



All About Coffee:

Exploring Digital Data on Coffee Using Computational Methods

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Research Questions

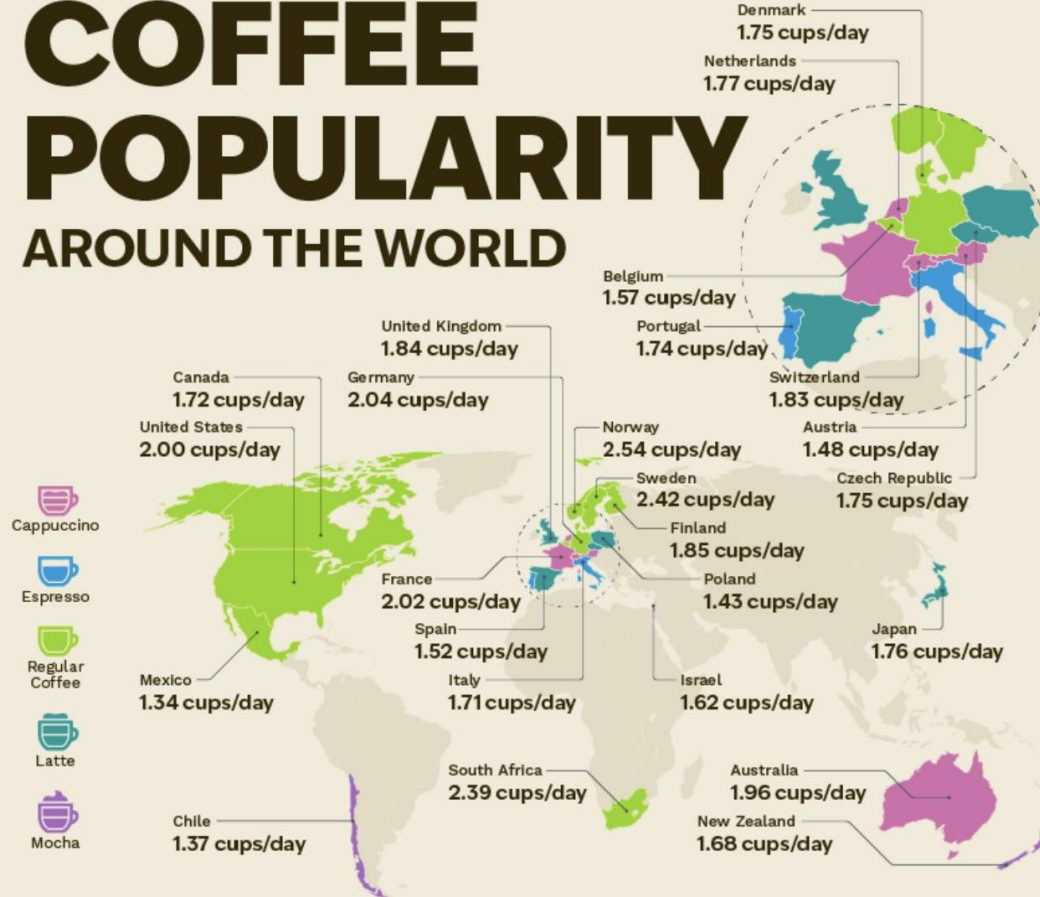
- How are people discussing coffee on different social media platforms?
- What other information can we gather about the US coffee industry?

