

Issue # 7: Numerator Data - Trends and Event Studies 2021-2022

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September 15, 2025

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; ≤ 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

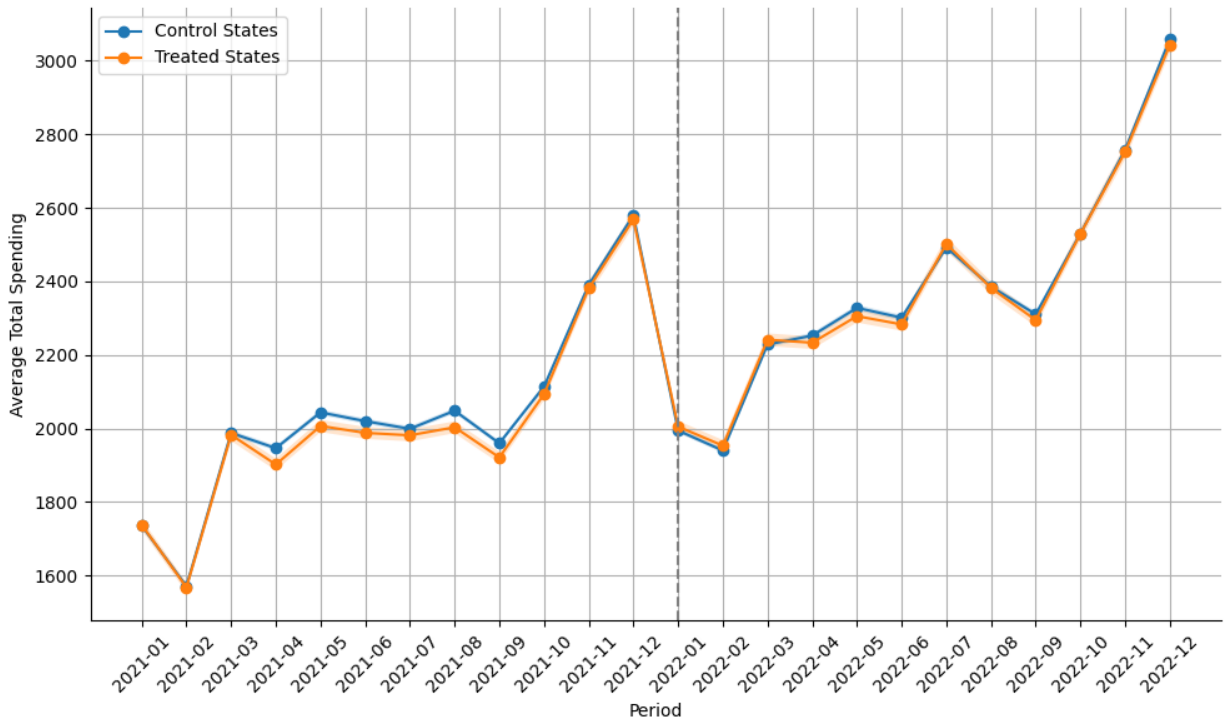
- level/log soda spending winsorized
- level/log soda spending by SNAP \times post (conditional on treated states)
- level/log soda spending DDD

