

# Incentives in the Consumer Expenditure Survey: One Payment, Lasting Effects

---

**Karen Goldenberg**  
**Lucilla Tan**

Division of Consumer Expenditure Surveys. BLS

**David McGrath**

Defense Manpower Data Center (formerly BLS)



The opinions expressed here are those of the authors and do not represent policy for the Bureau of Labor Statistics.

[www.bls.gov](http://www.bls.gov)

# Overview

---

- Consumer Expenditures Quarterly Interview Survey (CEQ)
- Motivation for incentives experiment
- Experimental design
- Results
- Summary

# Background: CEQ

---

- One of two BLS surveys that together provide a detailed picture of spending patterns and income of American consumers
- Difficult survey for respondents and for interviewers
  - ▶ Sample units interviewed 5 times over 13 months; each interview is a "wave"
  - ▶ Respondent asked to report purchases and expenditures for all household members
  - ▶ Primarily personal interviews, increasingly conducted over the telephone
  - ▶ Average interview takes about an hour
- Data collected for BLS by the Census Bureau

# Motivation for Incentives Experiment

---

- Falling response rates: early 1990s, mid-80 percent range, 2004 mid-70s (AAPOR RR1)
- Incentives effective in raising response rates
- Singer et al. (1999) meta-analysis of interviewer-mediated surveys
  - ▶ Incentives still effective with interviewer involvement
  - ▶ The higher the initial response rate, the smaller the difference between no-incentive and incentive
  - ▶ Effects relatively modest after controlling for other variables
- SIPP's experiments with incentives in mid-1990s
- Many similarities between CEQ and SIPP

# Primary Research Questions

---

- Can an incentive stem the decline in CEQ response rates?
- Will that effect hold across the five waves of the panel survey?
- Will the incentive affect data quality?
- Will the incentive affect the overall sample composition?
- Will the incentive affect field costs?

# Experimental design

- Conduct experiment within production data collection
- Use prepaid monetary incentive: debit card
- Distribute the incentive only in wave 1
- Four treatment groups

