

## SUBJECTIVE COSTS OF TAXATION - ONLINE APPENDIX

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This document contains additional information relating to *Subjective Costs of Taxation*. Replication code for this Article is available online, at <https://jonathanhchoi.squarespace.com/config/pages>.

*A. Financial and Demographic Data Collected*

In addition to the data described in the Article that we collected in the course of the survey, Prolific collected the following demographic data in advance, some of which we used in our statistical analysis.

- Ethnicity
- Current state of residence
- Work week in hours
- Highest education level completed
- Household income
- Experiences at work (respect, passion, motivation)
- Entrepreneurship
- Employment sector
- Industry
- Supervisory duties
- Political affiliation
- Children (yes / no)
- Investment ownership
- Property ownership (own, rent, affordable housing, etc.)
- Age
- Sex
- Country of birth
- Country of residence
- Nationality
- Language
- Student status
- Employment status (full-time, part-time)

*B. Implicit Price Tables*

The following tables depict implicit prices by subgroup—depicting, for example, implicit prices of various tax compliance services for men, for women, and the different between men and women (in the column labeled  $\Delta$ ). 95% confidence intervals are provided, calculated parametrically using the Delta method.

**Table 1: Implicit Prices by Gender**

Attribute	Male		Female		$\Delta$	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$72.80	\$59.45 - \$86.15	\$73.81	\$62.27 - \$85.34	\$1.00	-\$12.26 - \$14.27
Time Elimination: 1 Hour	-\$4.35	-\$16.78 - \$8.08	-\$14.36	-\$25.24 - -\$3.47	-\$10.01	-\$24.01 - \$4.00
Time Elimination: Half	\$14.03	\$0.83 - \$27.23	\$4.96	-\$6.81 - \$16.74	-\$9.07	-\$24.13 - \$5.99
Time Elimination: All	\$67.98	\$52.30 - \$83.66	\$34.94	\$24.24 - \$45.65	-\$33.03	-\$47.35 - -\$18.71

**Table 2: Implicit Prices by Race**

Attribute	White		Black		$\Delta$	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$72.47	\$61.40 - \$83.55	\$88.22	\$56.92 - \$119.53	\$15.75	-\$14.53 - \$46.02
Time Elimination: 1 Hour	-\$11.06	-\$21.12 - -\$1.00	\$2.86	-\$24.12 - \$29.83	\$13.92	-\$13.03 - \$40.87
Time Elimination: Half	\$9.80	-\$0.92 - \$20.52	\$26.51	-\$4.75 - \$57.78	\$16.72	-\$14.33 - \$47.76
Time Elimination: All	\$52.86	\$41.20 - \$64.52	\$73.37	\$40.49 - \$106.26	\$20.52	-\$10.92 - \$51.95
			Hispanic/Latino			
			Implicit Price	95% CI	$\Delta$	95% CI
Risk Elimination	\$72.47	\$61.40 - \$83.55	\$59.21	\$41.59 - \$76.84	-\$13.26	-\$31.45 - \$4.93
Time Elimination: 1 Hour	-\$11.06	-\$21.12 - -\$1.00	\$6.44	-\$12.20 - \$25.07	\$17.50	-\$1.78 - \$36.78

Time Elimination: Half	\$9.80	-\$0.92 - \$20.52	\$3.89	-\$17.33 - \$25.11	-\$5.91	-\$28.24 - \$16.42
Time Elimination: All	\$52.86	\$41.20 - \$64.52	\$32.11	\$14.84 - \$49.38	-\$20.75	-\$38.36 - -\$3.14
			<b>Asian</b>			
					<b>Δ</b>	<b>95% CI</b>
Risk Elimination	\$72.47	\$61.40 - \$83.55	\$78.79	\$32.35 - \$125.24	\$6.32	-\$39.48 - \$52.13
Time Elimination: 1 Hour	-\$11.06	-\$21.12 - -\$1.00	-\$23.66	-\$70.72 - \$23.42	-\$12.59	-\$59.65 - \$34.46
Time Elimination: Half	\$9.80	-\$0.92 - \$20.52	\$16.21	-\$29.14 - \$61.55	\$6.41	-\$38.67 - \$51.48
Time Elimination: All	\$52.86	\$41.20 - \$64.52	\$96.05	\$36.01 - \$156.09	\$43.19	-\$15.22 - \$101.60

**Table 3: Implicit Prices by Small Business Ownership**

Attribute	No Small Business		Has Small Business		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$67.98	\$57.53 - \$78.44	\$83.21	\$65.51 - \$100.90	\$15.22	-\$1.13 - \$31.58
Time Elimination: 1 Hour	-\$6.47	-\$16.70 - \$3.77	-\$13.27	-\$28.45 - \$1.90	-\$6.81	-\$22.58 - \$8.96
Time Elimination: Half	\$9.76	-\$1.02 - \$20.56	\$12.88	-\$3.58 - \$29.35	\$3.12	-\$13.77 - \$20.00
Time Elimination: All	\$52.72	\$41.04 - \$64.41	\$55.81	\$39.58 - \$72.03	\$3.08	-\$11.54 - \$17.71

**Table 4: Implicit Prices by EITC Filing Status**

Attribute	No EITC		Files EITC		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$73.55	\$61.45 - \$85.66	\$69.25	\$56.92 - \$81.58	-\$4.31	-\$17.51 - \$8.90
Time Elimination: 1 Hour	-\$10.25	-\$21.25 - \$0.75	-\$5.69	-\$18.18 - \$6.81	\$4.56	-\$9.54 - \$18.67
Time Elimination: Half	\$9.00	-\$2.63 - \$20.63	\$12.75	-\$0.95 - \$26.44	\$3.75	-\$11.63 - \$19.13
Time Elimination: All	\$54.59	\$41.70 - \$67.49	\$50.86	\$38.07 - \$63.65	-\$3.73	-\$16.90 - \$9.44

