher grade?



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- · Robust to different models



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- · Dilemma:
- 1. Longer papers might imply students work hard and write a good paper
- $2. \ \ \text{But students might also put in low quality filler hoping to inflate their grades}$



• I collected data from 7 different classes at 2 different colleges where I assigned a longer term paper

Class	n
Econometrics	32
IEP	51
ΙΟ	22
Trade	23

School	n
GMU	51
Hood	77

Year	n
2014	51
2016	38
2017	39



## VARIABLES USED

Variable	Description
Grade	Grade on paper assignment (0-100)
Pages	Number of pages written
Female	= 1 if student is female, = 0 if male
Morning	= 1 if class met in morning, = 0 if afternoon
Hood	= 1 if class taught at Hood, $=$ 0 if other school
Metrics	= 1 if class was Econometrics, $=$ 0 if other class

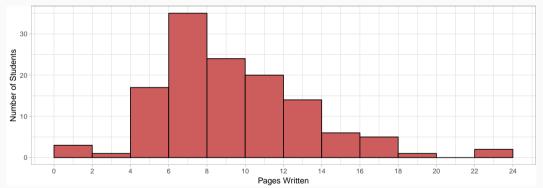


# **SUMMARY STATISTICS**

Variable	Obs	Min	Q1	Median	Q3	Max	Mean	Std. Dev.
Grade	128	0	80	86	91	100	83.94	14.86
Pages	128	0	7	9	12	24	9.79	3.91

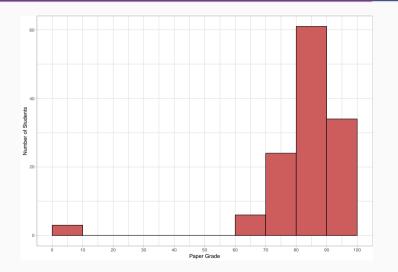


# DATA: HISTOGRAM OF PAGES WRITTEN



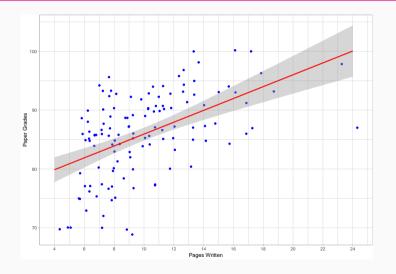


# DATA: HISTOGRAM OF PAPER GRADES



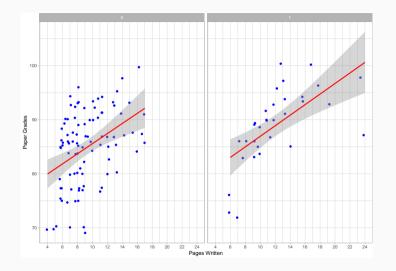


# SCATTERPLOT OF PAGES WRITTEN AND GRADE WITH OUTLIERS (0'S) DROPPED





## SCATTERPLOT FOR ECONOMETRICS CLASSES VS NON-ECONOMETRICS CLASSES





$$Grade_i = Length_i + Final_i + Female_i + Morning_i + Hood_i + Metrics_i\epsilon_i$$

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- Endogeneity: unmeasured attributes (e.g. paper topic, student's diligence, conscienciousness, intelligence, etc) correlated with both number of Length and Grade

## **RESULTS**

			Gra	ide		
	All	No 0s				
	(1)	(2)	(3)	(4)	(5)	(6)
Pages	2.154***	0.711***	0.725***	0.867***	0.813***	0.815***
	(0.279)	(0.154)	(0.149)	(0.144)	(0.138)	(0.145)
Final		0.259***	0.255***	0.211***	0.189***	0.189***
		(0.055)	(0.053)	(0.051)	(0.049)	(0.049)
Female			-3.234***	-2.608***	-0.904	-0.904
			(1.007)	(0.961)	(1.021)	(1.025)
Morning				-5.208***	-3.621***	-3.590**
				(1.282)	(1.291)	(1.484)
Hood					4.137***	4.170***
					(1.109)	(1.363)
Metrics						-0.059
						(1.414)
Constant	62.856***	56.606***	58.109***	64.475***	62.352***	62.325***
	(2.935)	(4.352)	(4.221)	(4.272)	(4.099)	(4.167)
Observations	128	125	125	125	125	125



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- · Still probably strongly endogenous
- · Poor advice to just write long papers!