Overview & Data

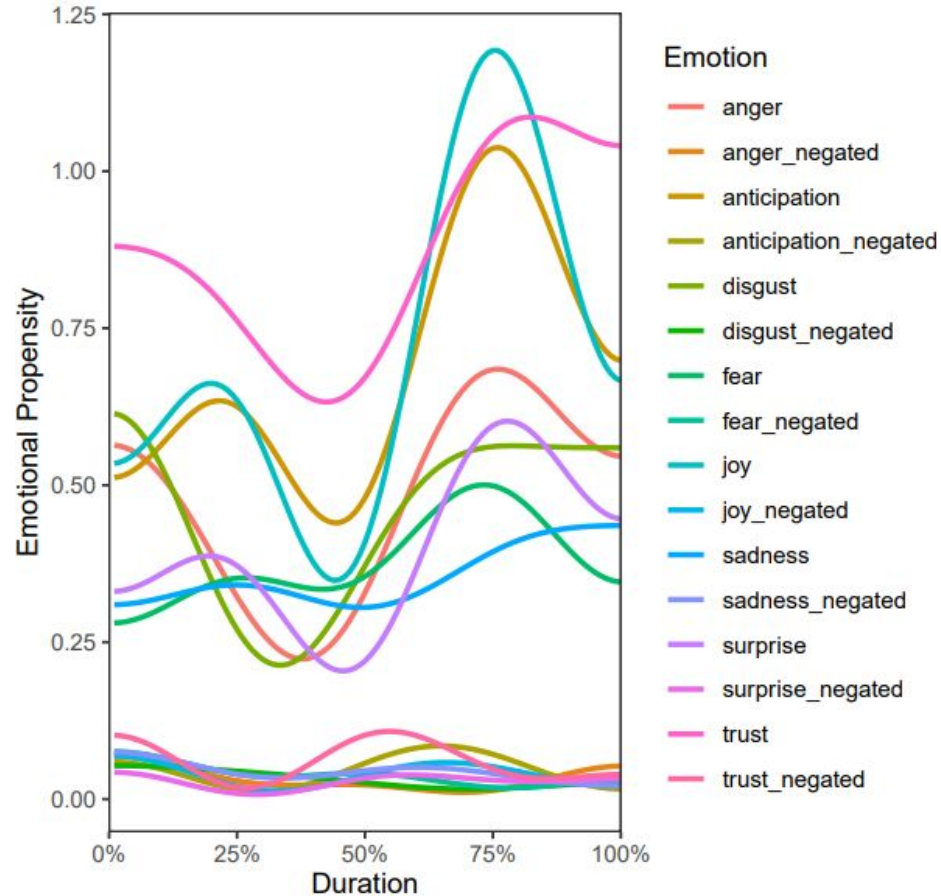
- Reddit Discussion
- Twitter Discussion
- Coffee Industry

