

## Issue # 7: Numerator Data - Trends and Event Studies 2023-2024

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This Write-up contains tables and plots for trend and event study analyses of the Numerator data. The original user-trip-item level data is transformed to user- month level data, with variables summarized at the monthly level for each user. SNAP and Non-SNAP treatment is determined by SNAP participation rate of each user over the periods of the data ( $>0.5$  on SNAP;  $\leq 0.5$  Non-SNAP)

### 1. Figures: Monthly average of ...

- level/log total spending winsorized
- level/log Food spending winsorized
- level/log Food on EBT winsorized
- level/log Soda spending winsorized
- level/log Soda on EBT winsorized
- prop. food spending
- prop. food on EBT
- prop. soda
- prop. soda on EBT
- level/log soda spending by SNAP/Non-SNAP
- level/log soda spending by state  $\times$  SNAP

### 2. Figures: Event Studies

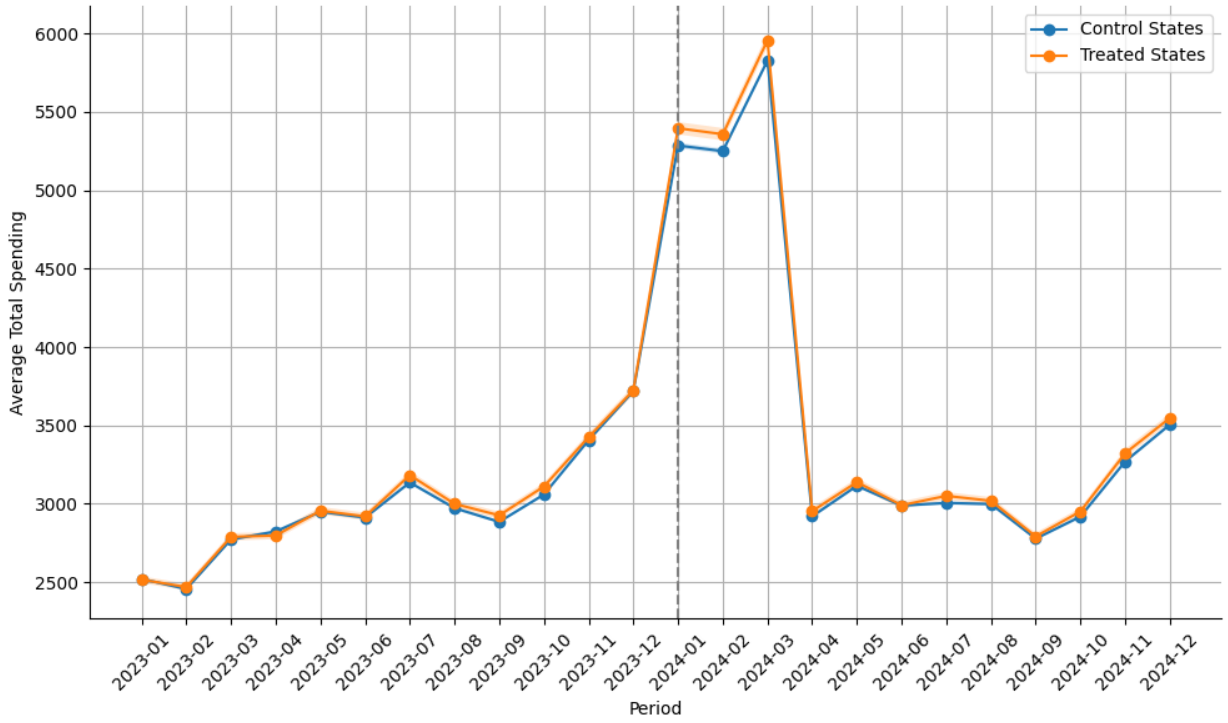
- level/log soda spending winsorized
- level/log soda spending by SNAP  $\times$  post (conditional on treated states)
- level/log soda spending DDD

### 3. Tables

- TWFE/DDD Model Estimates

Figure 1: Monthly Average of Total Spending

(a) level



(b) log

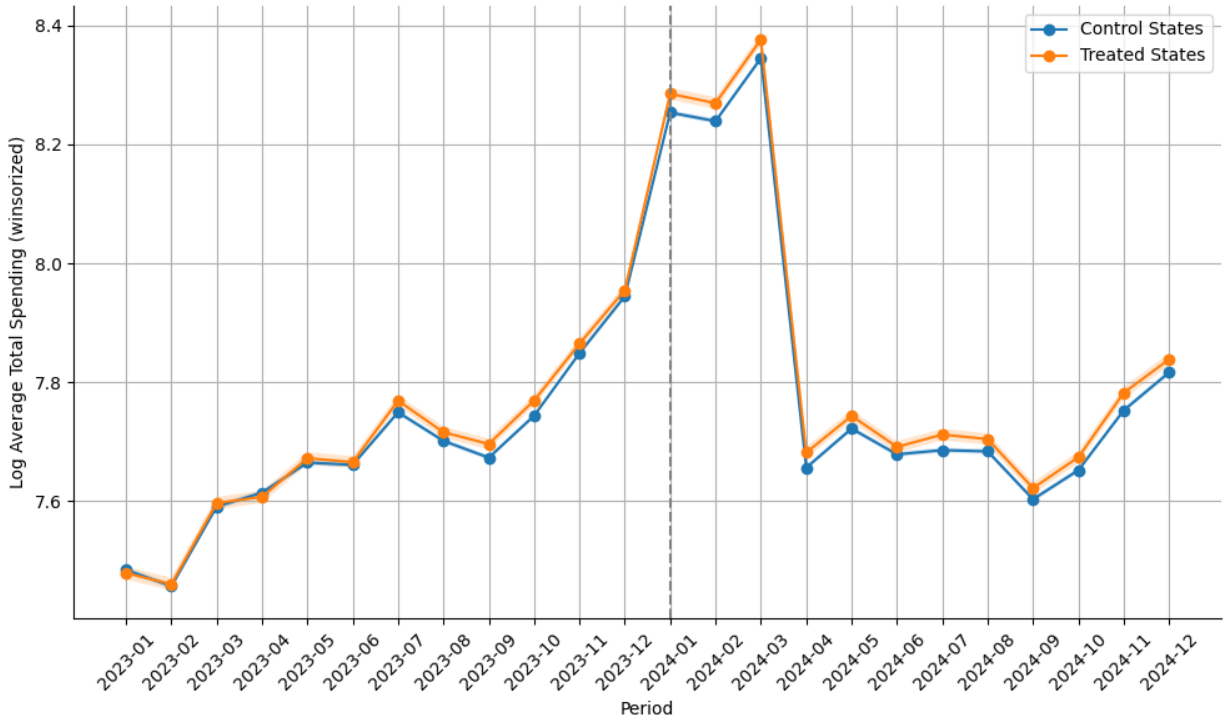
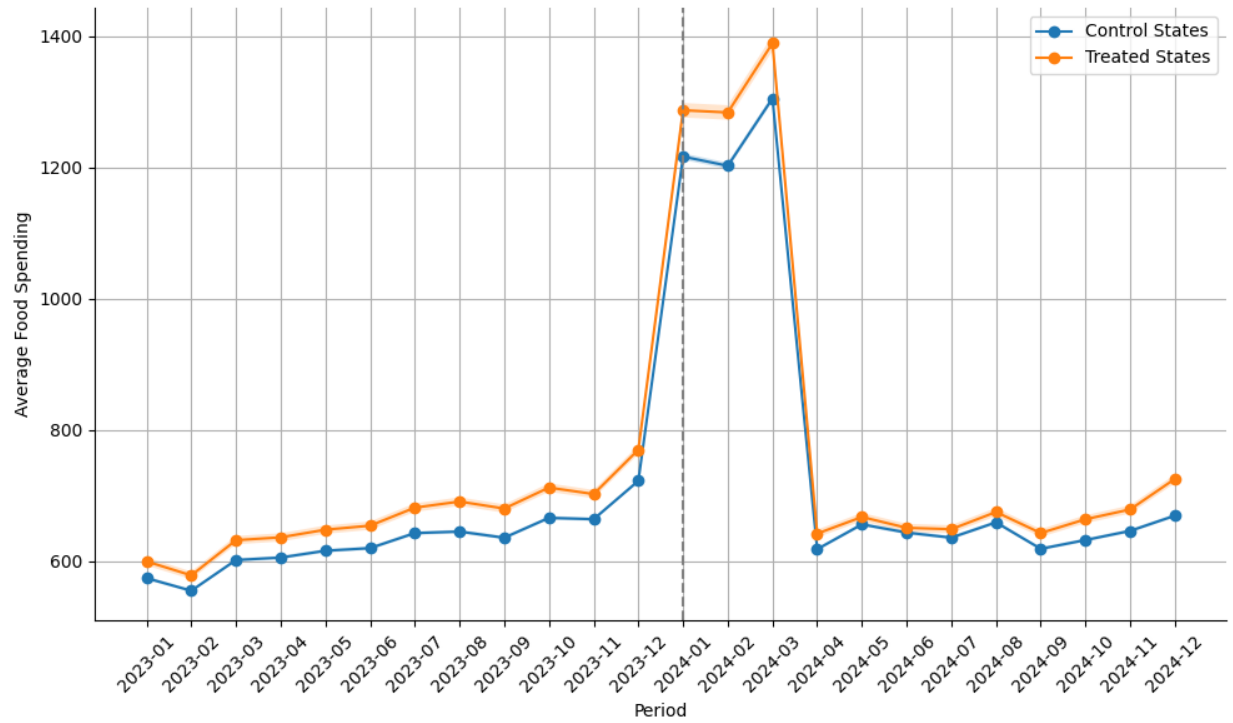