**Table 5: Implicit Prices by CTC Filing Status**

Attribute	No CTC		Files CTC		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$71.05	\$69.87 - 82.24	\$74.59	\$59.79 - \$89.39	\$3.53	-\$10.80 - \$17.88
Time Elimination: 1 Hour	-\$11.60	-\$22.06 - -\$1.14	-\$2.31	-\$16.22 - \$11.59	\$9.29	-\$5.38 - \$23.96
Time Elimination: Half	\$7.88	-\$3.15 - \$18.91	\$15.50	\$0.20 - \$30.80	\$7.62	-\$8.52 - \$23.75
Time Elimination: All	\$51.53	\$39.58 - \$63.47	\$57.32	\$42.28 - \$72.36	\$5.79	-\$8.07 - \$19.66

**Table 6: Implicit Prices by Deduction Filing Status**

Attribute	Standard Deduction		Itemized Deductions		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$69.07	\$58.61 - \$79.52	\$85.22	\$64.64 - \$105.81	\$16.16	-\$3.19 - \$35.51
Time Elimination: 1 Hour	-\$6.76	-\$16.54 - \$3.03	-\$20.63	-\$39.59 - -\$1.68	-\$13.87	-\$33.06 - \$5.31
Time Elimination: Half	\$11.75	\$1.31 - \$22.19	-\$1.80	-\$21.55 - \$17.94	-\$13.55	-\$33.68 - \$6.58
Time Elimination: All	\$53.56	\$42.25 - \$64.86	\$51.68	\$31.92 - \$71.44	-\$1.87	-\$19.76 - \$16.01

**Table 7: Implicit Prices by Refund Expectation**

Attribute	Expects Payment		Expects Refund		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$79.88	\$63.95 - \$95.82	\$67.90	\$57.37 - \$78.44	-\$11.98	-\$26.70 - \$2.74
Time Elimination: 1 Hour	-\$9.98	-\$24.10 - \$4.13	-\$7.80	-\$18.07 - \$2.48	\$2.19	-\$12.56 - \$16.94
Time Elimination: Half	\$13.96	-\$1.31 - \$29.23	\$8.37	-\$2.46 - \$19.19	-\$5.60	-\$21.41 - \$10.22
Time Elimination: All	\$63.51	\$46.65 - \$80.37	\$47.98	\$36.89 - \$59.07	-\$15.53	-\$30.28 - -\$0.78

**Table 8: Implicit Prices by Hours Spent on Tax Compliance**

Attribute	≤ 5 Hours		> 5 Hours		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$61.70	\$51.85 - \$71.54	\$81.97	\$66.91 - \$97.03	\$20.27	\$6.35 - \$34.18
Time Elimination: 1 Hour	\$0.00	-\$10.12 - \$10.12	-\$15.46	-\$28.15 - -\$2.77	-\$15.47	-\$29.11 - -\$1.82
Time Elimination: Half	\$2.66	-\$8.14 - \$13.46	\$17.29	\$3.25 - \$31.33	\$14.64	-\$0.60 - \$29.88
Time Elimination: All	\$37.55	\$27.62 - \$47.47	\$68.25	\$51.72 - \$84.78	\$30.70	\$16.20 - \$45.20

**Table 9: Implicit Prices by Attitude Toward Tax Compliance**

Attribute	Does Not Dislike		Dislikes		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$63.15	\$49.01 - \$77.29	\$74.30	\$63.12 - \$85.48	\$11.15	-\$2.79 - \$25.09
Time Elimination: 1 Hour	-\$20.82	-\$36.38 - \$5.25	-\$3.16	-\$13.21 - \$6.89	\$17.65	\$1.57 - \$33.74
Time Elimination: Half	-\$4.44	-\$19.86 - \$10.97	\$17.24	\$6.11 - \$28.36	\$21.67	\$5.33 - \$38.03
Time Elimination: All	\$35.84	\$21.11 - \$50.56	\$59.99	\$48.02 - \$71.95	\$24.14	\$10.55 - \$37.75

**Table 10: Implicit Prices by Household Annual Income**

Attribute	Income < Median		Income ≥ Median		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$66.96	\$56.32 - \$77.60	\$77.18	\$63.15 - \$91.22	\$10.22	-\$3.11 - \$23.56
Time Elimination: 1 Hour	-\$9.16	-\$19.84 - \$1.52	-\$8.17	-\$20.69 - \$4.34	\$0.99	-\$12.80 - \$14.77
Time Elimination: Half	\$12.00	\$0.43 - \$23.57	\$8.46	-\$4.67 - \$21.61	-\$3.53	-\$18.24 - \$11.18
Time Elimination: All	\$44.10	\$33.19 - \$55.01	\$61.84	\$46.72 - \$76.96	\$17.74	\$4.22 - \$31.25

**Table 11: Implicit Prices by Individual Annual Income**

Attribute	Income < Median		Income ≥ Median		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$65.40	\$55.35 - \$75.46	\$81.73	\$65.74 - \$97.72	\$16.33	\$1.73 - \$30.93
Time Elimination: 1 Hour	-\$10.35	-\$20.46 - -\$0.23	-\$6.11	-\$19.86 - \$7.65	\$4.24	-\$10.09 - \$18.58
Time Elimination: Half	\$9.02	-\$1.73 - \$19.76	\$11.97	-\$2.72 - \$26.65	\$2.95	-\$12.41 - \$18.31
Time Elimination: All	\$43.47	\$33.04 - \$53.90	\$66.75	\$49.65 - \$83.85	\$23.28	\$8.42 - \$38.15

**Table 12: Implicit Prices by Education**

Attribute	No College		College or More		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$67.97	\$53.76 - \$82.18	\$73.89	\$62.49 - \$85.28	\$5.92	-\$8.15 - \$19.99
Time Elimination: 1 Hour	-\$6.95	-\$21.49 - \$7.58	-\$9.52	-\$19.81 - \$0.76	-\$2.56	-\$17.75 - \$12.62
Time Elimination: Half	\$5.42	-\$9.81 - \$20.65	\$12.07	\$0.94 - \$23.20	\$6.65	-\$9.64 - \$22.93
Time Elimination: All	\$55.57	\$40.13 - \$71.01	\$52.50	\$40.65 - \$64.35	-\$3.06	-\$17.28 - \$11.15