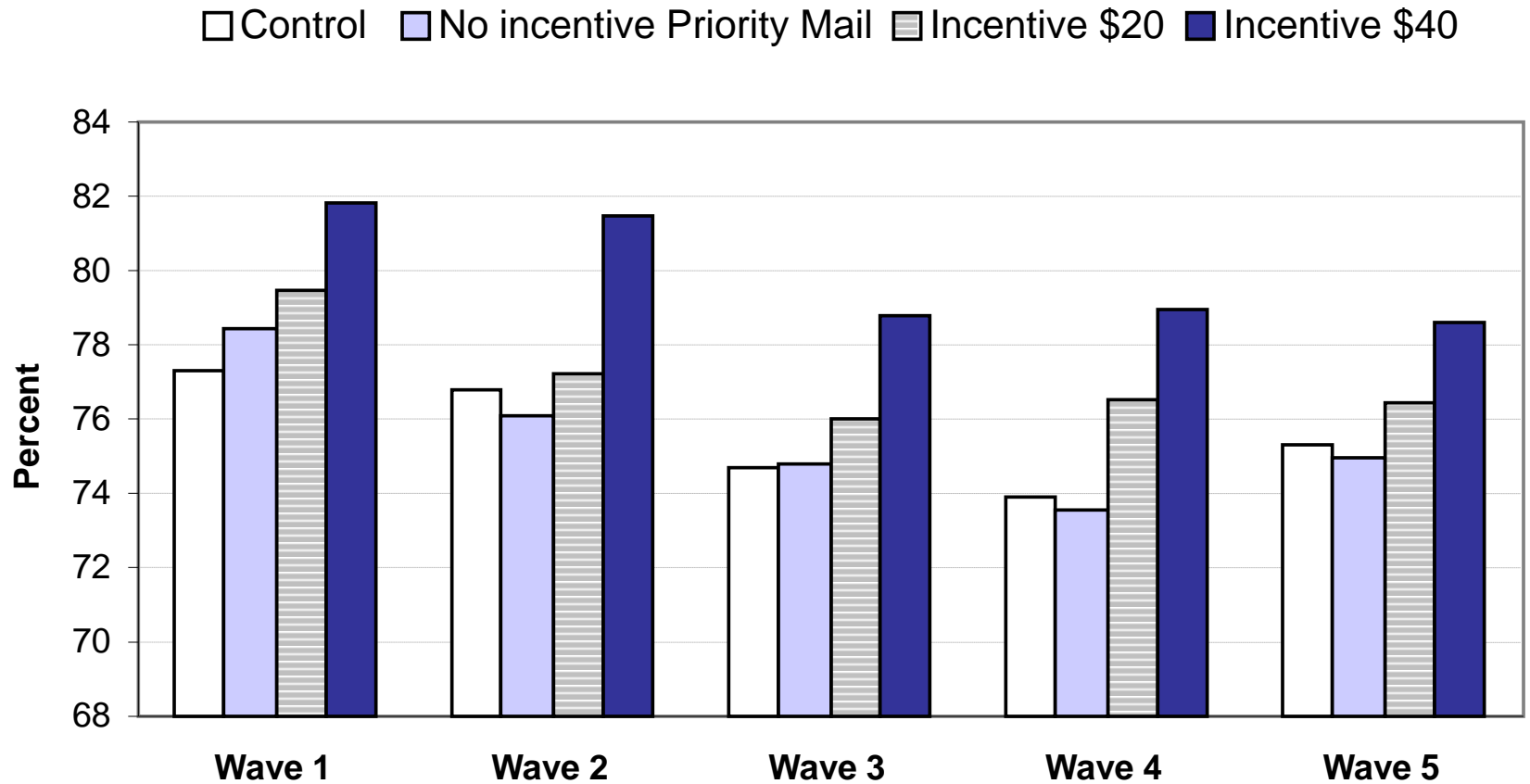
Mail method	Experimental condition		
Priority	<b>No Incentive Priority Mail</b>	<b>\$20 debit card</b>	<b>\$40 debit card</b>
First Class	<b>No incentive Control</b>	--	--

- Incentives distributed November 2005--July 2006
- Details in McGrath (2006)