Figure 2: Monthly Average of Food Spending

(a) level



(b) log

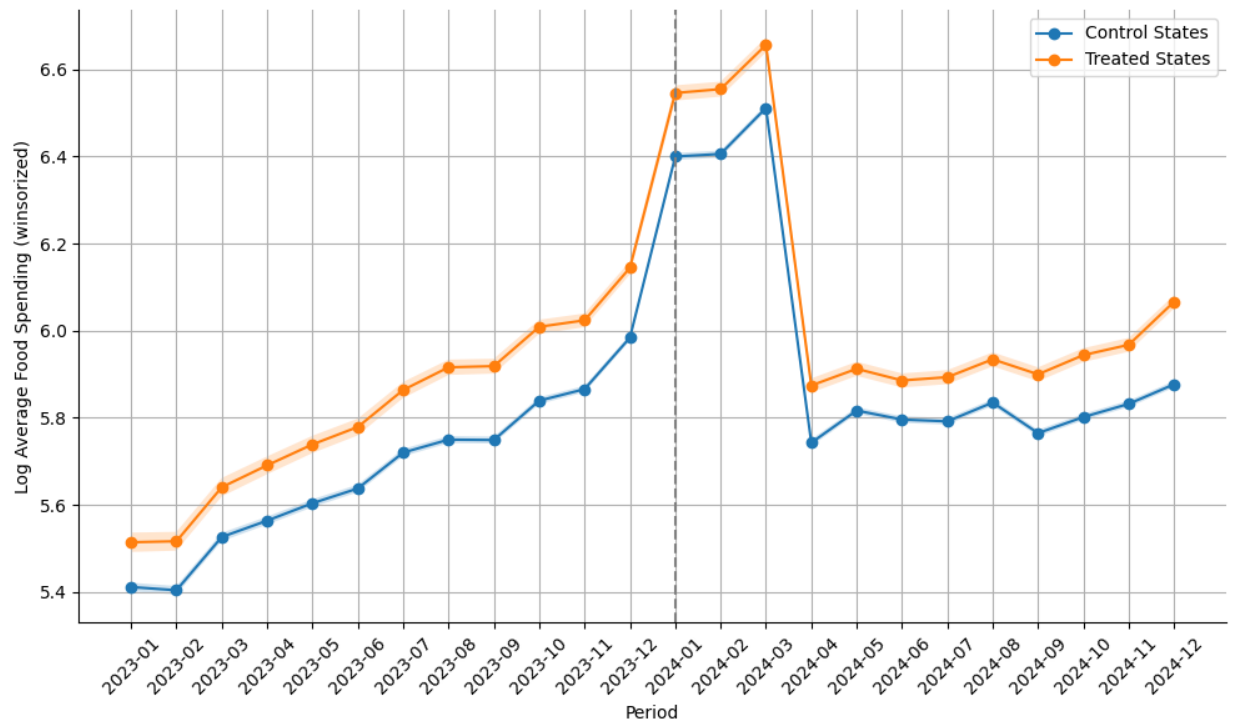
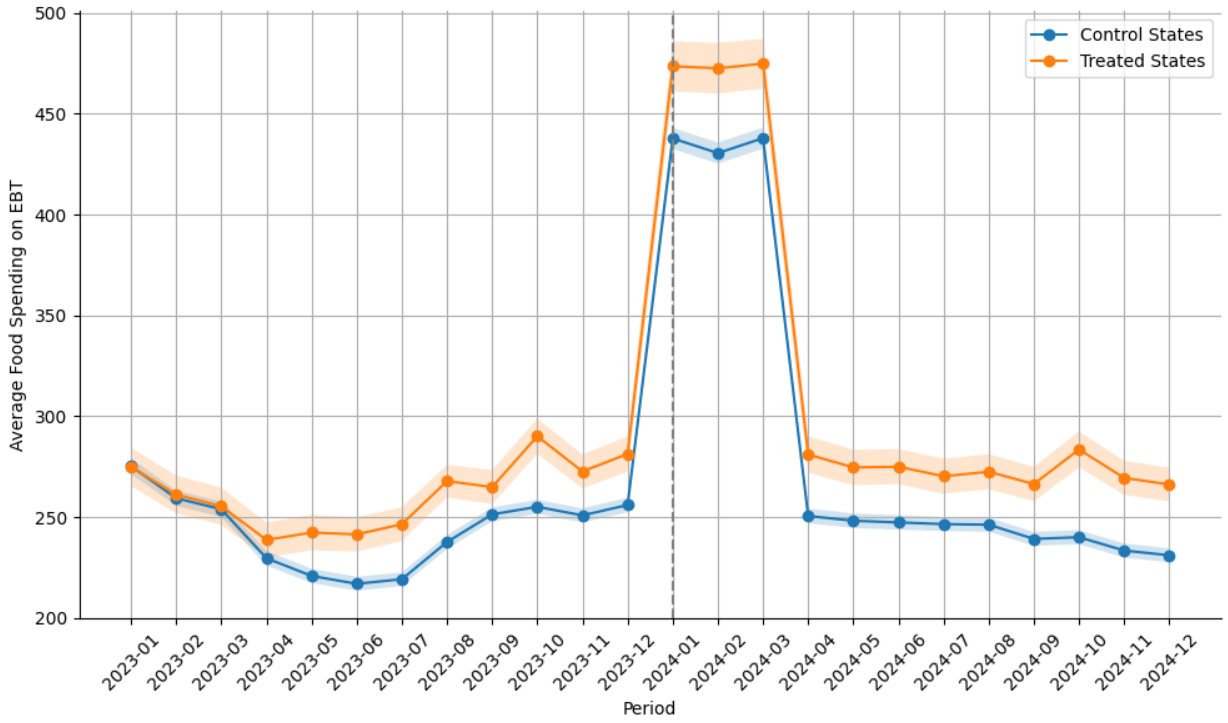