**Table 13: Implicit Prices by Paid Preparer**

Attribute	No Paid Preparer		Paid Preparer		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$68.66	\$58.04 - \$79.27	\$86.25	\$67.18 - \$105.32	\$17.59	-\$0.53 - \$35.71
Time Elimination: 1 Hour	-\$11.49	-\$21.56 - \$1.42	\$2.95	-\$13.39 - \$19.30	\$14.44	-\$2.22 - \$31.10
Time Elimination: Half	\$10.20	-\$0.46 - \$20.86	\$9.86	-\$8.78 - \$28.51	-\$0.34	-\$19.69 - \$19.01
Time Elimination: All	\$53.01	\$41.29 - \$64.73	\$56.14	\$38.59 - \$73.69	\$3.13	-\$13.32 - \$19.57

**Table 14: Implicit Prices by Whether State of Residence Has Income Tax**

Attribute	No State Income Tax		Has State Income Tax		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$73.78	\$54.44 - \$93.13	\$71.94	\$61.29 - \$82.59	-\$1.84	-\$20.18 - \$16.50
Time Elimination: 1 Hour	-\$13.59	-\$33.25 - \$6.05	-\$7.84	-\$17.59 - \$1.92	\$5.76	-\$14.09 - \$25.62
Time Elimination: Half	\$14.28	-\$6.06 - \$34.62	\$9.33	-\$0.96 - \$19.63	-\$4.94	-\$25.18 - \$15.30
Time Elimination: All	\$55.29	\$34.83 - \$75.75	\$53.06	\$41.76 - \$64.36	-\$2.22	-\$20.97 - \$16.52

**Table 15: Implicit Prices by Age**

Attribute	≤ Median Age		> Median Age		Δ	95% CI
	Implicit Price	95% CI	Implicit Price	95% CI		
Risk Elimination	\$68.99	\$57.14 - \$80.83	\$75.72	\$62.86 - \$88.58	\$6.73	-\$6.29 - \$19.75
Time Elimination: 1 Hour	-\$1.08	-\$12.67 - \$10.51	-\$16.86	-\$28.75 - -\$4.98	-\$15.79	-\$29.66 - -\$1.92
Time Elimination: Half	\$15.04	\$2.57 - \$27.51	\$5.07	-\$7.37 - \$17.50	-\$9.97	-\$24.71 - \$4.77
Time Elimination: All	\$57.88	\$44.51 - \$71.25	\$48.89	\$36.35 - \$61.44	-\$8.99	-\$21.75 - \$3.77

### C. Qualitative Response Word Clouds

The following word clouds depict the most common words and phrases in respondents' qualitative responses answering why they believe it is (or isn't) worthwhile to pay money to reduce time spent on tax compliance, or eliminate the risk of error or audit. The word clouds were generated by first using the TextBlob noun extraction tool<sup>1</sup> to identify common phrases, then using the WordCloud tool<sup>2</sup> to visualize the most common phrases that respondents used.

<sup>1</sup> *TextBlob*, GITHUB (Sept. 25, 2013), <https://github.com/sloria/TextBlob>.

<sup>2</sup> *WordCloud*, GITHUB, [https://amueller.github.io/word\\_cloud](https://amueller.github.io/word_cloud) (last visited Jan. 28, 2023).

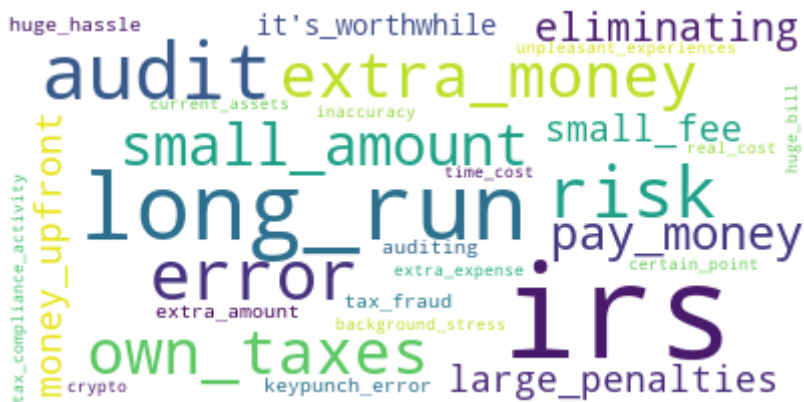
Figure 1: Word Cloud, Worthwhile to Pay Money to Reduce Time



Figure 2: Word Cloud, Not Worthwhile to Pay Money to Reduce Time



Figure 3: Word Cloud, Worthwhile to Pay Money to Eliminate Risk of Error / Audit





**Figure 4: Word Cloud, Not Worthwhile to Pay Money to Eliminate Risk of Error / Audit**



*D. Regression Table for Monetary Benefit Analysis*

The following table shows the results of a multinomial logistic regression including all variables used for our estimates of the monetary benefits of various tax reforms. Unlike our single-interaction-term results above, this regression retains as much data specificity as possible, to increase the accuracy of the estimates. In particular, we include dummy variables for each of the household income categories, rather than simply analyzing whether respondents are above or below the median. Standard errors in the table are calculated parametrically, and these are not the standard errors used to estimate confidence intervals in the main paper (which were estimated using bootstrapping).