# Sample Sizes by Treatment Groups

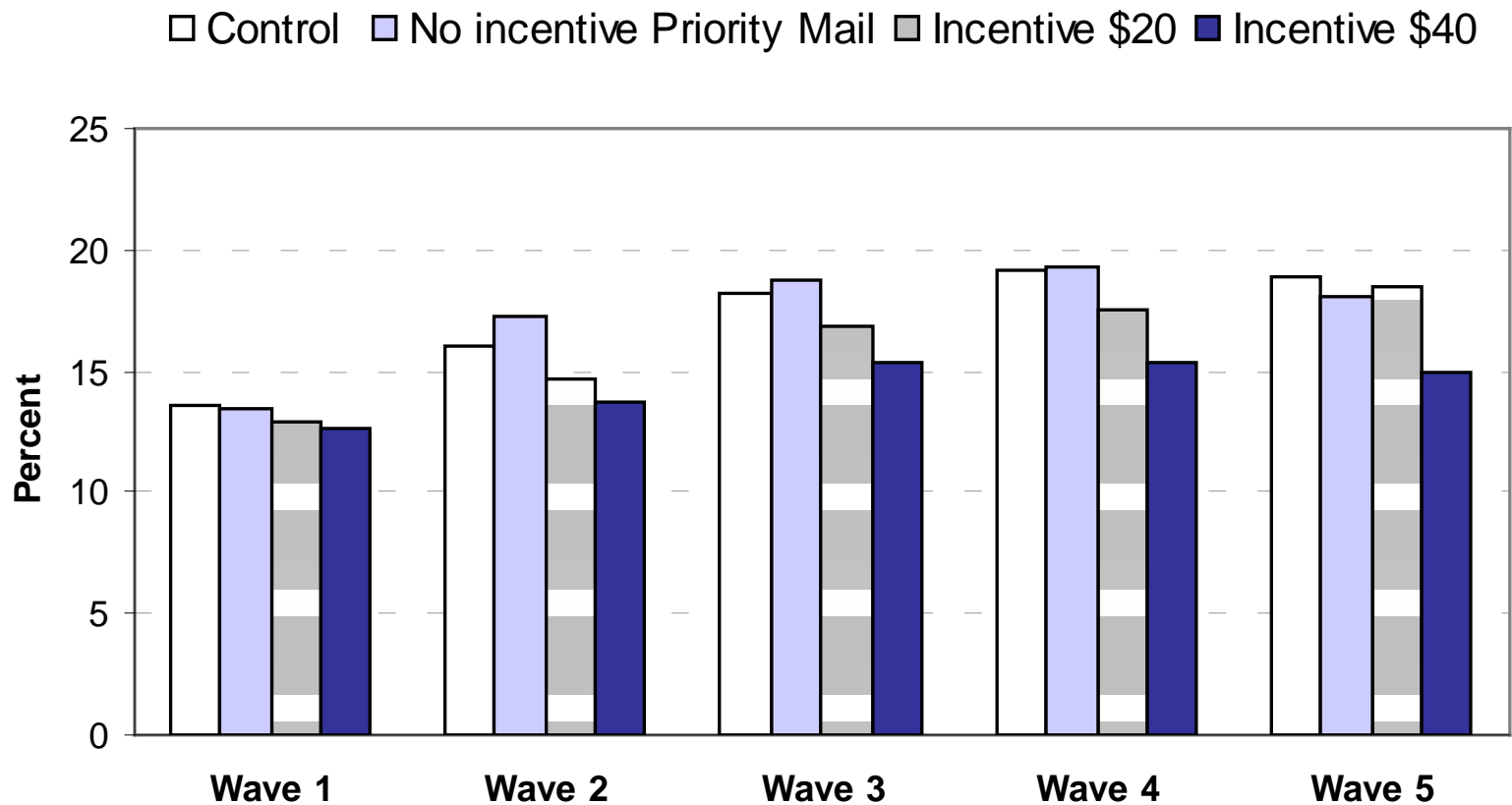
Wave	Control Regular Mail	No Incentive Priority Mail	Incentive \$20	Incentive \$40	Total
<b>1</b>	1,922	1,759	1,838	1,805	7,324
<b>2</b>	1,726	1,599	1,667	1,617	6,609
<b>3</b>	1,610	1,492	1,564	1,521	6,187
<b>4</b>	1,561	1,436	1,512	1,454	5,963
<b>5</b>	1,517	1,395	1,466	1,396	5,774
<b>Total</b>	8,336	7,681	8,047	7,793	31,857