3. Tables

- TWFE/DDD Model Estimates

Figure 1: Monthly Average of Total Spending

(a) level



(b) log

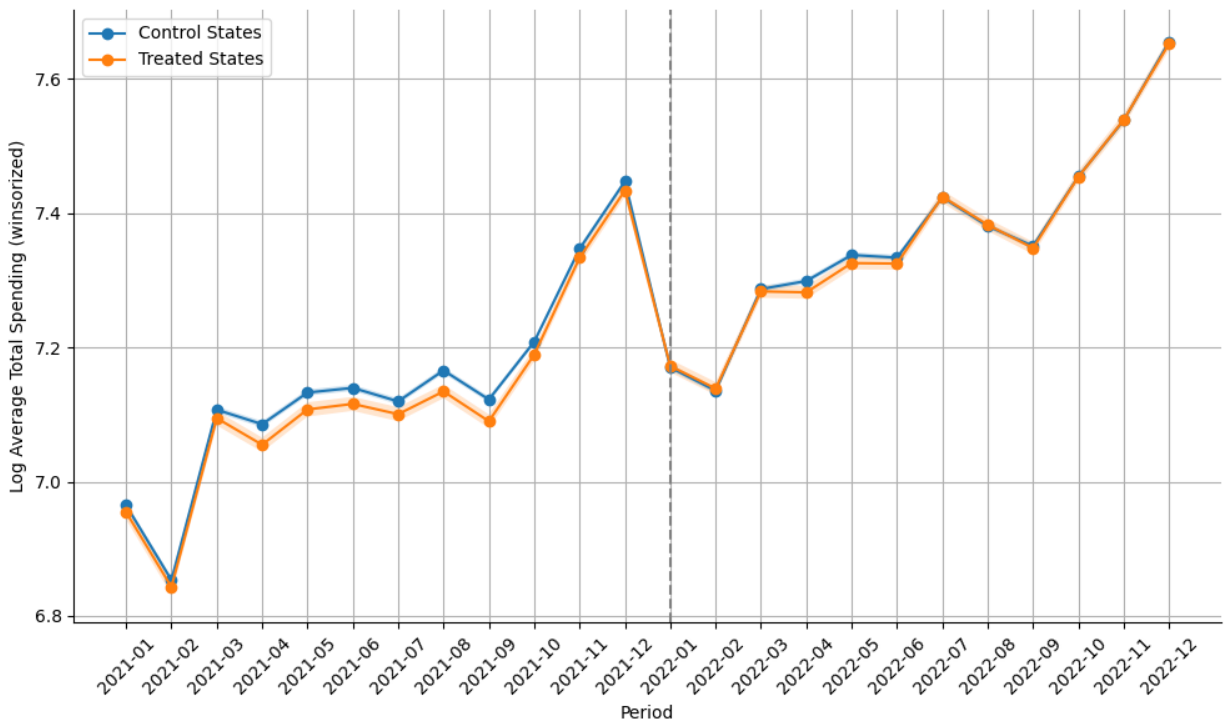
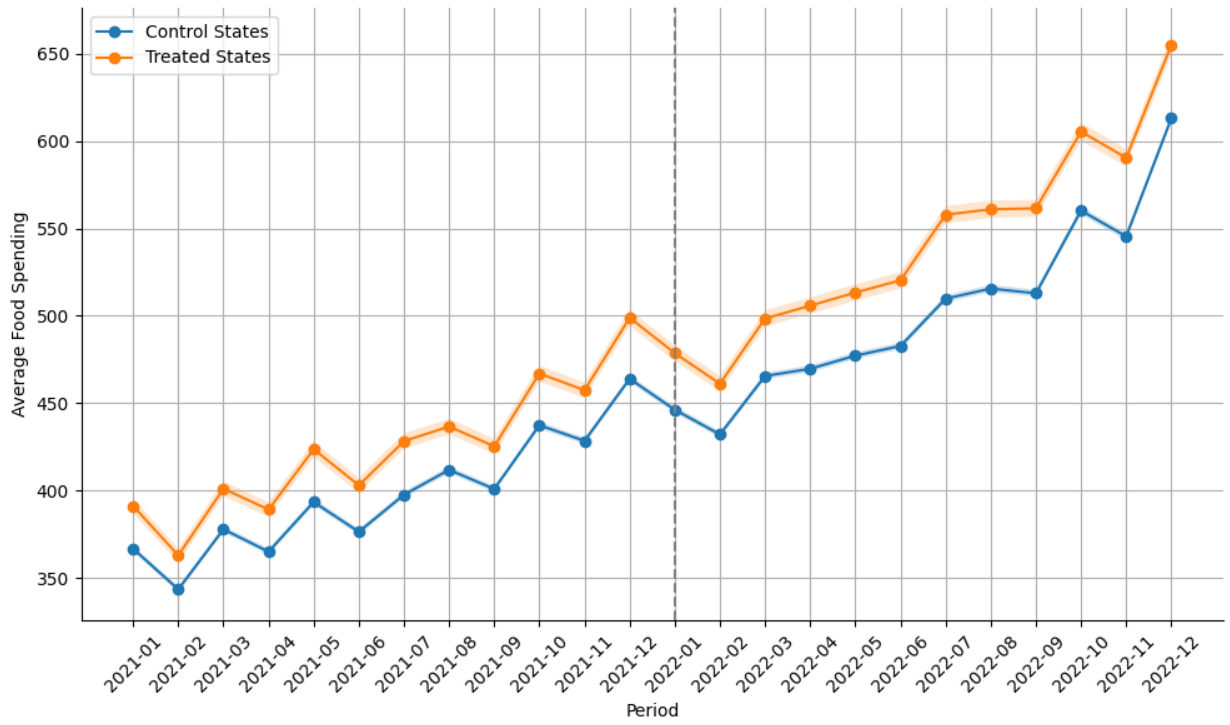