**Table 16: Regression Table for Monetary Benefit Calculations**

Attribute	choice
<i>Risk</i>	2.183** (1.082)
<i>Time<sub>1</sub></i>	-0.365 (1.054)
<i>Time<sub>half</sub></i>	0.684 (1.014)
<i>Time<sub>all</sub></i>	3.440*** (1.178)
<i>Government</i>	0.006 (0.729)
<i>Fee</i>	-0.061*** (0.023)
<i>Female · Risk</i>	0.745*** (0.219)

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[31-Jan-23]

<i>Female · Time<sub>1</sub></i>	-0.515** (0.243)
<i>Female · Time<sub>half</sub></i>	-0.240 (0.261)
<i>Female · Time<sub>all</sub></i>	-0.718*** (0.248)
<i>Female · Government</i>	-0.282* (0.170)
<i>Female · Fee</i>	-0.008* (0.004)
<i>Itemizes · Risk</i>	-0.017 (0.252)
<i>Itemizes · Time<sub>1</sub></i>	-0.361 (0.286)
<i>Itemizes · Time<sub>half</sub></i>	-0.373 (0.306)
<i>Itemizes · Time<sub>all</sub></i>	-0.522* (0.276)
<i>Itemizes · Government</i>	0.344* (0.197)
<i>Itemizes · Fee</i>	0.007 (0.005)
<i>Claims CTC · Risk</i>	-0.054 (0.260)
<i>Claims CTC · Time<sub>1</sub></i>	0.259 (0.293)
<i>Claims CTC · Time<sub>half</sub></i>	0.420 (0.316)
<i>Claims CTC · Time<sub>all</sub></i>	0.031 (0.292)
<i>Claims CTC · Government</i>	-0.112 (0.202)
<i>Claims CTC · Fee</i>	-0.002

	(0.005)
<i>Claims EITC · Risk</i>	0.419*
	(0.251)
<i>Claims EITC · Time<sub>1</sub></i>	0.034
	(0.286)
<i>Claims EITC · Time<sub>half</sub></i>	0.150
	(0.304)
<i>Claims EITC · Time<sub>all</sub></i>	0.409
	(0.291)
<i>Claims EITC · Government</i>	0.163
	(0.195)
<i>Claims EITC · Fee</i>	-0.005
	(0.005)
<i>Files Jointly · Risk</i>	-0.024
	(0.244)
<i>Files Jointly · Time<sub>1</sub></i>	-0.017
	(0.276)
<i>Files Jointly · Time<sub>half</sub></i>	-0.262
	(0.296)
<i>Files Jointly · Time<sub>all</sub></i>	0.076
	(0.275)
<i>Files Jointly · Government</i>	-0.156
	(0.191)
<i>Files Jointly · Fee</i>	-0.002
	(0.005)
<i>Has Small Business Income · Risk</i>	-0.060
	(0.216)
<i>Has Small Business Income · Time<sub>1</sub></i>	-0.078
	(0.248)
<i>Has Small Business Income · Time<sub>half</sub></i>	0.110
	(0.263)
<i>Has Small Business Income · Time<sub>all</sub></i>	0.025
	(0.248)
<i>Has Small Business Income · Government</i>	-0.143

	(0.173)
<i>Has Small Business Income · Fee</i>	0.006 (0.004)
<i>Household Income<sub>\$10k-\$16k</sub> · Risk</i>	-0.212 (1.442)
<i>Household Income<sub>\$10k-\$16k</sub> · Time<sub>1</sub></i>	1.644 (1.523)
<i>Household Income<sub>\$10k-\$16k</sub> · Time<sub>half</sub></i>	0.890 (1.462)
<i>Household Income<sub>\$10k-\$16k</sub> · Time<sub>all</sub></i>	1.254 (1.967)
<i>Household Income<sub>\$10k-\$16k</sub> · Government</i>	-0.069 (1.099)
<i>Household Income<sub>\$10k-\$16k</sub> · Fee</i>	-0.005 (0.033)
<i>Household Income<sub>\$16k-\$20k</sub> · Risk</i>	0.270 (1.290)
<i>Household Income<sub>\$16k-\$20k</sub> · Time<sub>1</sub></i>	-0.201 (1.284)
<i>Household Income<sub>\$16k-\$20k</sub> · Time<sub>half</sub></i>	-1.530 (1.321)
<i>Household Income<sub>\$16k-\$20k</sub> · Time<sub>all</sub></i>	-3.320** (1.469)
<i>Household Income<sub>\$16k-\$20k</sub> · Government</i>	0.138 (0.915)
<i>Household Income<sub>\$16k-\$20k</sub> · Fee</i>	0.031 (0.026)
<i>Household Income<sub>\$20k-\$30k</sub> · Risk</i>	-0.552 (1.147)
<i>Household Income<sub>\$20k-\$30k</sub> · Time<sub>1</sub></i>	0.474 (1.144)
<i>Household Income<sub>\$20k-\$30k</sub> · Time<sub>half</sub></i>	-0.391 (1.121)

<i>Household Income</i> <sub>\$20k-\$30k</sub> · <i>Time</i> <sub>all</sub>	-2.045 (1.279)
<i>Household Income</i> <sub>\$20k-\$30k</sub> · <i>Government</i>	-0.181 (0.798)
<i>Household Income</i> <sub>\$20k-\$30k</sub> · <i>Fee</i>	0.032 (0.024)
<i>Household Income</i> <sub>\$30k-\$40k</sub> · <i>Risk</i>	1.077 (1.306)
<i>Household Income</i> <sub>\$30k-\$40k</sub> · <i>Time</i> <sub>1</sub>	0.462 (1.181)
<i>Household Income</i> <sub>\$30k-\$40k</sub> · <i>Time</i> <sub>half</sub>	-0.296 (1.220)
<i>Household Income</i> <sub>\$30k-\$40k</sub> · <i>Time</i> <sub>all</sub>	-0.088 (1.325)
<i>Household Income</i> <sub>\$30k-\$40k</sub> · <i>Government</i>	0.699 (0.825)
<i>Household Income</i> <sub>\$30k-\$40k</sub> · <i>Fee</i>	0.015 (0.026)
<i>Household Income</i> <sub>\$40k-\$50k</sub> · <i>Risk</i>	-0.226 (1.122)
<i>Household Income</i> <sub>\$40k-\$50k</sub> · <i>Time</i> <sub>1</sub>	0.646 (1.105)
<i>Household Income</i> <sub>\$40k-\$50k</sub> · <i>Time</i> <sub>half</sub>	0.731 (1.083)
<i>Household Income</i> <sub>\$40k-\$50k</sub> · <i>Time</i> <sub>all</sub>	-1.806 (1.231)
<i>Household Income</i> <sub>\$40k-\$50k</sub> · <i>Government</i>	-0.197 (0.774)
<i>Household Income</i> <sub>\$40k-\$50k</sub> · <i>Fee</i>	0.026 (0.024)
<i>Household Income</i> <sub>\$50k-\$60k</sub> · <i>Risk</i>	1.116 (1.188)
<i>Household Income</i> <sub>\$50k-\$60k</sub> · <i>Time</i> <sub>1</sub>	0.076 (1.129)

