

Religion and Future Discounting

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Motivation

Scarcity of research and contradictory findings

- Carter et. al (2012) found that religious people discount future rewards less than non-religious people
- Benjamin, Choi, and Fisher (2012) Thornton, Stokes, and Helms (2105) did not find such a relationship

What is future discounting

- Measurement for the preference to have something now instead in the future (time preference)
- Example: Cookie

Future discounting in my data

Table 1: Intertemporal choice matrix

	today	or	in 12 months
1	100.00		102.50
2	100.00		105.10
3	100.00		107.60
4	100.00		110.20
5	100.00		112.80
6	100.00		115.50
7	100.00		118.20
8	100.00		121.00
9	100.00		123.70
10	100.00		126.50
11	100.00		129.30
12	100.00		132.20
13	100.00		135.10
14	100.00		138.00
15	100.00		141.00
16	100.00		144.00
17	100.00		147.00
18	100.00		150.00
19	100.00		153.10
20	100.00		156.20

Table 2: Variables

Switching row	Response variable	1 - 21
Religion	Explanatory variable	1 = religious affiliation and 0 = no religious affiliation
Gender	Control variable	1 = male and 0 = female
Age	Control variable	Age in years

Research question

Religious participants discount the future less than non-religious participants and have therefore a stronger preference for later payments as non-religious participants

Results

- Mean switching row religious participants: 13.81 (sd = 7.1)
- Mean switching row non-religious participants: 12.45 (sd = 7.63)
- Welch t-test: means of switching row between religious and non-religious participants are not significantly different (p-value: 0.066)
- Wilcoxon-Mann-Whitney: two means are not significantly different (p-value: 0.081)

Linear regression results

Table 3: Linear regression

Estimator	Regression 1	Regression 2
$\hat{\beta}_0$	12.45*** (0.62)	12.44*** (1.07)
$\hat{\beta}_{Religion}$	1.36* (0.72)	1.39* (0.72)
$\hat{\beta}_{Male}$		-0.56 (0.65)
$\hat{\beta}_{Age}$		0.01 (0.02)
Observations	500	499
Adjusted R^2	0.005	0.003
Residuals Std. Error	7.257 (df = 498)	7.250 (df = 495)
F-Statistic	3.618* (df = 1; 498)	1.564 (df = 3; 495)
Note	* $p < 0.1$; ** $p < 0.05$;	*** $p < 0.001$

Limitations

- Data is extremely left skewed
- R^2 is very small
- For 35 % of the participants a switching row of 21 is assumed as they never switch from the immediate to the later payment

Questions?