Figure 2: Monthly Average of Food Spending

(a) level



(b) log

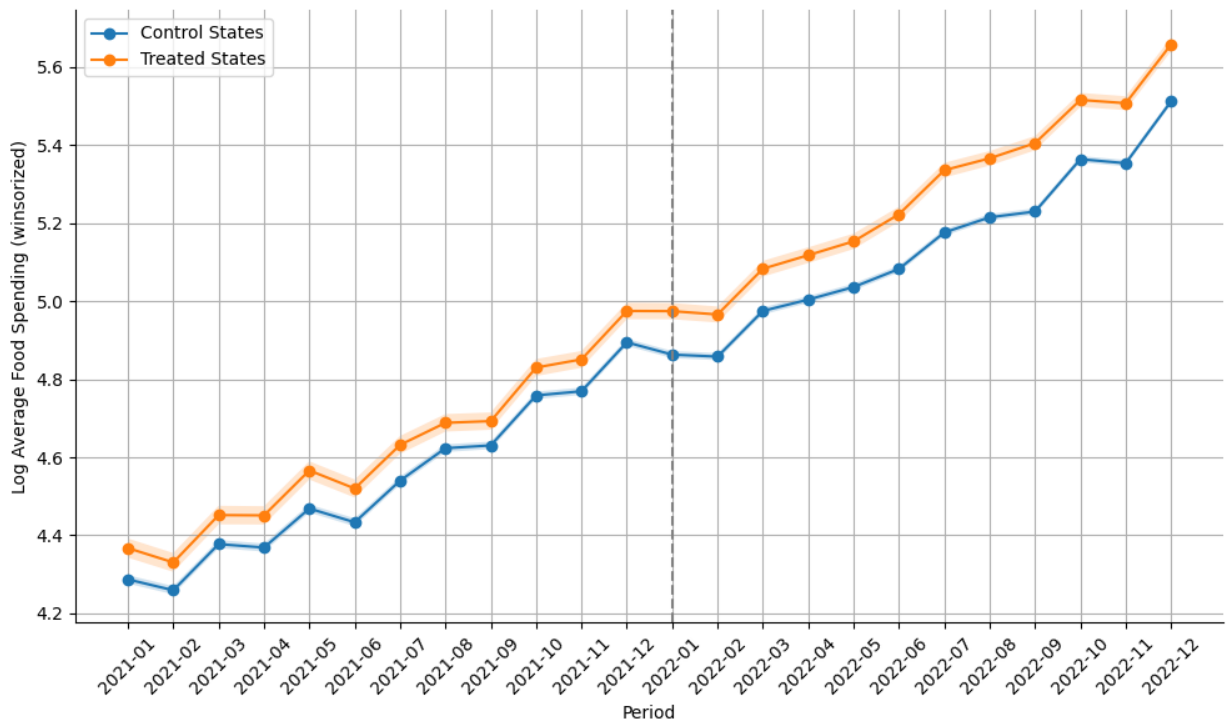
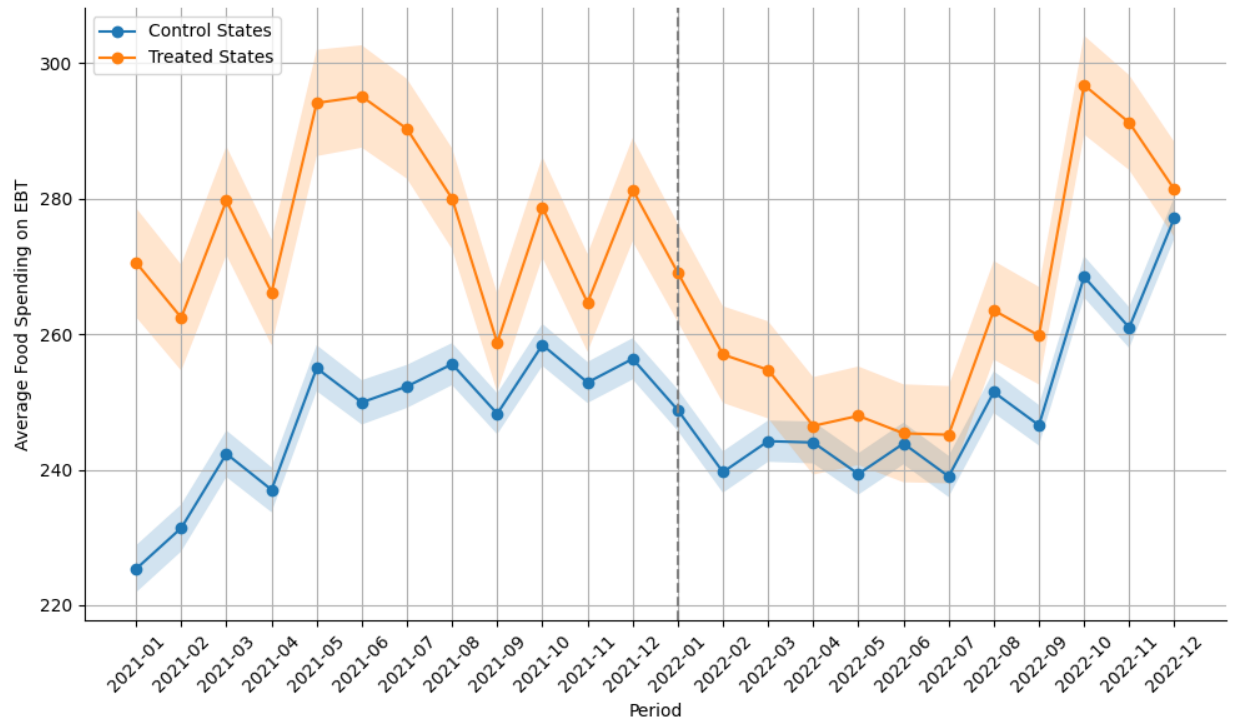