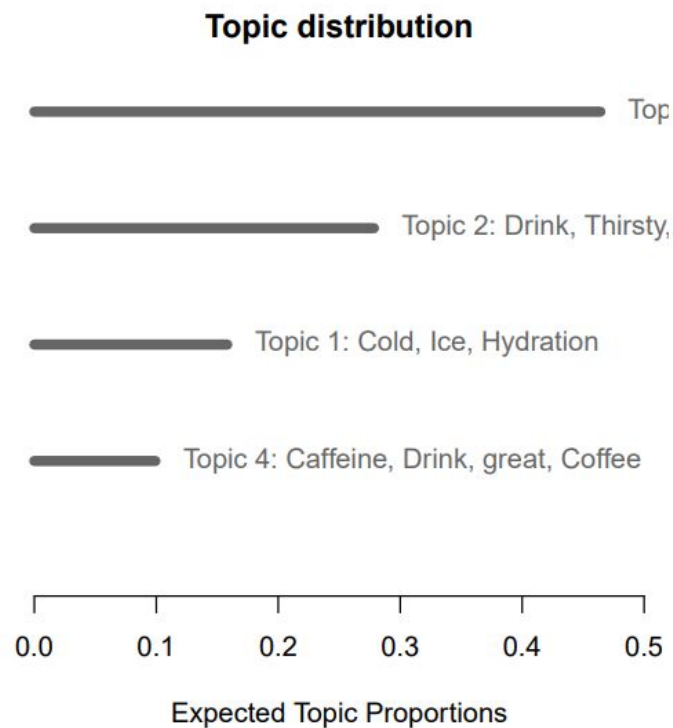


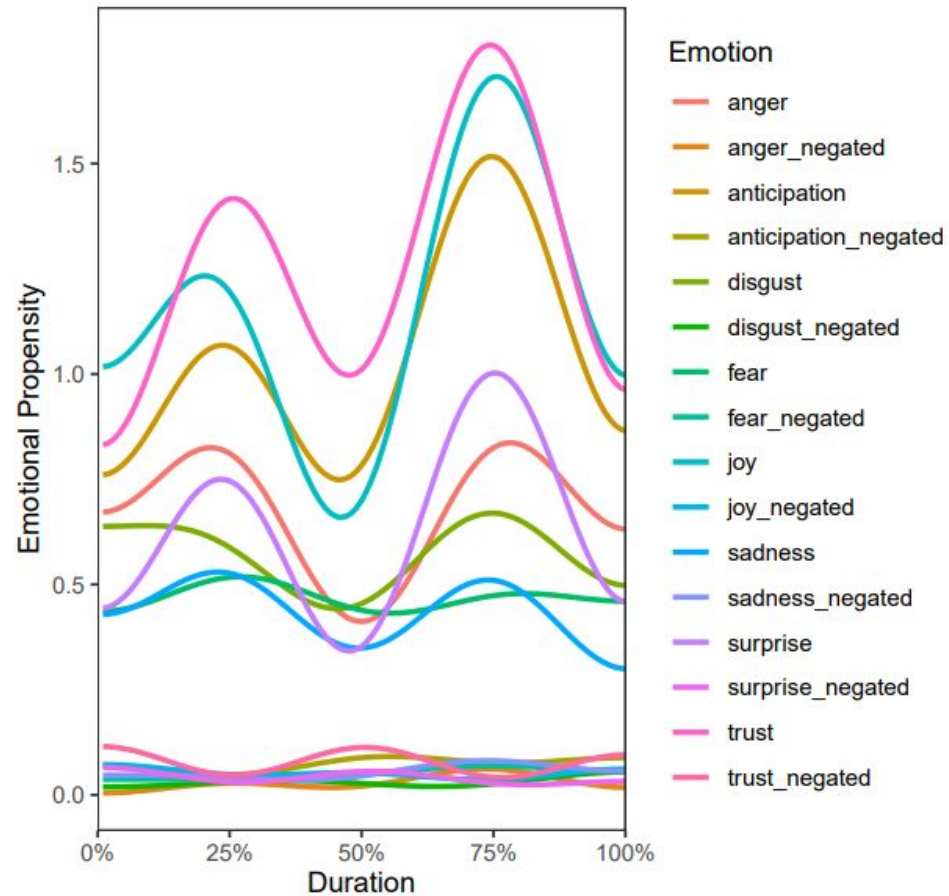
COFFEE POPULARITY AROUND THE WORLD



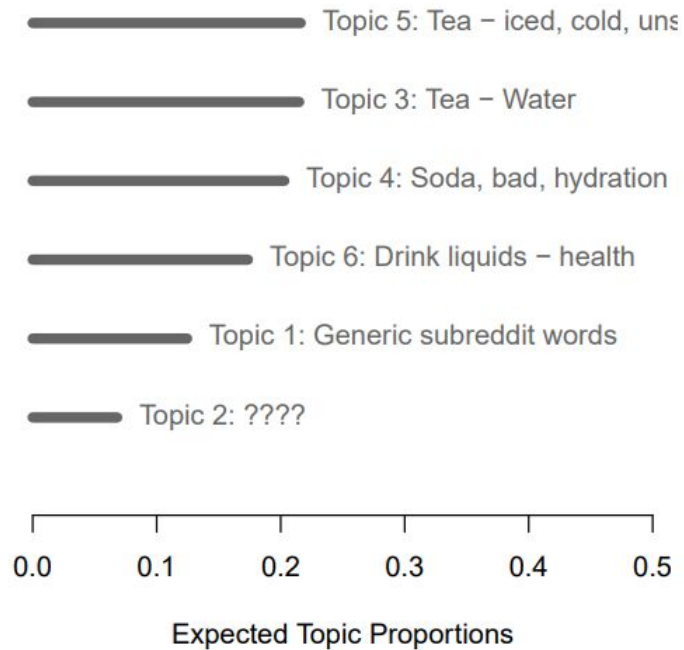
Based on Preferred Coffee Type and Number of Cups Drunk per Day, According To Survey Responses From Over 2,000 People