Figure 3: Monthly Average of Food Spending on EBT

(a) level



(b) log

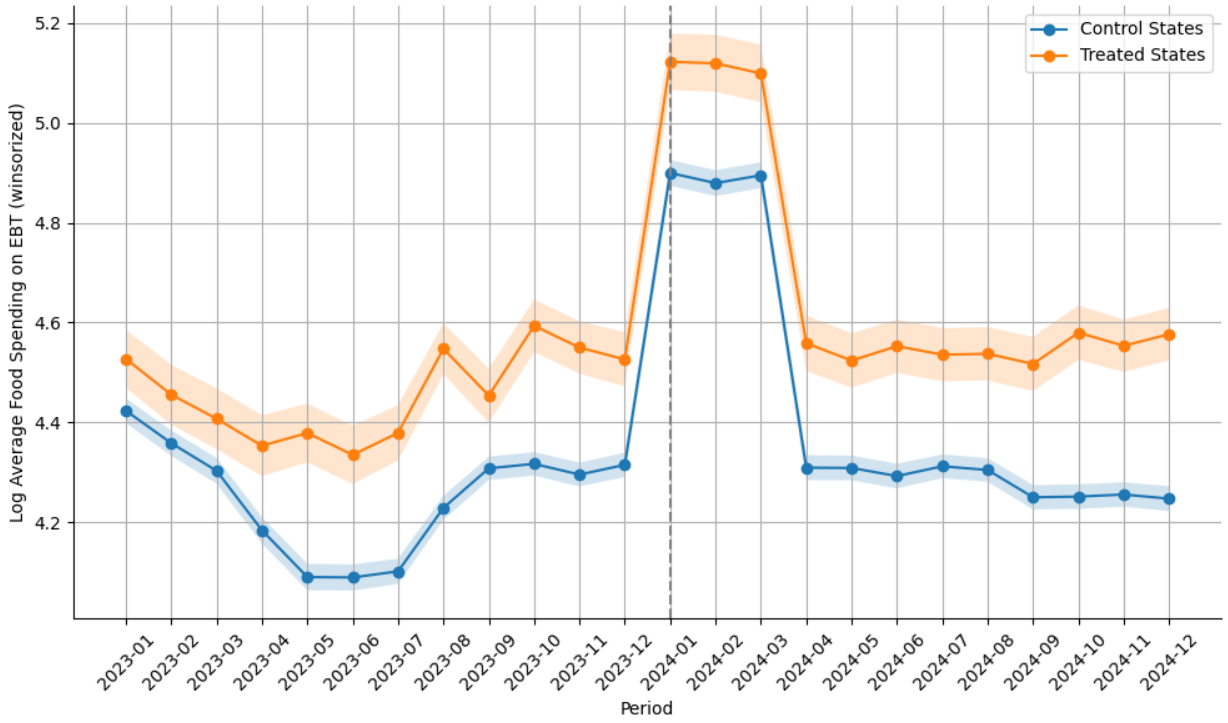


Figure 4: Monthly Average of Soda Spending

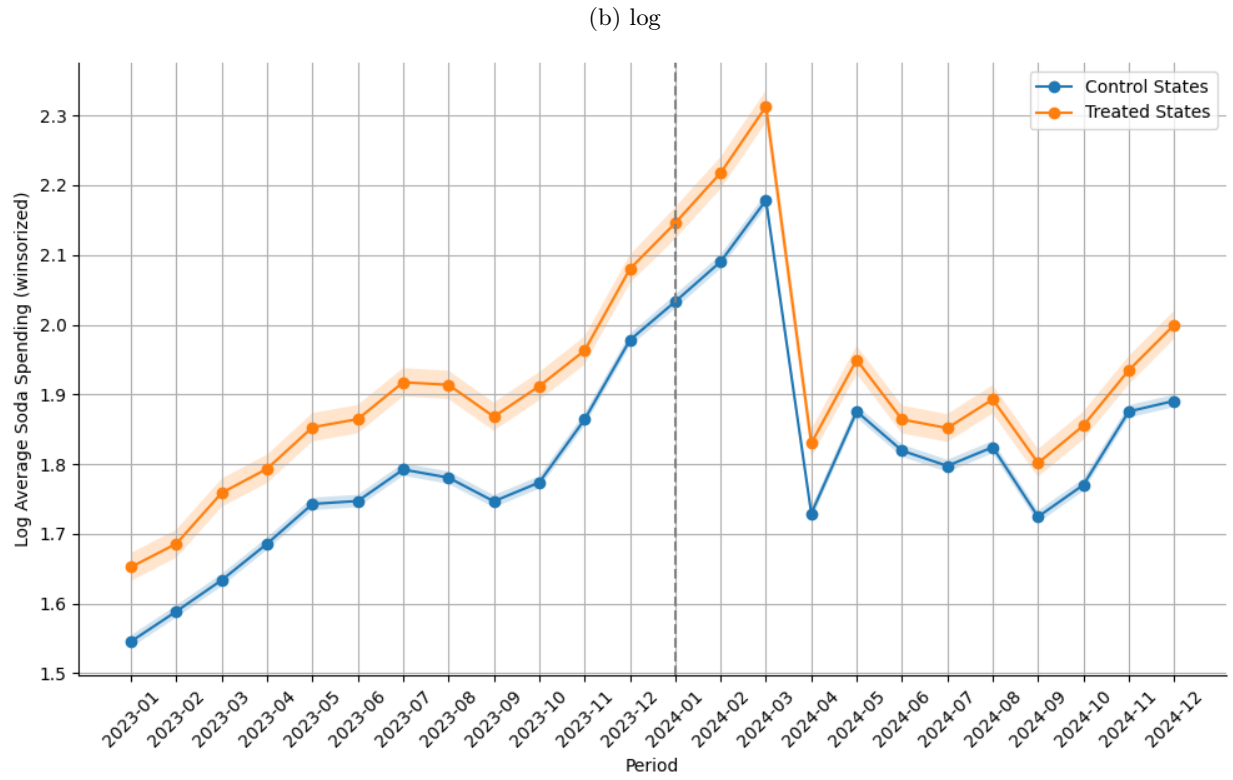
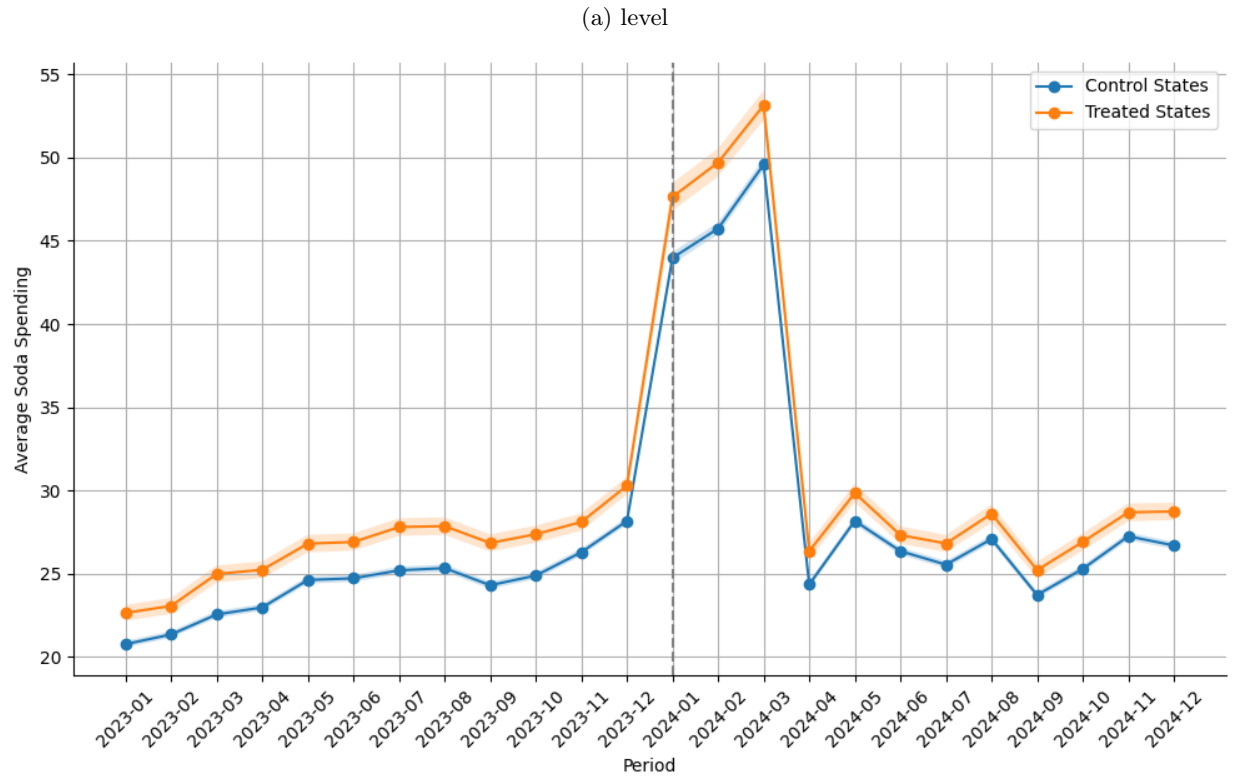
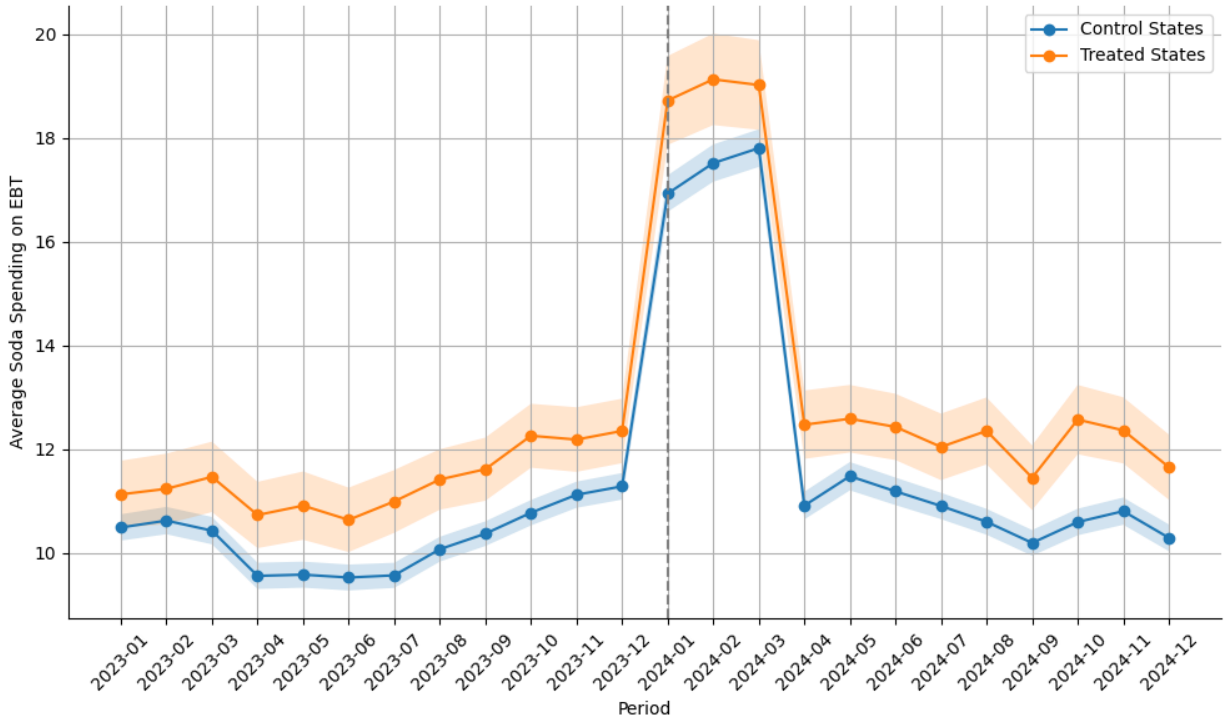