<i>Household Income</i> <sub>\$50k-\$60k</sub> · <i>Time</i> <sub>half</sub>	-1.022 (1.129)
<i>Household Income</i> <sub>\$50k-\$60k</sub> · <i>Time</i> <sub>all</sub>	-1.482 (1.252)
<i>Household Income</i> <sub>\$50k-\$60k</sub> · <i>Government</i>	-0.246 (0.784)
<i>Household Income</i> <sub>\$50k-\$60k</sub> · <i>Fee</i>	0.025 (0.024)
<i>Household Income</i> <sub>\$60k-\$70k</sub> · <i>Risk</i>	-0.198 (1.110)
<i>Household Income</i> <sub>\$60k-\$70k</sub> · <i>Time</i> <sub>1</sub>	-0.100 (1.100)
<i>Household Income</i> <sub>\$60k-\$70k</sub> · <i>Time</i> <sub>half</sub>	-0.130 (1.054)
<i>Household Income</i> <sub>\$60k-\$70k</sub> · <i>Time</i> <sub>all</sub>	-1.705 (1.212)
<i>Household Income</i> <sub>\$60k-\$70k</sub> · <i>Government</i>	0.035 (0.759)
<i>Household Income</i> <sub>\$60k-\$70k</sub> · <i>Fee</i>	0.027 (0.023)
<i>Household Income</i> <sub>\$70k-\$80k</sub> · <i>Risk</i>	-0.956 (1.101)
<i>Household Income</i> <sub>\$70k-\$80k</sub> · <i>Time</i> <sub>1</sub>	0.363 (1.088)
<i>Household Income</i> <sub>\$70k-\$80k</sub> · <i>Time</i> <sub>half</sub>	-0.108 (1.048)
<i>Household Income</i> <sub>\$70k-\$80k</sub> · <i>Time</i> <sub>all</sub>	-1.241 (1.207)
<i>Household Income</i> <sub>\$70k-\$80k</sub> · <i>Government</i>	0.410 (0.752)
<i>Household Income</i> <sub>\$70k-\$80k</sub> · <i>Fee</i>	0.034 (0.023)
<i>Household Income</i> <sub>\$80k-\$90k</sub> · <i>Risk</i>	-0.027

	(1.131)
<i>Household Income</i> <sub>\$80k-\$90k</sub> · <i>Time</i> <sub>1</sub>	0.244
	(1.143)
<i>Household Income</i> <sub>\$80k-\$90k</sub> · <i>Time</i> <sub>half</sub>	-0.031
	(1.113)
<i>Household Income</i> <sub>\$80k-\$90k</sub> · <i>Time</i> <sub>all</sub>	-1.499
	(1.267)
<i>Household Income</i> <sub>\$80k-\$90k</sub> · <i>Government</i>	0.311
	(0.790)
<i>Household Income</i> <sub>\$80k-\$90k</sub> · <i>Fee</i>	0.043*
	(0.024)
<i>Household Income</i> <sub>\$90k-\$100k</sub> · <i>Risk</i>	-0.867
	(1.125)
<i>Household Income</i> <sub>\$90k-\$100k</sub> · <i>Time</i> <sub>1</sub>	0.029
	(1.117)
<i>Household Income</i> <sub>\$90k-\$100k</sub> · <i>Time</i> <sub>half</sub>	-0.612
	(1.075)
<i>Household Income</i> <sub>\$90k-\$100k</sub> · <i>Time</i> <sub>all</sub>	-1.703
	(1.218)
<i>Household Income</i> <sub>\$90k-\$100k</sub> · <i>Government</i>	-0.158
	(0.772)
<i>Household Income</i> <sub>\$90k-\$100k</sub> · <i>Fee</i>	0.038
	(0.023)
<i>Household Income</i> <sub>\$100k-\$150k</sub> · <i>Risk</i>	-0.322
	(1.095)
<i>Household Income</i> <sub>\$100k-\$150k</sub> · <i>Time</i> <sub>1</sub>	0.599
	(1.070)
<i>Household Income</i> <sub>\$100k-\$150k</sub> · <i>Time</i> <sub>half</sub>	-0.465
	(1.035)
<i>Household Income</i> <sub>\$100k-\$150k</sub> · <i>Time</i> <sub>all</sub>	-1.533
	(1.193)
<i>Household Income</i> <sub>\$100k-\$150k</sub> · <i>Government</i>	0.142
	(0.741)
<i>Household Income</i> <sub>\$100k-\$150k</sub> · <i>Fee</i>	0.037

	(0.023)
<i>Household Income</i> <sub>&gt;\$150k</sub> · <i>Risk</i>	0.143 (1.108)
<i>Household Income</i> <sub>&gt;\$150k</sub> · <i>Time</i> <sub>1</sub>	0.313 (1.088)
<i>Household Income</i> <sub>&gt;\$150k</sub> · <i>Time</i> <sub>half</sub>	-0.180 (1.057)
<i>Household Income</i> <sub>&gt;\$150k</sub> · <i>Time</i> <sub>all</sub>	-1.563 (1.205)
<i>Household Income</i> <sub>&gt;\$150k</sub> · <i>government</i>	0.628 (0.753)
<i>Household Income</i> <sub>&gt;\$150k</sub> · <i>Fee</i>	0.034 (0.023)
<i>ASC</i> <sub>status quo</sub>	0.367* (0.211)
<i>ASC</i> <sub>option 2</sub>	0.060 (0.084)
Observations	1,652
Log Likelihood	-1,166.835
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

### E. Survey Instrument

We reproduce the text of our survey below. Note that we present eight choice cards, but the specific choice cards were randomized for each respondent, choosing one out of three possible card sets.