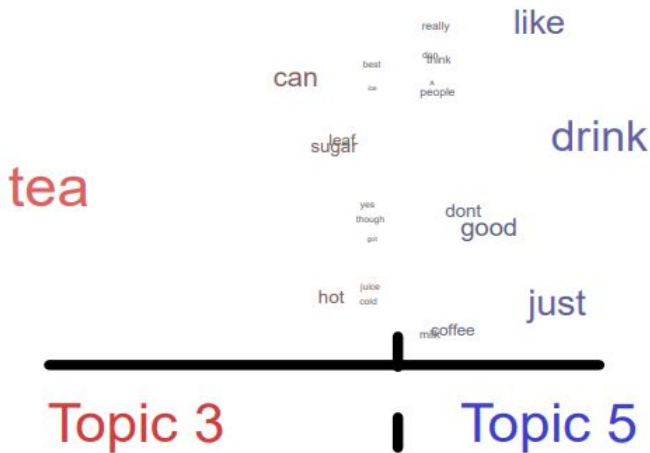




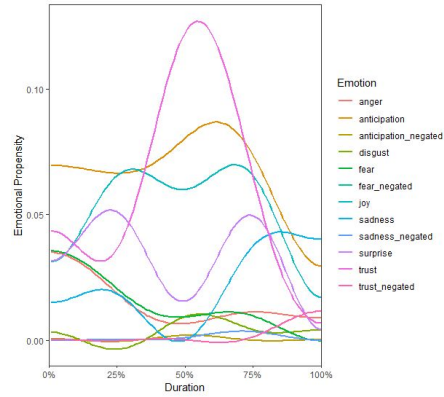


Topic distribution

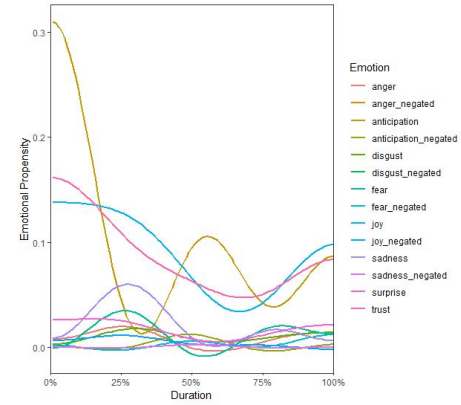




#coffeebreak tweets

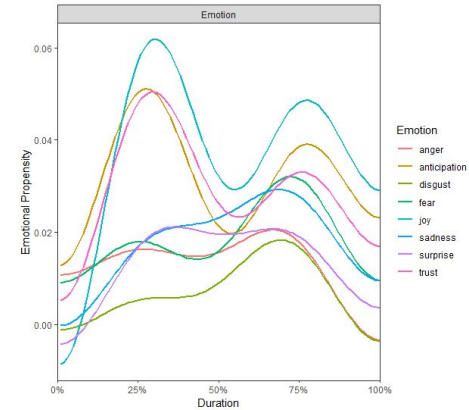
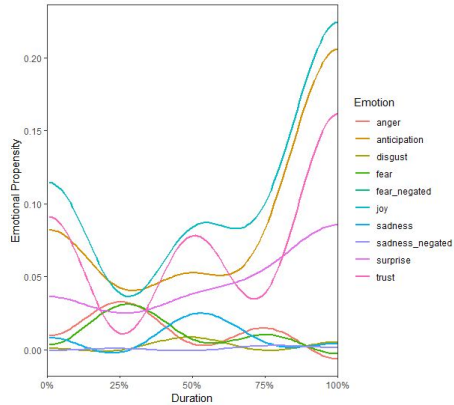