Figure 5: Monthly Average of Soda Spending on EBT

(a) level



(b) log

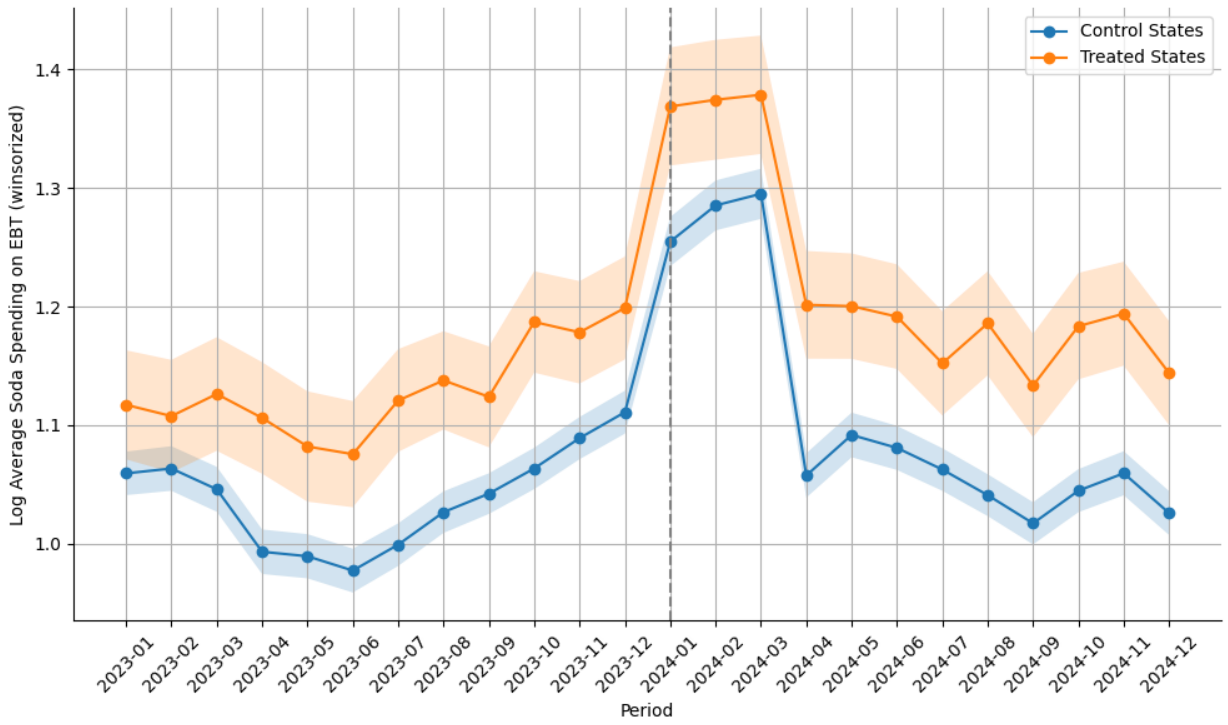
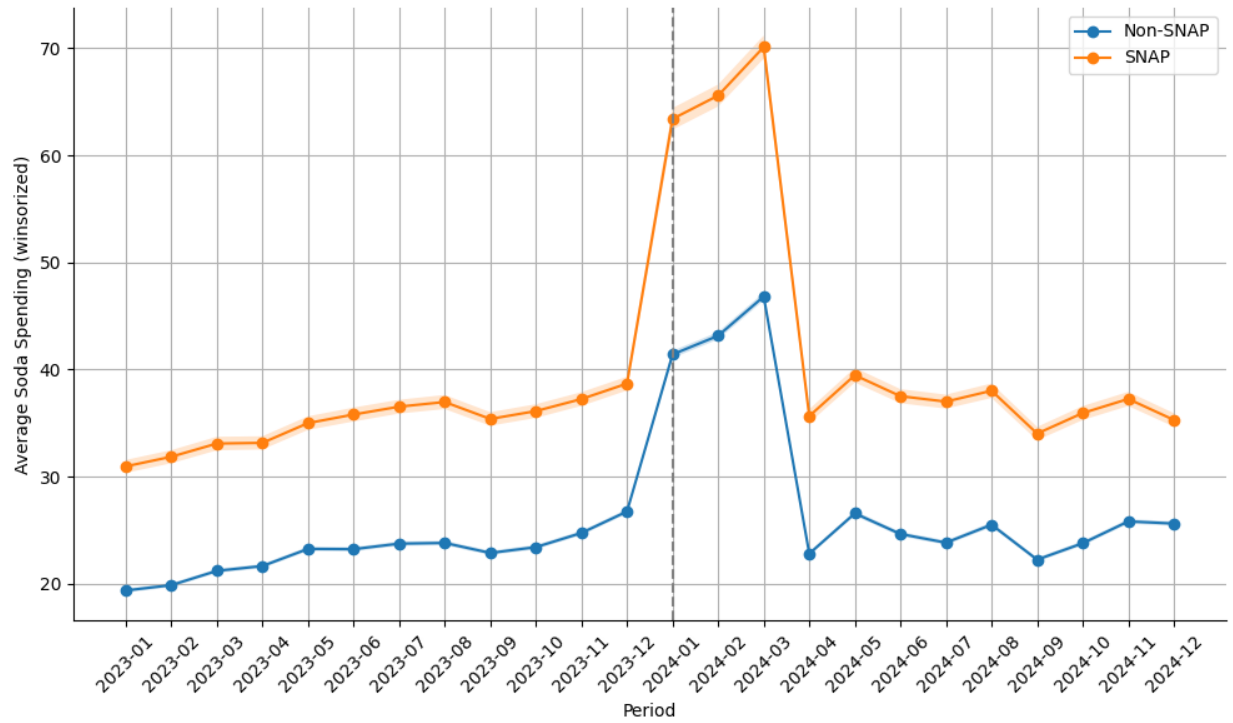