[Start of Survey]

#### Informed Consent Form

**TITLE:** Subjective Costs of Taxation

**INVESTIGATORS:** Ariel Jurow Kleiman, Associate Professor of Law, Loyola Law School, Los Angeles 213.736.8149. Jonathan Choi, Associate Professor of Law, University of Minnesota Law School, 929.246.8488.

**PURPOSE:** You are being asked to participate in a research project that investigates how pleasant or unpleasant people find the process of preparing and filing a tax return. A person's experience of tax filing might depend on whether they find tax compliance activities to be confusing, annoying, or tedious. It might also depend on whether they are afraid of making a mistake on their tax return or of getting audited in the future. You will be



asked to complete a survey that will ask you about your experience with tax filing. You will also be asked to imagine choosing among different hypothetical tax services that would reduce your time spent on tax filing and/or the risk of errors on your tax return. You will then be presented with two different hypothetical tax services with different features and prices and will be asked to choose which one you would purchase, if any. You will repeat this choice several times. The full survey will take approximately 10 minutes to complete. You may stop taking the survey at any time.

**RISKS:** It is not likely that there will be any harms or discomforts associated with participating in this survey. However, you may find it uncomfortable or unpleasant to think about the topics covered in this survey—such as earning income or paying taxes. You may leave the survey at any time.

**BENEFITS:** While there may be no direct benefit to you from participating in this study, the indirect benefit of participating will be knowing that you helped researchers better understand how people feel about the process of filing a tax return. This research could help policymakers pass laws that make the tax system easier to comply with.

**INCENTIVES:** You will receive a small incentive for participating in this study. Participation in the project will require no monetary cost to you.

**CONFIDENTIALITY:** **We are not collecting any personal information about you.** When the research study ends, any identifying information will be removed from the data, or it will be destroyed. All of the information you provide will be kept confidential.

**RIGHT TO WITHDRAW:** Your participation in this study is voluntary. You may withdraw your consent to participate at any time without penalty.

**SUMMARY OF RESULTS:** A summary of the results of this research will be supplied to you, at no cost, upon request. **Please contact Ariel Jurow Kleiman at [ariel.jurowkleiman@lls.edu](mailto:ariel.jurowkleiman@lls.edu).** Analysis and publication of the research will likely take 6-12 months.

**VOLUNTARY CONSENT:** I have read the above statements and understand what is being asked of me. I also understand that my participation is voluntary and that I am free to withdraw my consent at any time, for any reason, without penalty. If the study design or use of the information is changed I will be informed and my consent reobtained. On these terms, I certify that I am willing to participate in this research project.

I understand that if I have any further questions, comments or concerns about the study or the informed consent process, I may contact Dr. David Moffet, Chair, Institutional Review Board, Loyola Marymount University, 1 LMU Drive, Los Angeles, CA 90045-2659 or by email at [David.Moffet@lmu.edu](mailto:David.Moffet@lmu.edu).

This research has been reviewed and approved by an IRB within the Human Research Protections Program (HRPP). To share feedback privately with the HRPP about your research experience, call the Research Participants' Advocate Line at 612-625-1650 (Toll Free: 1-888-224-8636) or go to [z.umn.edu/participants](http://z.umn.edu/participants). You are encouraged to contact the HRPP if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.

**Do you consent to participate in this study?**

Yes

No

*[End of Block: Consent Block]*

---

*[Start of Block: Consequentiality Block]*

The results of this survey will be used to make important policy decisions about tax compliance, including the tradeoff between equity and complexity. It is important that you give honest, considered responses to each question so that we can gather accurate information about your preferences. Can you commit to giving **honest, considered responses** to each question on this survey?

Yes, I can commit to giving honest, considered responses to each question in this survey.

No, I cannot commit to giving honest, considered responses to each question in this survey.

[Display This Question: If respondent answered “No” to the prior question.]

Please confirm that you **cannot commit to giving honest, considered answers** to each question in this survey.

I changed my mind, I can commit to giving honest, considered responses to each question in this survey.

I'm sure, I cannot commit to giving honest, considered responses to each question in this survey.

*[End of Block: Consequentiality Block]*

---

*[Start of Block: Respondent Information]*

Wage-1 Do you currently receive income from working?

Yes

No

[Skip To: Tax-1 If respondent answers “No.”]

Wage-2 How often do you get paid?

Once a week

Once every 2 weeks

Twice a month

Once a month

Once a year

Other (please specify) \_\_\_\_\_

Wage-3 What is your **take-home pay** per pay period (i.e. each time you get paid), on average?

*(Please enter number only, in US dollars, without commas)*

*(Include retirement contributions, but do not include income that you receive for something other than work, such as disability insurance, alimony, pension income, etc. Exclude any pay received by other members of your household.)*

\_\_\_\_\_

Wage-4 Approximately **how many hours do you work per week**, on average?

*(Please enter number only, without commas)*

\_\_\_\_\_

Tax-1 In any of the past 3 years, **did you use tax preparation software** (like TurboTax or H&R Block tax software) to complete your tax return?

- Yes
- No
- I don't know

Tax-2 In any of the past 3 years, **did you hire a professional tax preparer** to help you prepare and file your tax return?

- Yes
- No
- I don't know

Tax-3 In any of the past 3 years, did you **include any of following items on your tax return?** (*Please select all that apply.*)

- Wage income
- Small business / sole proprietorship income
- Earned Income Tax Credit
- Child Tax Credit
- None of the above

Tax-4 During the past 3 years, **did you normally itemize your deductions or did you take the standard deduction?**

(If you took the standard deduction, you subtracted a fixed amount from your income. If you itemized deductions, you subtracted various eligible expenses from your income, like mortgage interest and charitable contributions.)