Figure 3: Monthly Average of Food Spending on EBT

(a) level



(b) log

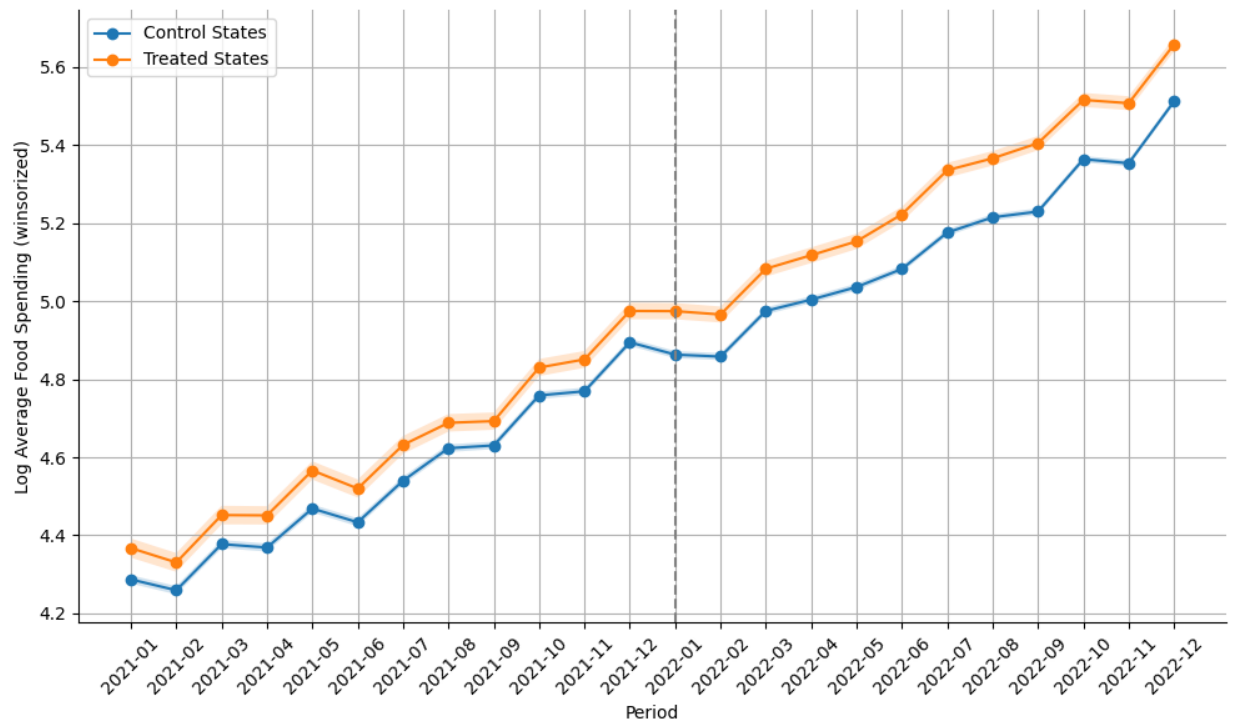
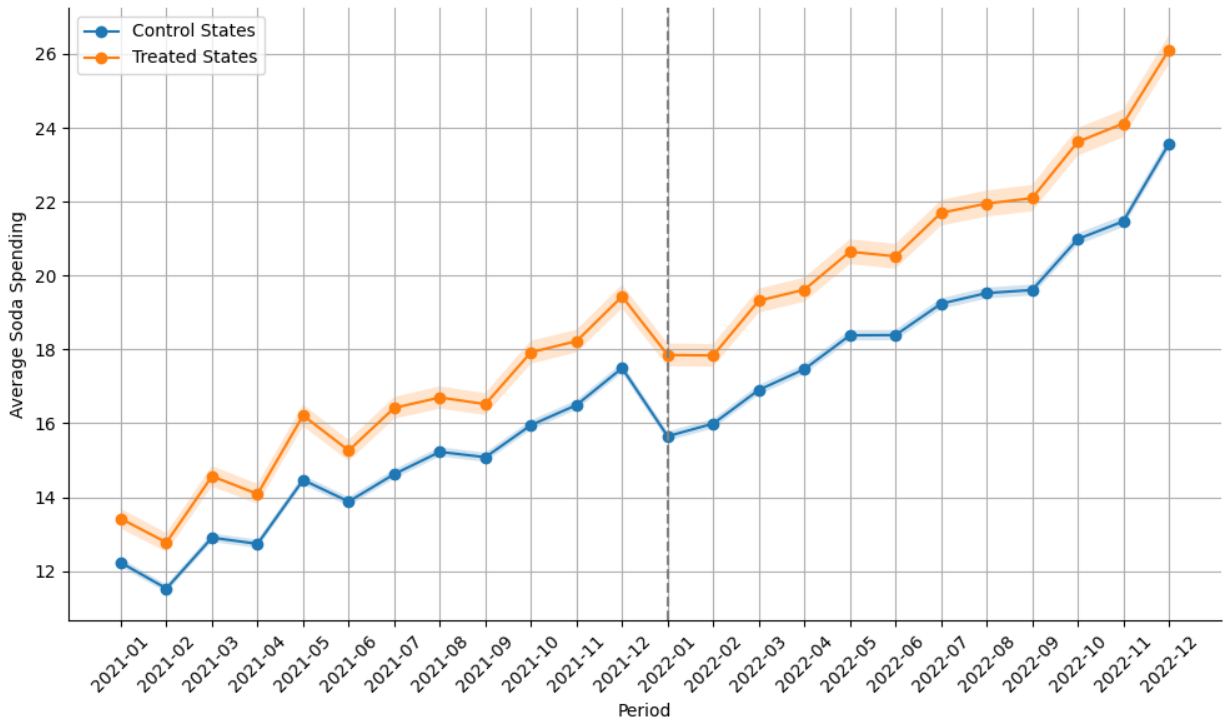