Figure 6: Monthly Average of Soda Spending by SNAP/Non-SNAP

(a) level



(b) log

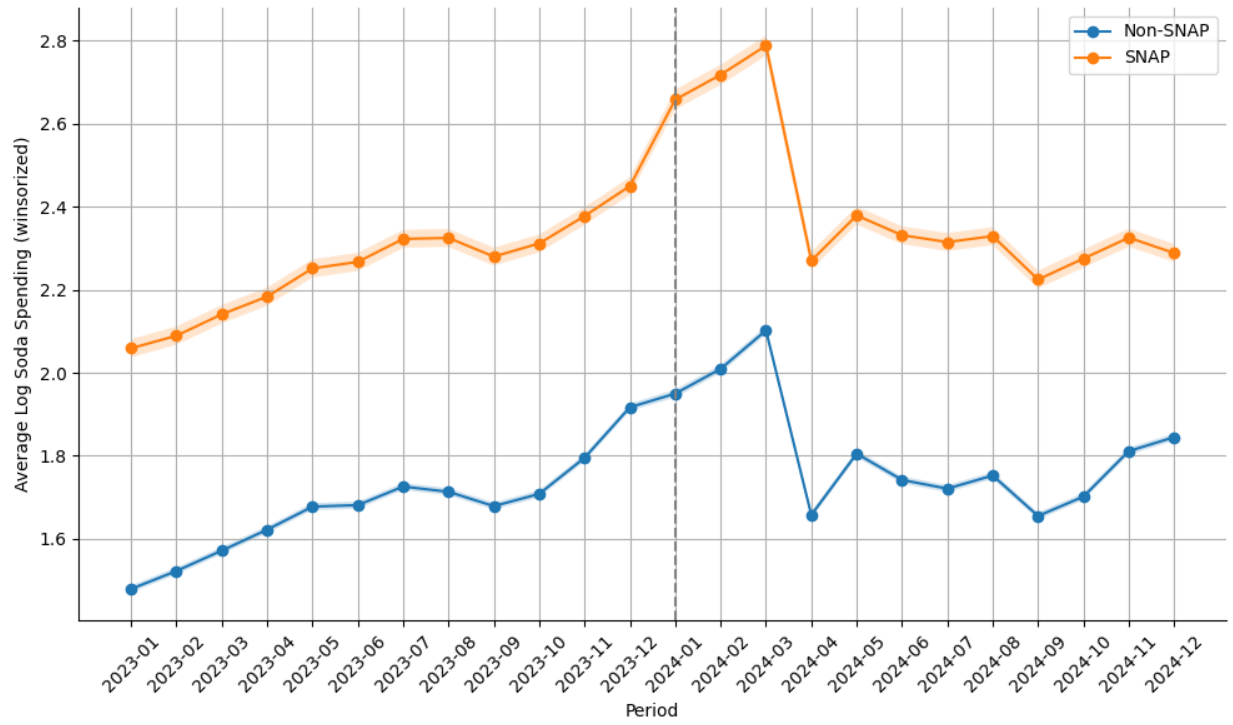
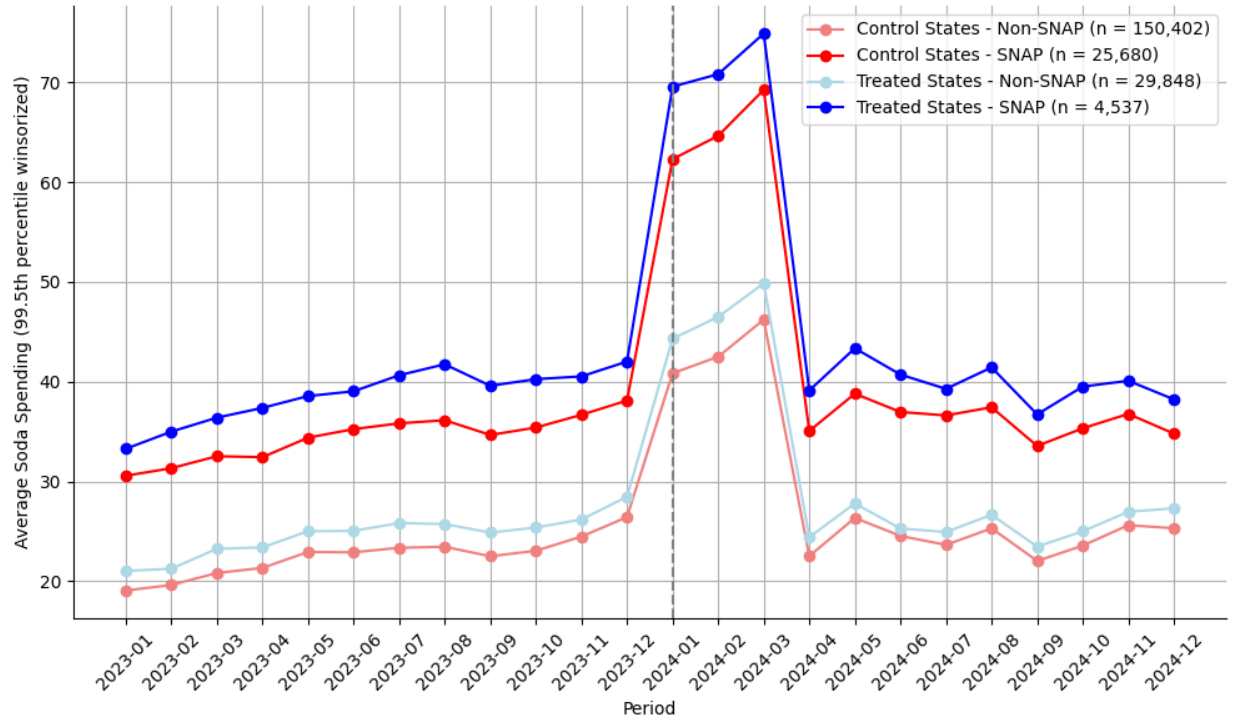