#teatime tweets



Individuals

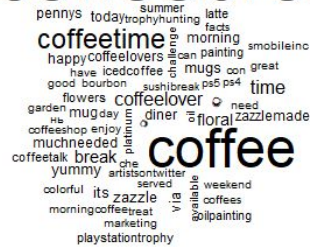
Businesses



#teatime tweets

coffeebreak

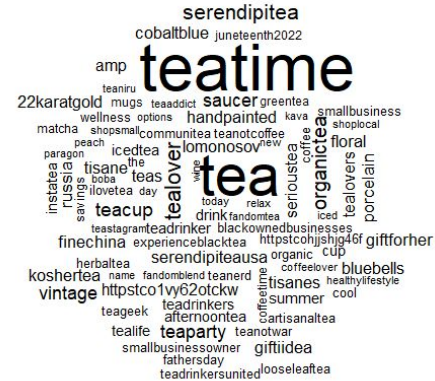
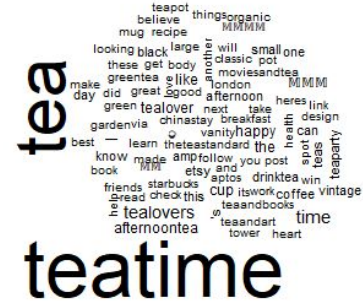
Individuals



