Exploring monetary incentives and respondent burden in the Consumer Expenditure Interview Survey

Yezzi Angi Lee
Clayton Knappenberger
Special thanks to Incentive Field Test group:
Ian Elkin, Brett McBride and Barry Steinberg

Division of Consumer Expenditure Survey

AAPOR

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Outline

1. How to measure burden?
2. What is the role of incentives?
3. Research Question
4. Data
5. Methodology
6. Results
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How to measure burden?

- In recent CE studies of burden, (1) *respondents' views about survey length* and (2) *their interest in survey topic* correlates with their burden experience

- Fricker *et al. (*2015) emphasize taking increased efforts to promote respondents' interest in the survey

What is the role of incentives?

- Incentives are an effective method of increasing respondent's motivation and cooperation (Eyerman *et al., 2002*)
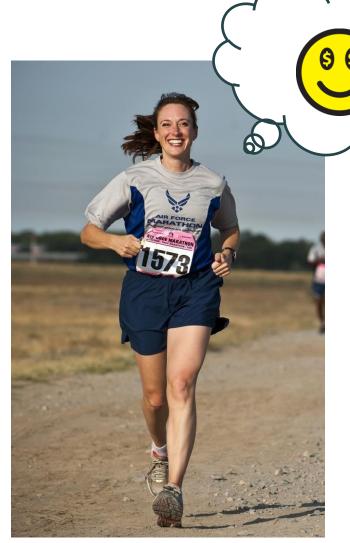
- Hypothesized relationship:

Research Question

Does providing incentives decrease the amount of burden perceived by respondents?

Data

- CE interview survey
  - ▶ from July 2016 to Sept 2017
- Incentive Field Test group (IFT)

Treatment and Control Groups			
	Token	Survey	Record	Total
All	$5	$40	$20	Up to $65
No Token	No	$40	$20	Up to $60
No Record	$5	$40	No	Up to $45
Control	No	No	No	$0

- Burden questions were introduced in April 2017 and are asked in 4th wave

- Restricted to sample units who were eligible for Incentive Field Test (IFT) and completed burden questions
  - ▶ A total of 2,741 cases used

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Data

Year	Month	Interview
2016	July	Interview 1
	August	
	September	
	October	Interview 2
	November	
2017	December	
	January	Interview 3
	February	
	March	
	April	Interview 4
	May	
	June	

Interview 1 → **Incentives Test**

End of Incentive Field Test → (December)

Burden Questions Introduced → (April)

Interview 4 → **Burden Question**

Data

■ Incentives vs No Incentives

Incentive		N=2,741
No Incentive	Control group	850
Incentives	Up to $65	599
	Up to $60	622
	Up to $45	670

■ Burdened vs Not Burdened

"How burdensome was this survey to you?"		N=2,741
Not Burdened	1. Not at all	932
Burdened	2. A little	829
	3. Somewhat	661
	4. Very	205
	5. Extremely	114

Data

Demographic	Not Burdened	Burdened
N	932	1,809
Median Survey Length (minutes)*	54.88	60.45
Median Income*	$34,354	$48,800
Median Quarterly Expenditures*	$9,039	$11,643
Respondent's Education (%)*		
Less than High School	14.27	8.46
High School	26.29	20.12
Some College	22.00	20.40
Undergraduate	27.47	36.48
Postgraduate	9.98	14.54

* Statistically significant at $p < 0.05$

- Other statistically significant differences
  - Housing Tenure (owner/renter)
  - Household size
- Demographics that were not statistically significant
  - Respondent's race
  - Respondent's sex
  - Respondent's age

Methodology

■ First Method - Average Treatment Effect (ATE)

▶ $ATE = E[Y_i(1) - Y_i(0)]$

Treatment Group	Burdened (%)	Not Burdened (%)	N
Incentives	63.6	36.4	1,891
No Incentives	71.3	27.7	850
Difference*	-7.7		

* Statistically significant with p < 0.05

■ Second Method - Conditional Average Treatment (CATE)

▶ $CATE = E[Y_i(1) - Y_i(0) \,|\, X_i = x]$

Results

- Treatment Effect Estimates

Treatment	% difference	SE
ATE	7.7%	0.019
CATE	7.1%	0.019

  ▶ CATE was smaller but qualitatively similar to ATE

  ▶ Both were statistically significant at $p < 0.05$

- Respondents were less likely to report being burden if incentives were offered

Limitations

- CE's burden questions may not accurately measure respondent burden

- Time gap between the event of interest (incentives, 1st wave) and the burden question – 9 month time gap

- Data consists of respondents who completed their 4th wave

Contact Information

Yezzi Angi Lee

Economist
Division of Consumer Expenditure Survey
202-691-5154
Lee.yezzi@bls.gov