Figure 7: Monthly Average of Soda Spending by SNAP  $\times$  state

(a) level



(b) log

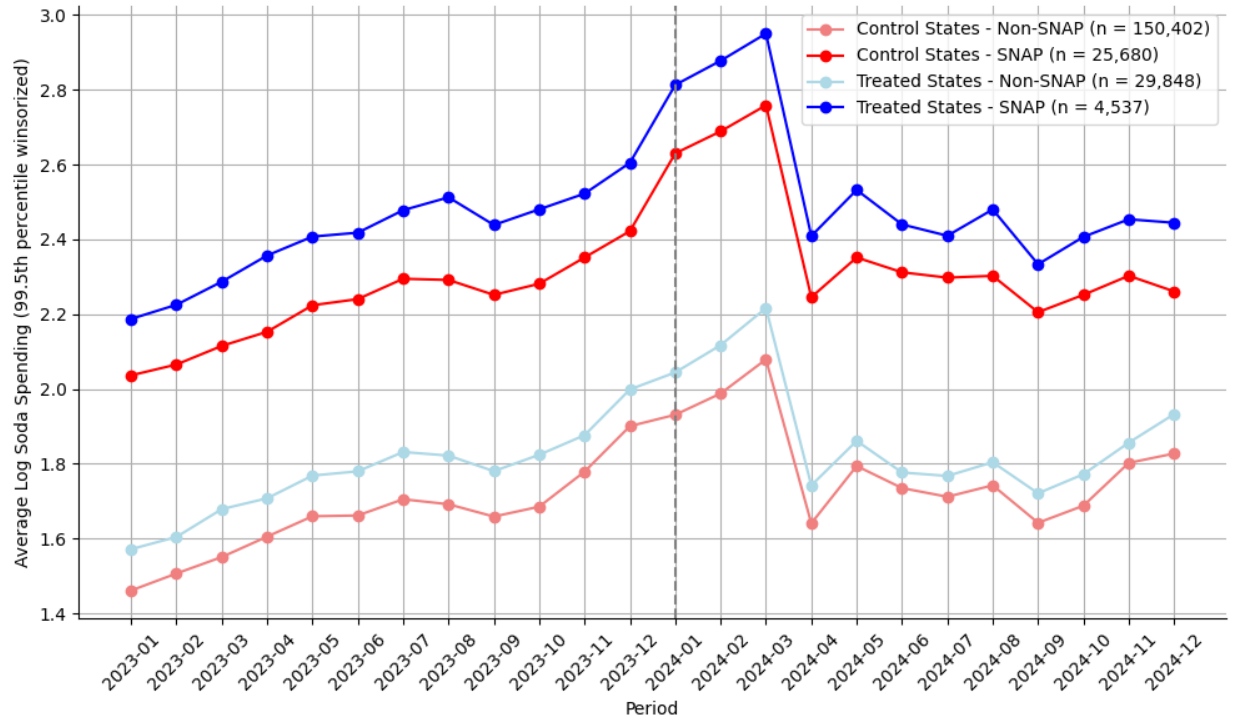




Figure 8: Proportion of Total Spending on Food

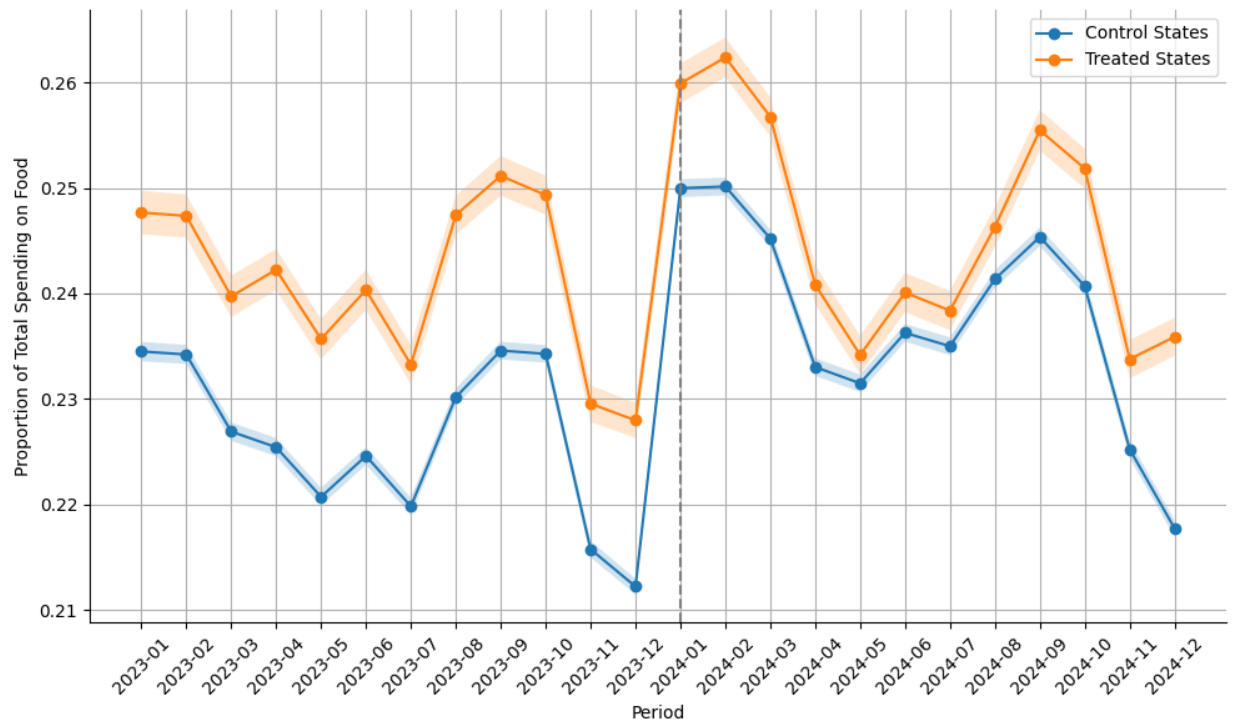


Figure 9: Proportion of Food Spending on EBT

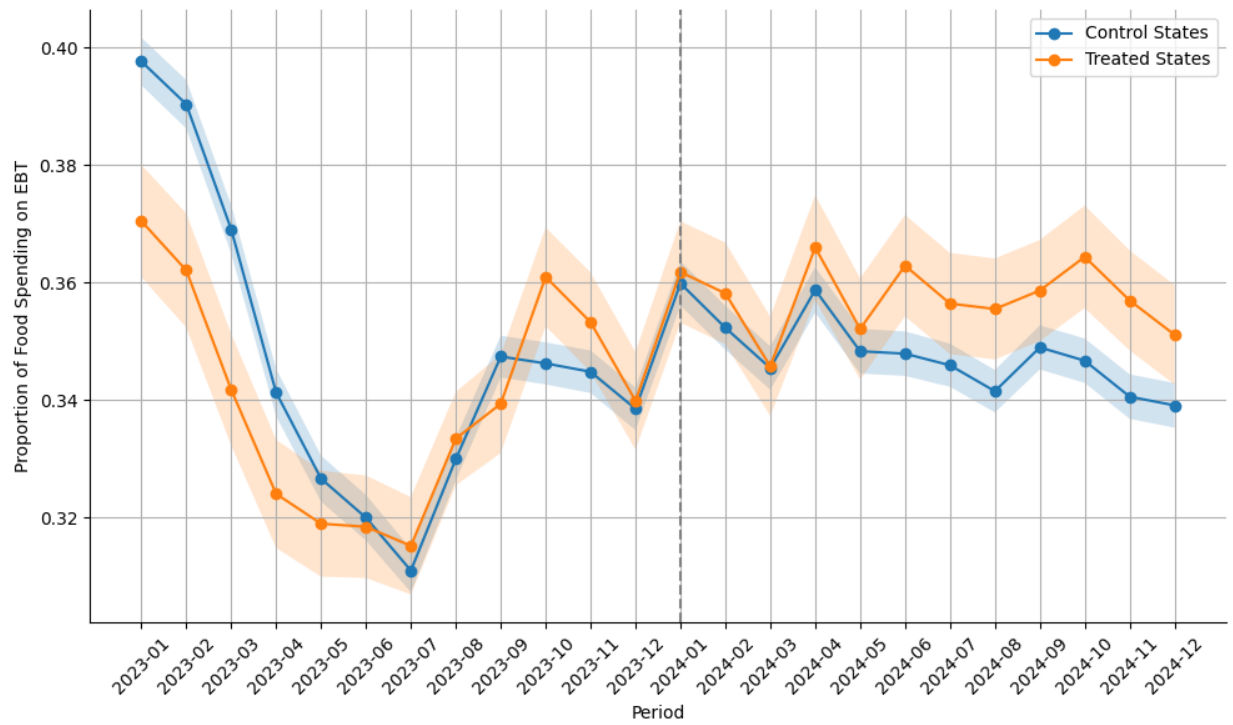


Figure 10: Proportion of Food Spending on Soda