Businesses

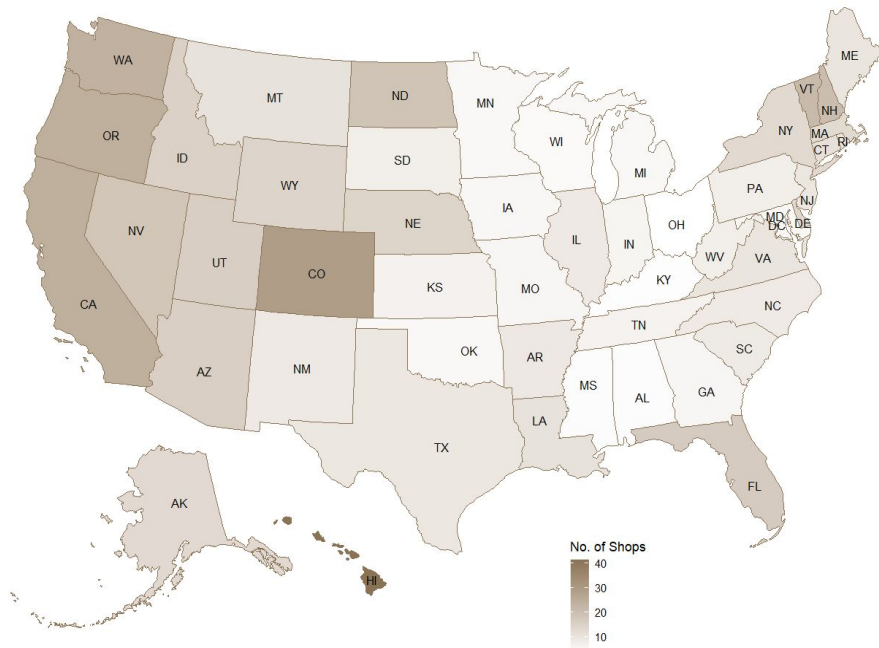


#teatime tweets

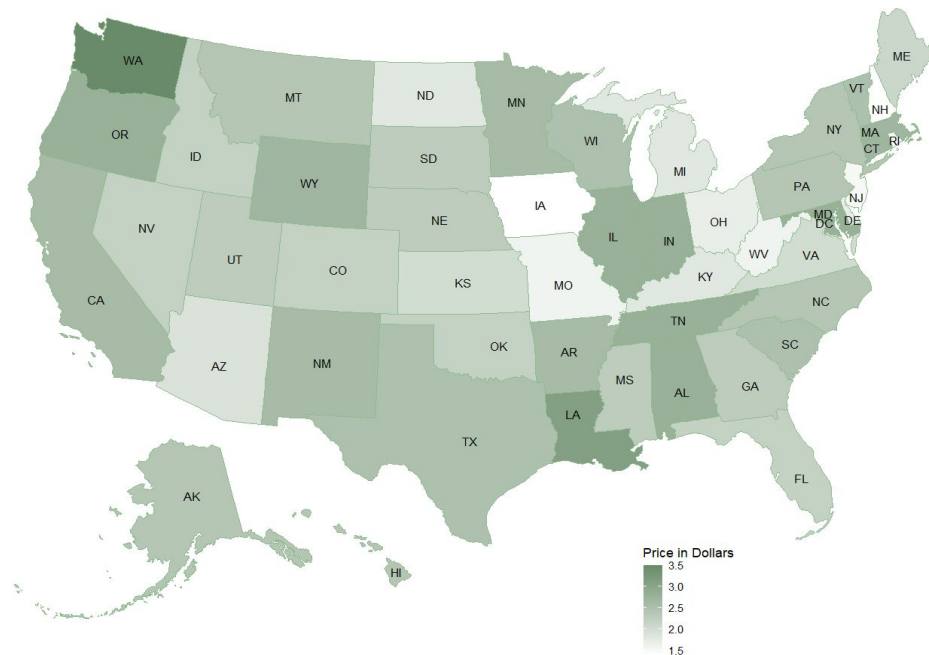


Coffee Industry

Number of Coffee Shops in the US
Per 100k People



Average Price of Coffee in the US



Coffee Industry

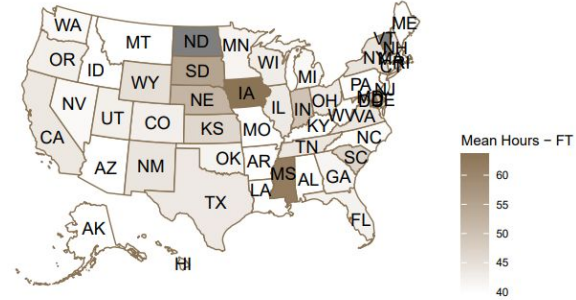
Mean Hours of Full-time Workers				
	Model 1	Model 2	Model 3	Model 4
Shops per	-0.13 (0.10)		-0.12 (0.11)	-0.36 (0.60)
Average		-2.07 (1.71)	-1.75 (1.73)	-2.94 (3.32)
Shops * Avg				0.10 (0.25)
Intercept	45.29 *** (1.41)	48.56 *** (4.03)	49.14 *** (4.05)	51.91 *** (7.76)
N	47	47	47	47
R2	0.04	0.03	0.06	0.06

*** p < 0.001; ** p < 0.01; * p < 0.05.

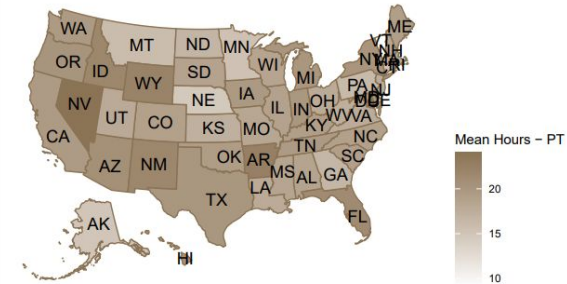
Mean Hours of Part-Time Workers				
	Model 1	Model 2	Model 3	Model 4
Shops per	0.02 (0.05)		0.02 (0.05)	-0.03 (0.27)
Average		0.31 (0.75)	0.27 (0.77)	0.04 (1.53)
Shops * Avg				0.02 (0.11)
Intercept	18.31 *** (0.64)	17.85 *** (1.76)	17.73 *** (1.80)	18.24 *** (3.56)
N	50	50	50	50
R2	0.00	0.00	0.01	0.01

*** p < 0.001; ** p < 0.01; * p < 0.05.

Mean Hours Worked Per Week of Full-Time Coffee Workers



Mean Hours Worked Per Week of Part-Time Coffee Workers



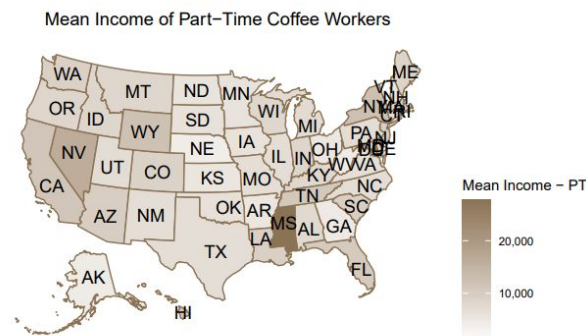
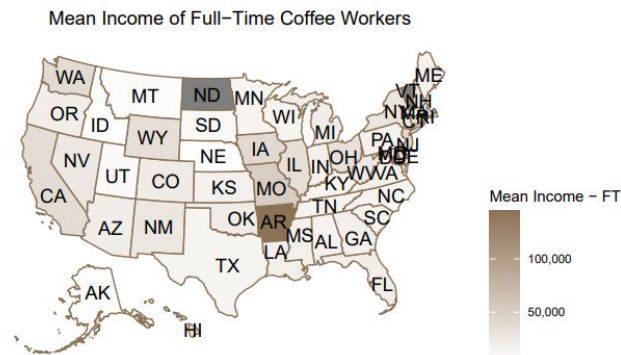
Coffee Industry