# Results: Response Rates

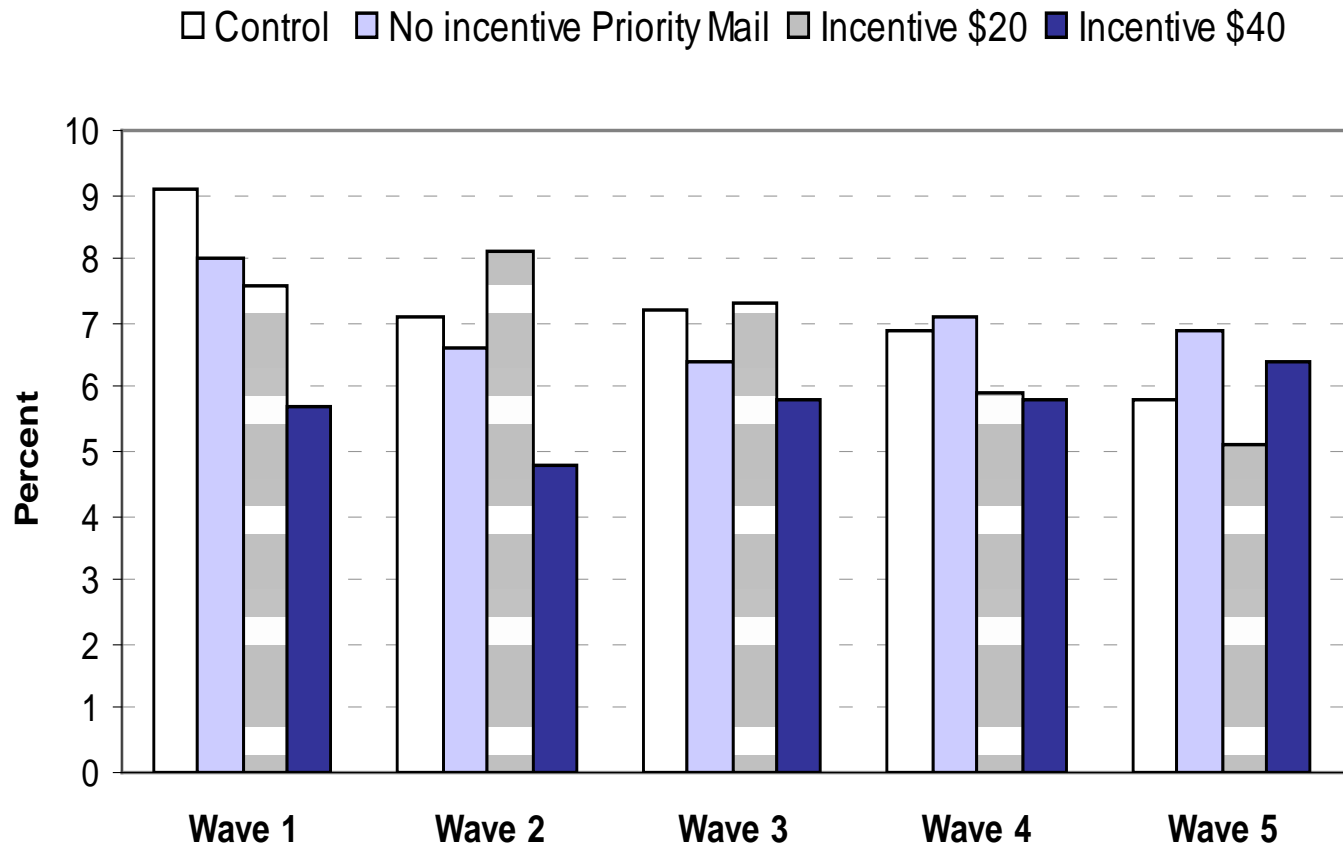




# Results: Refusal Rates



# Results: Noncontact Rates

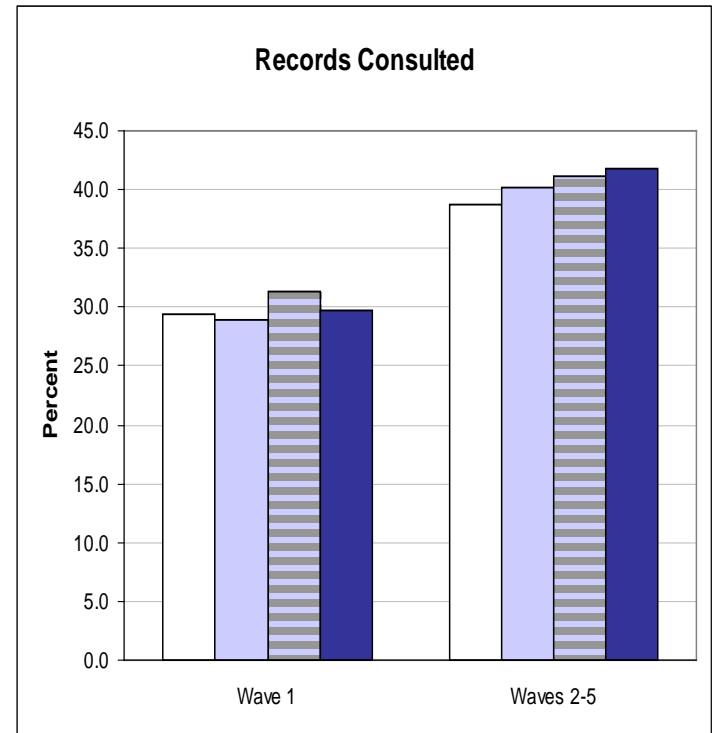
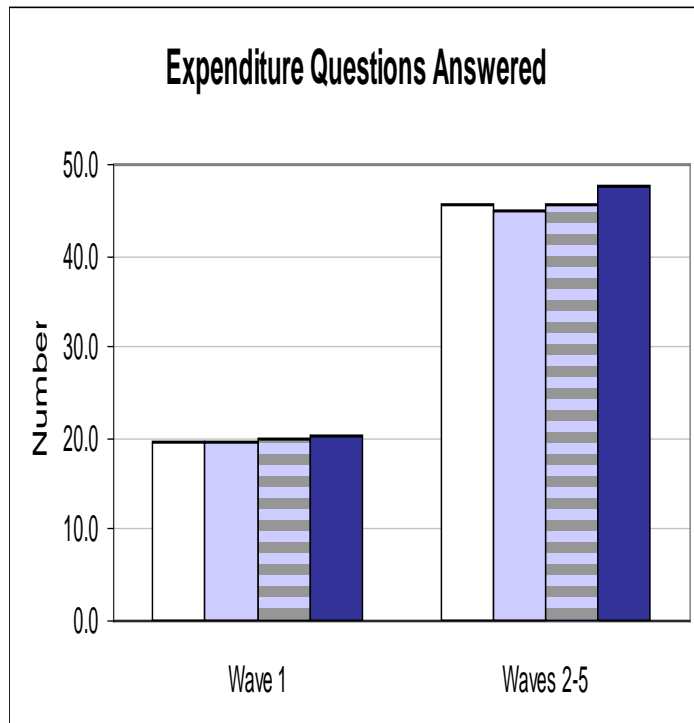


# Data Quality

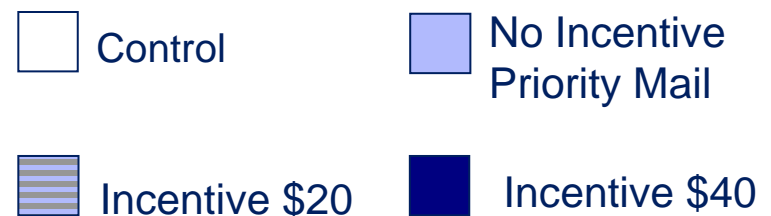
---

- Direct measure: Reported expenditures
  - ▶ “More is better” in CEQ
  - ▶ Increasing expenditures across the experimental groups, most not statistically significant
- Indirect measures:
  - ▶ Number of expenditure questions answered (more)
  - ▶ Whether respondent consulted records (more)
  - ▶ Number DK/Refused responses (fewer)
  - ▶ No imputation/allocation required (more)

