

Empirical problem set
BUS456 Fall 2022

Group 12

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Question 1

Table 1: Frequency of the claim colour

Green	Red	Yellow
5677	1492	13191

Table 2: Frequency of the insurance type

	auto	life	other	property	travel
2	7563	2305	35	5865	4590

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## [1] "Insurance claim with empty insurance type: 17857"  
## [2] "Insurance claim with empty insurance type: 18515"
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Comment on question 1

Question 2

Table 3: Percentage of claim color

green	yellow	red
0.2787602	0.6479517	0.0732881

Table 4: Percentage of claim color by insurance type

insurancetype	green	yellow	red
auto	0.3411345	0.6402221	0.0186434
life	0.2125813	0.7422993	0.0451193
other	0.8857143	0.0857143	0.0285714
property	0.3636829	0.5459506	0.0903666
travel	0.0960784	0.7479303	0.1559913

Question 3

Table 5: Title

treatmentgroup	0	1	2	3	4
green	0.2816386	0.2753448	0.2696765	0.2925290	0.2751244
yellow	0.6452085	0.6503750	0.6569290	0.6317516	0.6549751
red	0.07315289	0.07428018	0.07339450	0.07571933	0.06990050
auto	0.3733236	0.3684975	0.3679382	0.3702675	0.3776119
life	0.1128993	0.1200097	0.1103332	0.1128218	0.1099502

Table 5: Title

property	0.2845647	0.2884104	0.2940608	0.2895003	0.2838308
travel	0.2275055	0.2213888	0.2262192	0.2253912	0.2268657
other	0.001706901	0.001693685	0.001448576	0.002019182	0.001741294
privatefinanced	0.8351622	0.8400677	0.8401738	0.8200404	0.8504975

Question 4

Question 5

Question 6

Question 7

Table 6:

	<i>Dependent variable:</i>	
	accept_automatic	
	(1)	(2)
simplification	0.007 (0.007)	0.008 (0.007)
personalization	0.004 (0.007)	0.006 (0.007)
social.norm	0.015** (0.007)	0.014* (0.007)
combined	0.026*** (0.007)	0.028*** (0.007)
insurancetype1		0.078*** (0.008)
insurancetypeother		-0.023 (0.055)
insurancetypeproperty		-0.058*** (0.006)
insurancetypetravel		0.011* (0.007)
red		0.004 (0.009)
green		0.052*** (0.005)
privatefinanced1		-0.059*** (0.007)
Constant	0.867*** (0.005)	0.907*** (0.009)
Observations	20,358	20,358
R ²	0.001	0.020
Adjusted R ²	0.001	0.020
Residual Std. Error	0.328 (df = 20353)	0.324 (df = 20346)
F Statistic	4.090*** (df = 4; 20353)	38.036*** (df = 11; 20346)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 7:

	<i>Dependent variable:</i>		
	Green	accept_automatic Yellow	Red
	(1)	(2)	(3)
combined	0.013 (0.013)	0.036*** (0.009)	-0.005 (0.028)
Constant	0.894*** (0.009)	0.854*** (0.006)	0.873*** (0.019)
Observations	2,261	5,279	581
R ²	0.001	0.003	0.0001
Adjusted R ²	0.0001	0.003	-0.002
Residual Std. Error	0.299 (df = 2259)	0.333 (df = 5277)	0.336 (df = 579)
F Statistic	1.137 (df = 1; 2259)	15.175*** (df = 1; 5277)	0.032 (df = 1; 579)

Note:

*p<0.1; **p<0.05; ***p<0.01