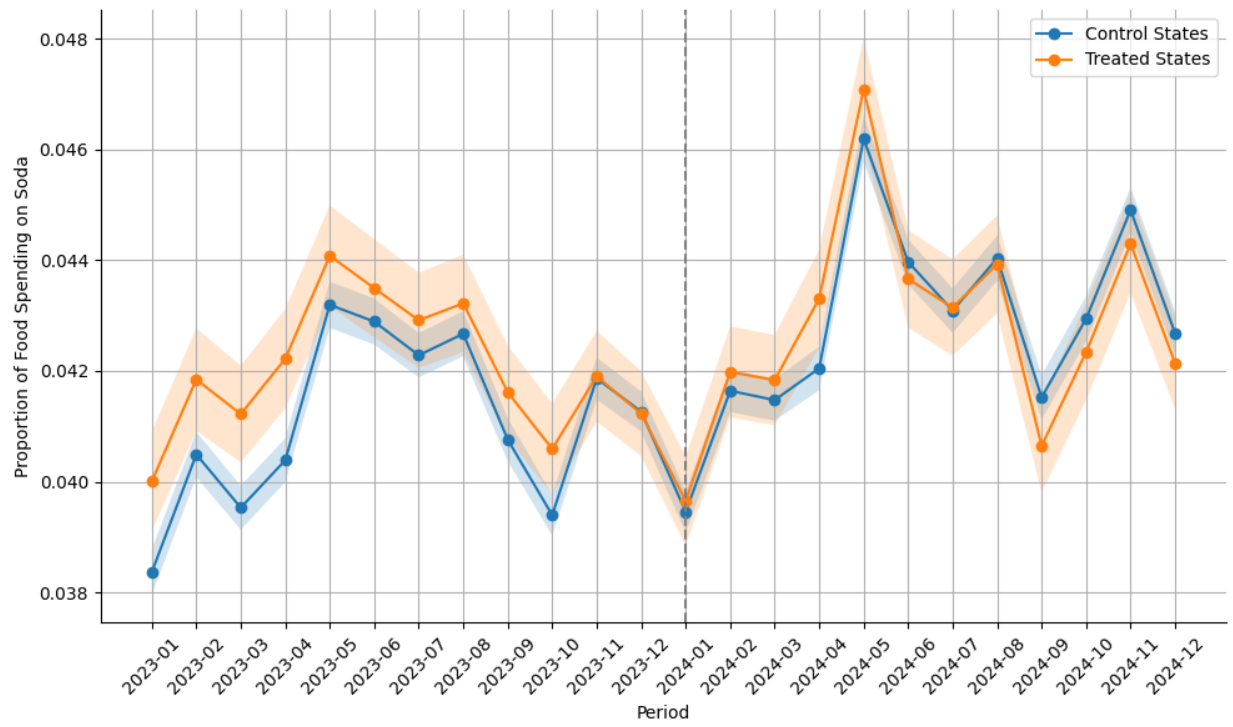


Figure 11: Proportion of Soda Spending on EBT

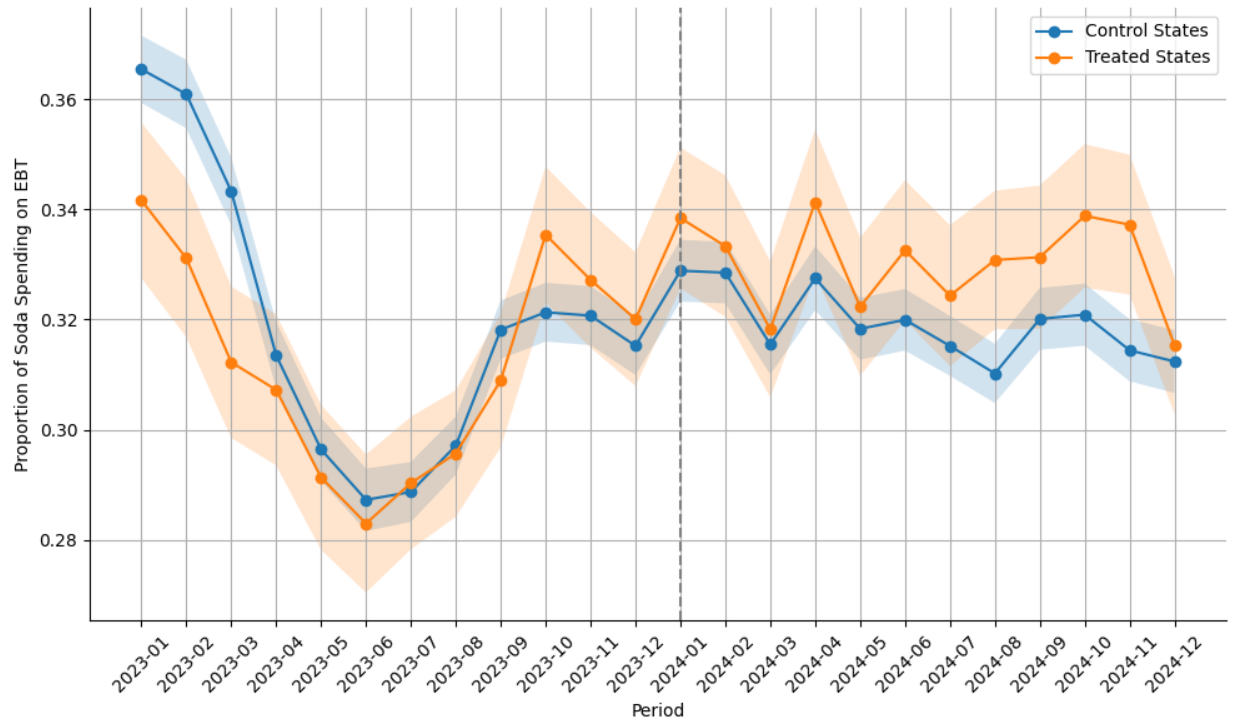
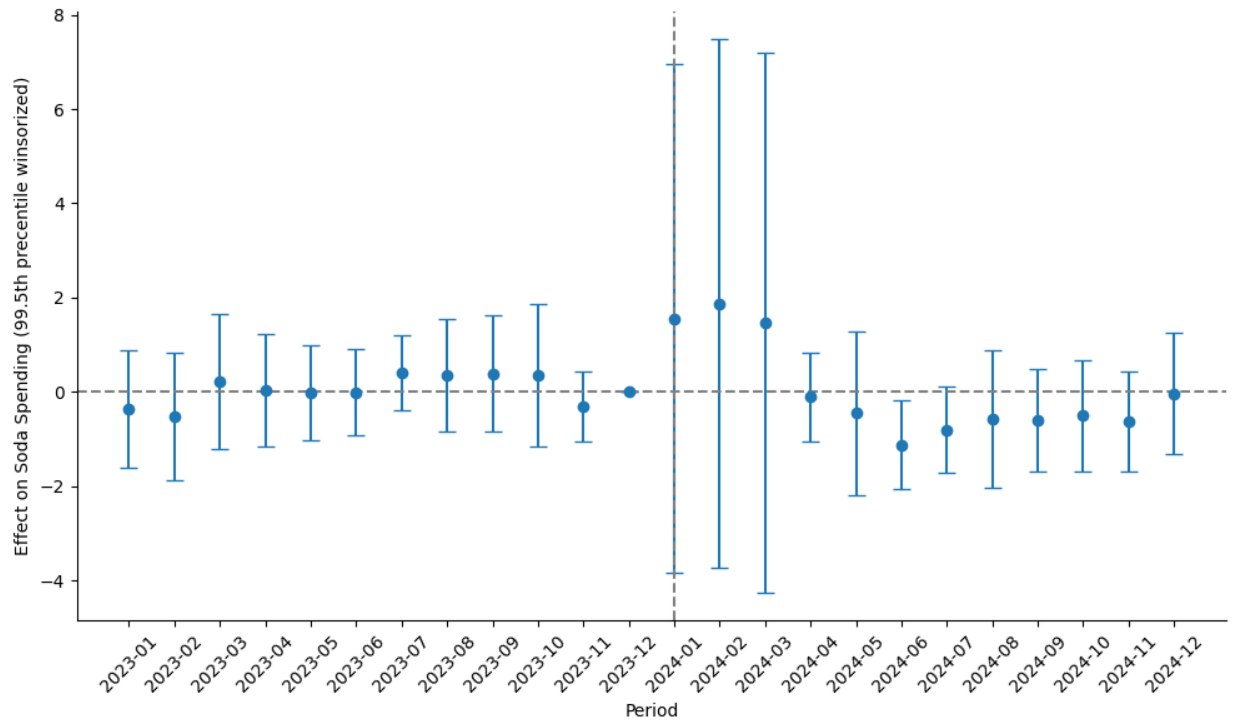


Figure 12: Event Study - TWFE

(a) level



(b) log

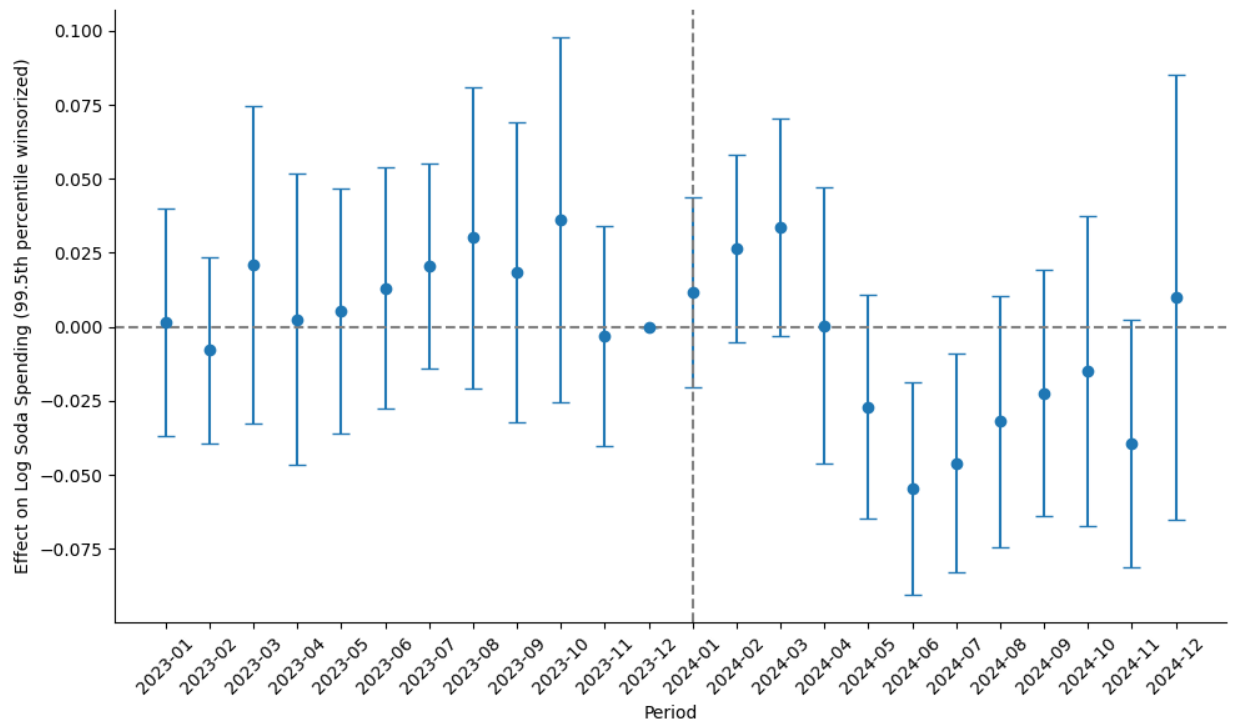


Figure 13: Event Study - TWFE (Treatment Assignment = SNAP/Non-SNAP) within treated states