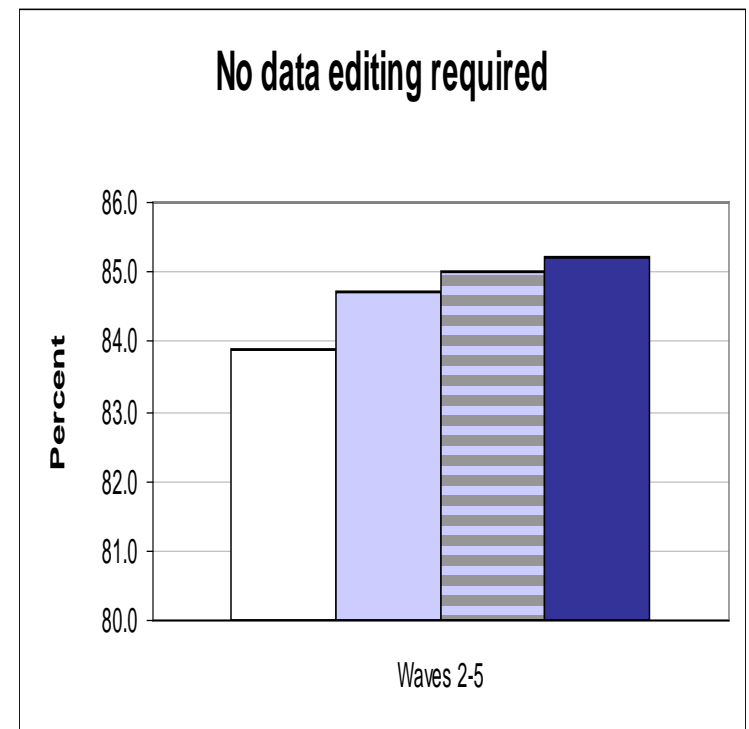
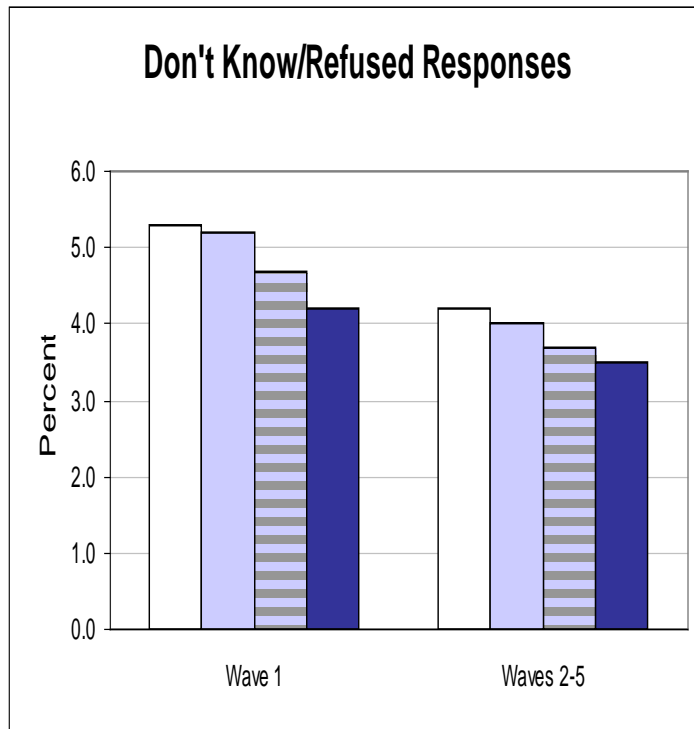
# Indirect Data Quality Measures



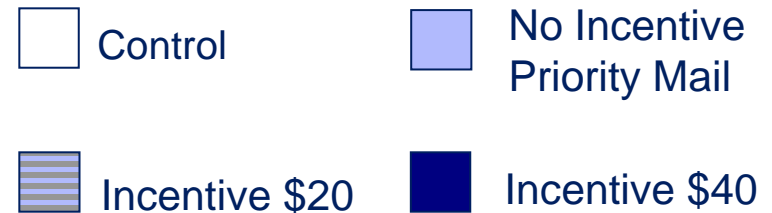
- Waves 2-5: Statistically significant at  $p < .05$  \$40 incentive versus control