	Mean Income of Full-time Workers			
	Model 1	Model 2	Model 3	Model 4
Shops per	82.41 (404.38)		95.46 (414.58)	-2592.02 (2315.91)
Average		-1027.49 (6656.57)	-1289.28 (6823.13)	-14260.84 (12927.77)
Shops * Avg				1127.24 (955.84)
Intercept	23649.77 (5519.18)	26963.53 (15677.33)	26479.99 (15983.49)	56754.79 (30203.37)
N	47	47	47	47
R2	0.00	0.00	0.00	0.03

*** p < 0.001; ** p < 0.01; * p < 0.05.

Mean Income of Part-Time Workers				
	Model 1	Model 2	Model 3	Model 4
Shops per	46.69		33.60	61.00
	(73.95)		(74.29)	(421.52)
Average		1582.76	1504.62	1641.83
		(1192.40)	(1214.76)	(2412.46)
Shops * Avg				-11.56
				(174.98)
Intercept	7447.06	4368.96	4152.57	3833.01
	(1030.69)	(2786.65)	(2850.49)	(5629.41)
N	50	50	50	50
R2	0.01	0.04	0.04	0.04

*** p < 0.001; ** p < 0.01; * p < 0.05.



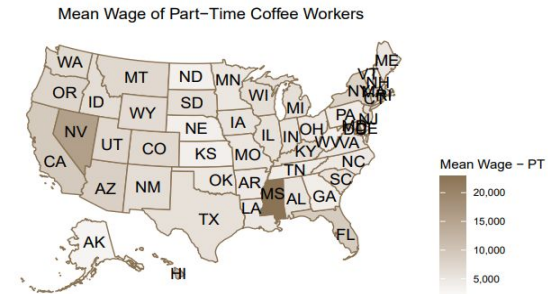
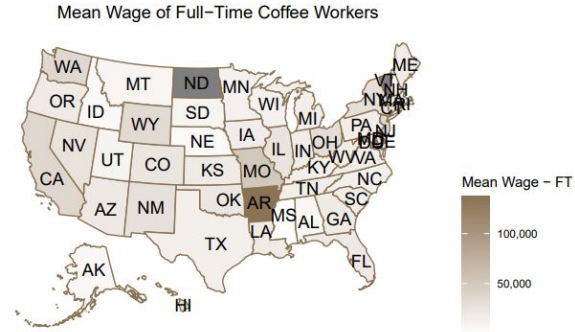
Coffee Industry

Mean Wage of Full-Time Workers				
	Model 1	Model 2	Model 3	Model 4
Shops per 100k	201.49		179.76	-2528.26
	-394.02		-403.64	-2252.24
Average Price of Coffee		2639.01	2146.03	-10924.69
		-6491.7	-6643.19	-12572.36
Shops * Avg Price				1135.86
				-929.56
Intercept	19569.86 ***	15769.45	14858.91	45365.14
	-5377.81	-15289.03	-15561.97	-29373.01
N	47	47	47	47
R2	0.01	0	0.01	0.04