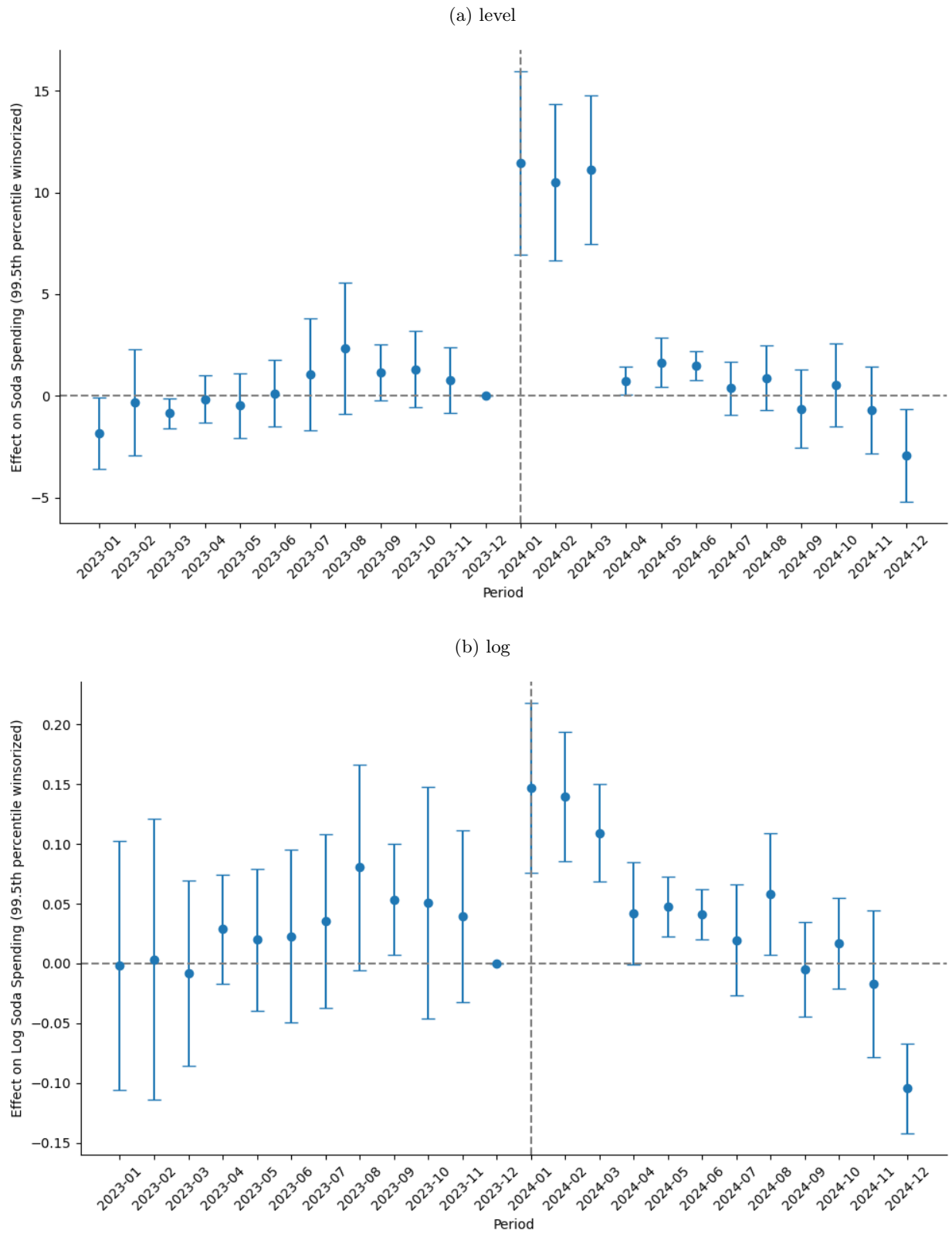


Figure 14: Event Study - DDD

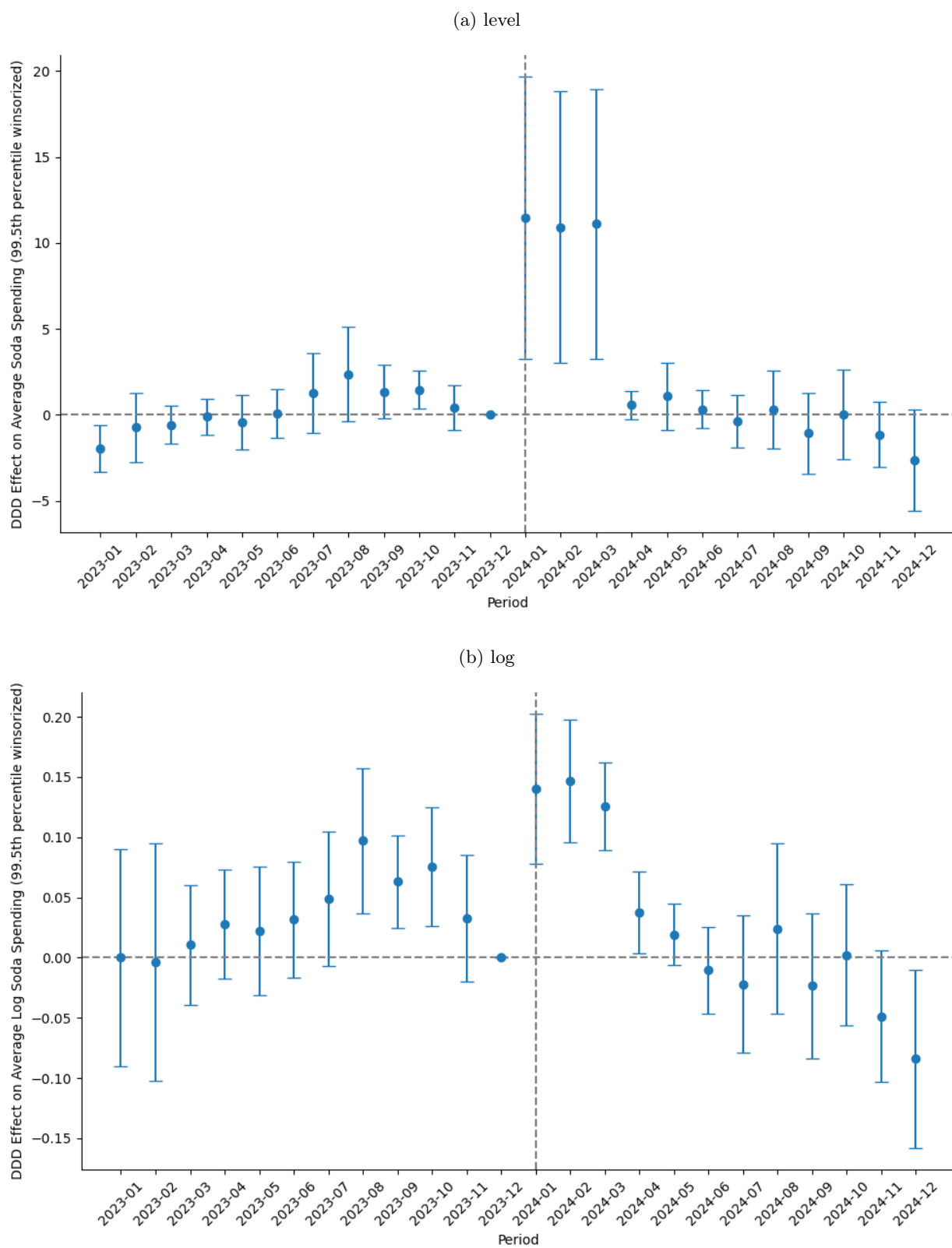


Table 1: Model Estimates

Term	TWFE	TWFE Log	TWFE	TWFE Log	DDD	DDD Log
Post	7.8044*** (0.3037)	0.1692*** (0.0096)	7.4198*** (1.1249)	0.1431*** (0.0160)	7.7487*** (0.3135)	0.1654*** (0.0089)
State $\times$ Post	-0.0262 (1.1184)	-0.0241 (0.0163)				
SNAP $\times$ Post			2.7057*** (0.2801)	0.0145 (0.0267)		
State $\times$ SNAP $\times$ Post					2.3769*** (0.7907)	-0.0077 (0.0199)
N	4,831,044	4,831,044	788,880	788,880	4,831,044	4,831,044
$R^2$	0.0118	0.0037	0.0113	0.0028	0.0118	0.0037
User FE	Yes	Yes	Yes	Yes	Yes	Yes
Period FE	No	No	No	No	No	No
SE Cluster	state	state	state	state	state	state