# Indirect Data Quality Measures (cont.)



- Statistically significant at  $p < .05$  \$40 incentive versus control

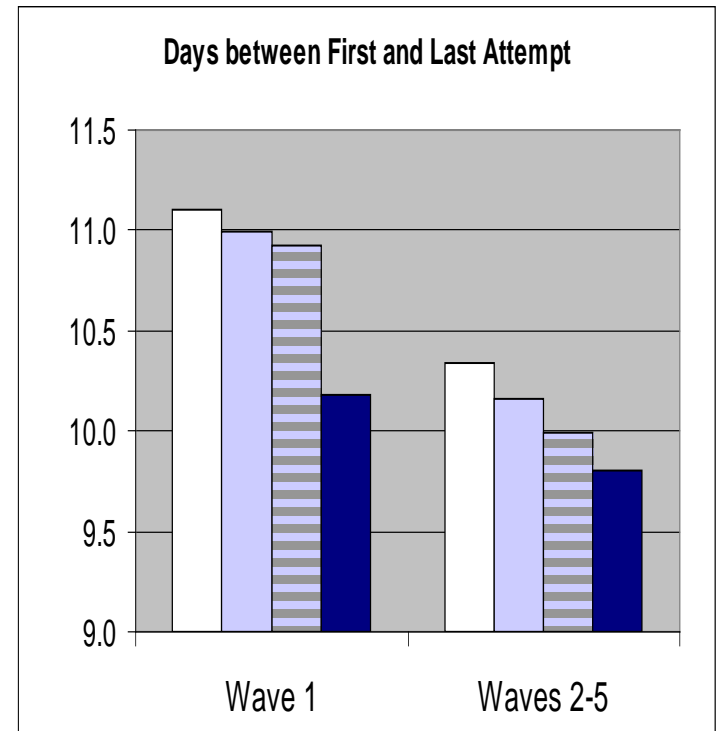
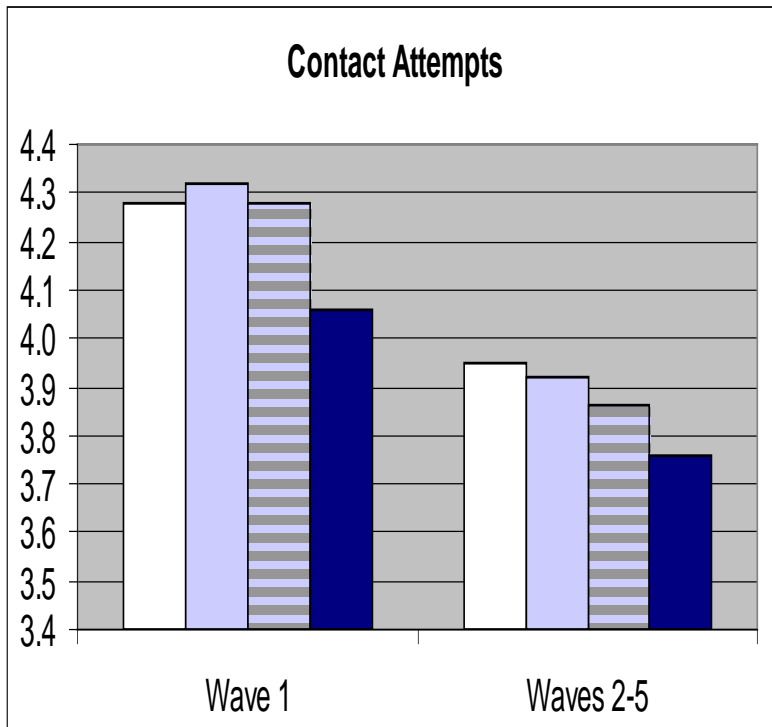


# Results: Sample Composition

---

- No statistically significant differences at wave 1 or in later waves
- Demographic characteristics
  - ▶ Trend toward more black respondents in incentive groups, as compared to control group, in wave 1 and in later waves
- Household characteristics
  - ▶ Trend: \$40 incentive group had more 1-person households than control
  - ▶ Trend: \$20 and \$40 incentive groups had more respondents from urban than rural areas
- Household income
  - ▶ Median reported income: control group and \$40 incentive group are roughly equal
  - ▶ Mean income increases from control to \$40 incentive condition
  - ▶ Distribution of income quintiles is fairly similar across treatment groups

# Effect on Field Collection



- Statistically significant at  $p < .05$  \$40 incentive versus control

□ Control

□ No Incentive  
Priority Mail

▨ Incentive \$20

■ Incentive \$40

# Summary

---

- Incentives experiment was successful in increasing response rates
- Effects of the \$40 incentive lasted through 5 interviewing waves
  - ▶ Some positive effects on data quality
  - ▶ No effect on sample composition
- \$20 incentive not significantly different from no incentive
- Field Costs: \$40 incentive resulted in fewer contacts, shorter field period



# Contact Information

---

**Karen Goldenberg**

Division of Consumer Expenditure  
Surveys

[www.bls.gov/cex](http://www.bls.gov/cex)

202-691-6358

goldenberg.karen@bls.gov