*** p < 0.001; ** p < 0.01; * p < 0.05.

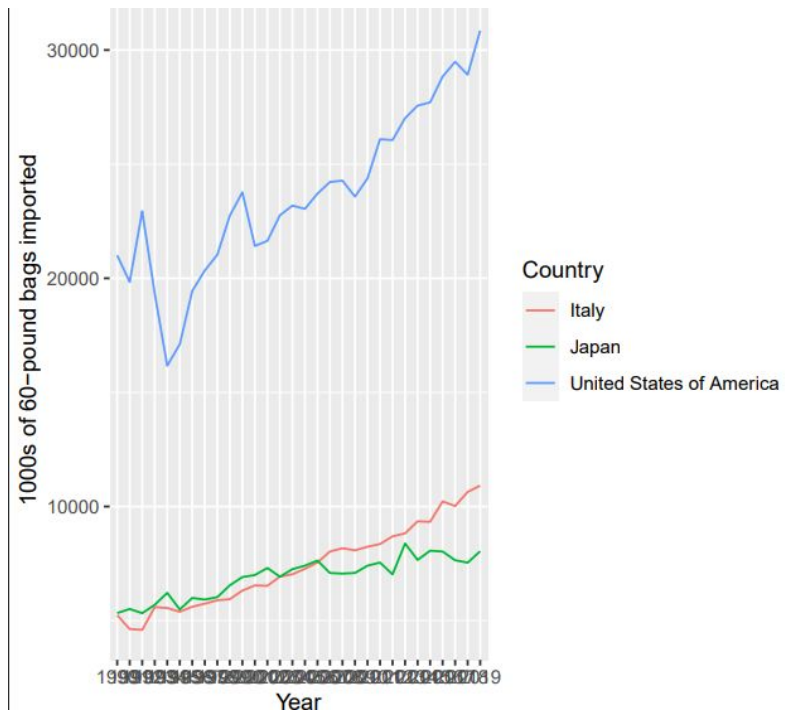
Mean Wage of Part-Time Workers				
	Model 1	Model 2	Model 3	Model 4
Shops per	77.29		72.92	-48.80
	(61.53)		(62.66)	(355.07)
Average		671.69	502.09	-107.29
		(1017.89)	(1024.58)	(2032.18)
Shops * Avg				51.35
				(147.40)
Intercept	5306.44	4676.74	4207.07	5626.25
	(857.66)	(2378.82)	(2404.21)	(4742.03)
N	50	50	50	50
R2	0.03	0.01	0.04	0.04

*** p < 0.001; ** p < 0.01; * p < 0.05.

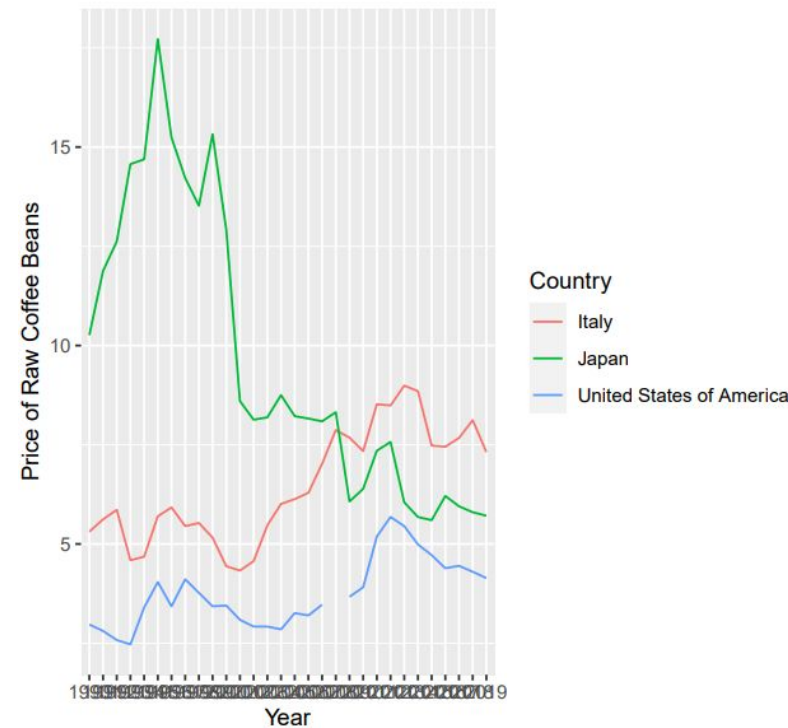


Coffee Industry

Coffee Imports by Country



Raw Coffee Bean Price by Country



Conclusions/Reflections



- Obstacles and limitations
- Reddit & Twitter
- Various methods
- Final workshop thoughts