- I normally itemized my deductions.
- I normally took the standard deduction.
- I don't know.

Tax-5 During the past 3 years, when you filed your income tax returns **did you normally owe taxes or receive a refund?**

- I usually received a tax refund.
- I usually owed taxes.
- I sometimes received a refund and sometimes owed taxes.
- I don't know.

Tax-6 During the past 3 years, did you normally **file your taxes individually or jointly** with a partner?

- I normally file taxes individually.
- I normally file taxes jointly.
- I don't know.

TaxComp-1 The next set of questions are related to the work you must do to prepare and file your tax return(s), which we call “**tax compliance activities.**” This includes **keeping financial records, learning about tax laws, tax planning, filing tax forms, working with a tax preparer, and anything else you must do to prepare and file your tax return.**

How pleasant or unpleasant do you find tax compliance to be?

- Extremely unpleasant
- Somewhat unpleasant
- Neither pleasant nor unpleasant
- Somewhat pleasant
- Extremely pleasant

[Display This Question: If respondent selected “I normally file taxes jointly” in response to the question “Tax-6 During the past 3 years, did you normally file your taxes individually or jointly with a partner?”]

TaxComp-2 In your household, who typically **spends more time** on tax compliance activities?

- I spend more time on tax compliance activities.
- My partner spends more time on tax compliance activities.
- We spend about the same amount of time on tax compliance activities.

TaxComp-3 Based on your experience during the past 3 years, approximately **how many hours** do you expect to **personally spend on tax compliance activities** for the 2022 tax year?  
(Please enter number only, without commas)

\_\_\_\_\_

TaxComp-4 Based on your experience during the past 3 years, approximately **how much money** do you expect to spend on tax compliance activities for the 2022 tax year?  
(Please enter number only, in US dollars, without commas)

\_\_\_\_\_

[End of Block: Respondent Information]

---

[Start of Block: Pre-DCE Info and Comprehension]

The next section will present services that would make tax compliance easier. Please think about each service presented as if you were deciding between them in the real world, then tell us whether you would prefer service 1, service 2, or neither service.

Each tax service has 4 possible parts for you to consider:

*Time Savings:* The service might reduce the amount of **time** you currently spend on your taxes. It might eliminate **all time** spent on taxes, cut your time in **half**, cut **1 hour** of time spent on taxes, or **not eliminate any time** spent on taxes.

*Risk Elimination:* The service might (or might not) eliminate the **risk** that you might make an error in your tax filings, which would also eliminate the risk of tax audits.

*Provider:* The service might be provided by a **private company** or by the **government**.

*Fee:* The service might cost **\$5, \$15, \$25, \$40, \$50, or \$100, in addition to** the \$[Response to TaxComp-4] you already spend on tax assistance.

The services will **not** affect the **amount** of taxes that you pay.

Comprehension-1 We want to ensure that you understood the above statement. Imagine that you select a tax service that eliminates **all of the time** you spend on tax compliance activities. In the year that you use this service, how much time will you spend preparing and filing your tax return (including gathering W-2s/1099s, hiring a tax preparer, checking your return, etc.)?

- The same time I currently spend on taxes
- A bit less time than I currently spend on taxes
- A lot less time than I currently spend on taxes
- I would not spend any time or effort working on my taxes

[Display This Question: If respondent failed to select “I would not spend any time or effort working on my taxes”.]



Comprehension-2 **Your response to the previous question was incorrect. Please try again.**

Imagine that you select a service that eliminates all of the time you spend on tax compliance activities. In the year that you use this service, how much time will you spend preparing and filing your tax return (including gathering W-2s/1099s, hiring a tax preparer, checking your return, etc.)?

- The same time I currently spend on taxes
- A bit less time than I currently spend on taxes
- A lot less time than I currently spend on taxes
- I would not spend any time or effort working on my taxes

*[End of Block: Pre-DCE Info and Comprehension]*

*[Start of Block: DCE Choice Cards]*

[The following 7 choice cards show 1 of 3 possible sets of choice cards, written for a respondent who spends 10 hours per year on tax compliance activities.]

**Service Choice Question 1/8**

Which of the following tax services would you prefer?

	Service 1	Service 2	Neither Service
<b>Time Savings</b>	<b>Eliminate All</b> (spend no time or effort on taxes)	<b>Reduce by 1 Hour</b> (spend 9 hours instead of 10 hours)	<b>No Change</b> (continue to spend 10 hours, no change in accuracy or audit risk)
<b>Risk Elimination</b>	<b>Eliminate All</b> (taxes are 100% accurate, no risk of future audit)	<b>Eliminate All</b> (taxes are 100% accurate, no risk of future audit)	
<b>Provider</b>	<b>Government</b>	<b>Private Company</b>	
<b>Fee</b>	<b>\$100</b>	<b>\$50</b>	

Your choice:

Service 1                       Service 2                       Neither

**Service Choice Question 2/8**

Which of the following tax services would you prefer?

	Service 1	Service 2	Neither Service
<b>Time Savings</b>	<b>Eliminate All</b> (spend no time or effort on taxes)	<b>No Reduction</b> (no change in time or effort spent)	<b>No Change</b> (continue to spend 10 hours, no change in accuracy or audit risk)
<b>Risk Elimination</b>	<b>No Reduction</b> (no change in accuracy or audit risk)	<b>Eliminate All</b> (taxes are 100% accurate, no risk of future audit)	
<b>Provider</b>	<b>Private Company</b>	<b>Government</b>	
<b>Fee</b>	<b>\$50</b>	<b>\$100</b>	

Your choice:                      Service 1                      Service 2                      Neither

**Service Choice Question 3/8**

Which of the following tax services would you prefer?

	Service 1	Service 2	Neither Service
<b>Time Savings</b>	<b>Reduce by 1 Hour</b> (spend 9 hours instead of 10 hours)	<b>Reduce by Half</b> (spend 5 hours instead of 10 hours)	<b>No Change</b> (continue to spend 10 hours, no change in accuracy or audit risk)
<b>Risk Elimination</b>	<b>Eliminate All</b> (taxes are 100% accurate, no risk of future audit)	<b>No Reduction</b> (no change in accuracy or audit risk)	
<b>Provider</b>	<b>Private Company</b>	<b>Government</b>	
<b>Fee</b>	<b>\$25</b>	<b>\$40</b>	

Your choice:                      Service 1                      Service 2                      Neither

**Service Choice Question 4/8**

Which of the following tax services would you prefer?

	Service 1	Service 2	Neither Service
<b>Time Savings</b>	<b>Reduce by Half</b> (spend 5 hours instead of 10 hours)	<b>Eliminate All</b> (spend no time or effort on taxes)	<b>No Change</b> (continue to spend 10 hours, no change in accuracy or audit risk)
<b>Risk Elimination</b>	<b>No Reduction</b> (no change in accuracy or audit risk)	<b>Eliminate All</b> (taxes are 100% accurate, no risk of future audit)	
<b>Provider</b>	<b>Government</b>	<b>Private Company</b>	
<b>Fee</b>	<b>\$100</b>	<b>\$5</b>	

Your choice:                      Service 1                      Service 2                      Neither

**Service Choice Question 5/8**

Which of the following tax services would you prefer?

	Service 1	Service 2	Neither Service
<b>Time Savings</b>	<b>Reduce by 1 Hour</b> (spend 9 hours instead of 10 hours)	<b>Reduce by Half</b> (spend 5 hours instead of 10 hours)	<b>No Change</b> (continue to spend 10 hours, no change in accuracy or audit risk)
<b>Risk Elimination</b>	<b>No Reduction</b> (no change in accuracy or audit risk)	<b>Eliminate All</b> (taxes are 100% accurate, no risk of future audit)	
<b>Provider</b>	<b>Private Company</b>	<b>Government</b>	
<b>Fee</b>	<b>\$40</b>	<b>\$50</b>	

Your choice:                      Service 1                      Service 2                      Neither

**Service Choice Question 6/8**

Which of the following tax services would you prefer?

	Service 1	Service 2	Neither Service
<b>Time Savings</b>	<b>Eliminate All</b> (spend no time or effort on taxes)	<b>No Reduction</b> (no change in time or effort spent)	<b>No Change</b> (continue to spend 10 hours, no change in accuracy or audit risk)
<b>Risk Elimination</b>	<b>No Reduction</b> (no change in accuracy or audit risk)	<b>Eliminate All</b> (taxes are 100% accurate, no risk of future audit)	
<b>Provider</b>	<b>Private Company</b>	<b>Government</b>	
<b>Fee</b>	<b>\$5</b>	<b>\$15</b>	

Your choice:                      Service 1                      Service 2                      Neither

**Service Choice Question 7/8**

Which of the following tax services would you prefer?

	Service 1	Service 2	Neither Service
<b>Time Savings</b>	<b>Reduce by Half</b> (spend 5 hours instead of 10 hours)	<b>Eliminate All</b> (spend no time or effort on taxes)	<b>No Change</b> (continue to spend 10 hours, no change in accuracy or audit risk)
<b>Risk Elimination</b>	<b>Eliminate All</b> (taxes are 100% accurate, no risk of future audit)	<b>No Reduction</b> (no change in accuracy or audit risk)	
<b>Provider</b>	<b>Government</b>	<b>Private Company</b>	
<b>Fee</b>	<b>\$15</b>	<b>\$25</b>	

Your choice:                      Service 1                      Service 2                      Neither

[End of Block: DCE Choice Cards]

[Start of Block: Attention Check - DCE Card]

**Service Choice Question 8/8**

Which of the following tax services would you prefer?

	Service 1	Service 2	Neither Service
<b>Time Savings</b>	<b>Reduce by 1 Hour</b> (spend 9 hours instead of 10 hours)	<b>Reduce by Half</b> (spend 5 hours instead of 10 hours)	<b>No Change</b> (continue to spend 10 hours, no change in accuracy or audit risk)
<b>Risk Elimination</b>	<b>Choice Not Available</b> (please select the "Neither Service" option)	<b>Choice Not Available</b> (please select the "Neither Service" option)	
<b>Provider</b>	<b>Private Company</b>	<b>Government</b>	
<b>Fee</b>	<b>\$15</b>	<b>\$25</b>	

Your choice:

Service 1
Service 2
Neither

[End of Block: Attention Check - DCE Card]

*[Start of Block: Qualitative Questions (Yes/No)]*

[Each respondent received 1 of the following 2 questions.]

Qual-T In general, do you think it's **worthwhile to pay money to reduce time** spent on taxes?

Yes

No

Qual-R In general, do you think it's **worthwhile to pay money to eliminate risk** of error and/or audit associated with taxes?

Yes

No

*[End of Block: Qualitative Questions (Yes/No)]*

---

*[Start of Block: Qualitative Questions (full text)]*

[Display This Question: If they answered “Yes” to “Qual-T In general, do you think it's worthwhile to pay money to reduce time spent on taxes?”]

Qual-TY Please give one reason why you think it is **worthwhile to pay money to reduce time spent on taxes**.

---

[Display This Question: If they answered “No” to “Qual-T In general, do you think it's worthwhile to pay money to reduce time spent on taxes?”]

Qual-TN Please give one reason why you **do not** think it is worthwhile to pay money to reduce time spent on taxes.

---

[Display This Question: If they answered “Yes” to “Qual-R In general, do you think it's worthwhile to pay money to eliminate risk of error and/or audit associated with taxes?”]

Qual-RY Please give one reason why you think it is **worthwhile to pay money to eliminate risk of error and/or audit** associated with taxes.

---

[Display This Question: If they answered “No” to “Qual-R In general, do you think it's worthwhile to pay money to eliminate risk of error and/or audit associated with taxes?”]

Qual-RN Please give one reason why you **do not** think it is worthwhile to pay money to eliminate risk of error and/or audit associated with taxes.

---

[End of Survey]