Figure 4: Monthly Average of Soda Spending

(a) level



(b) log

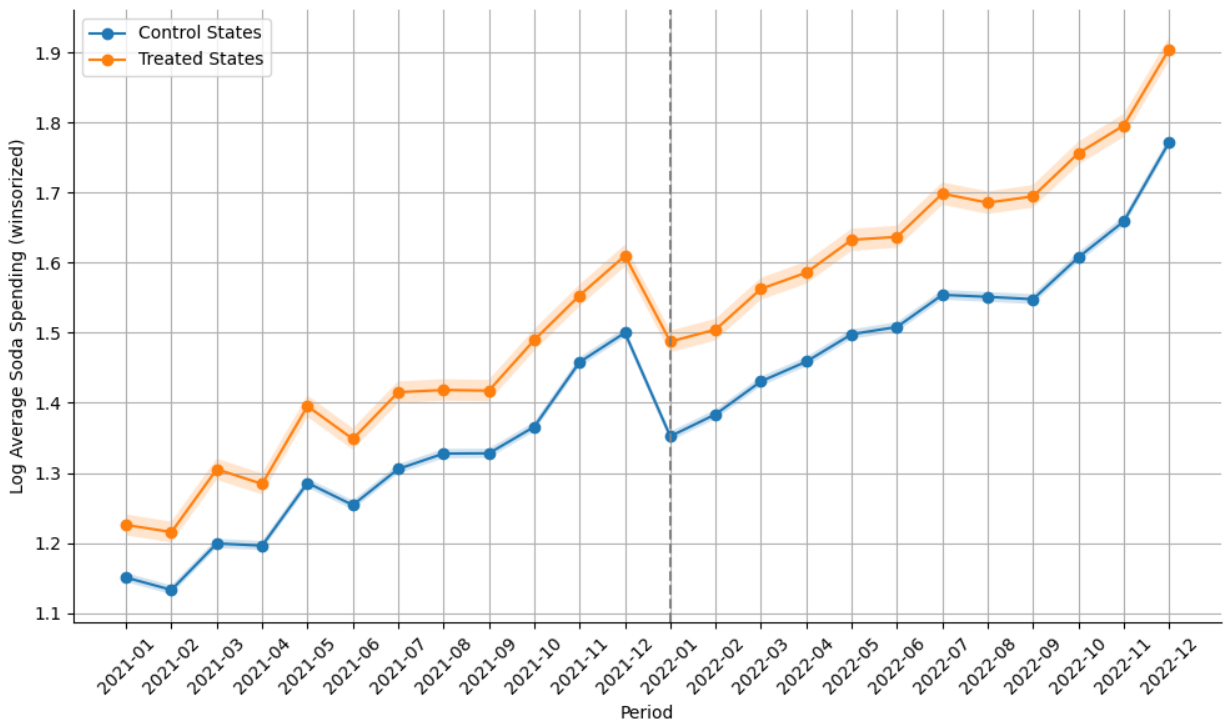
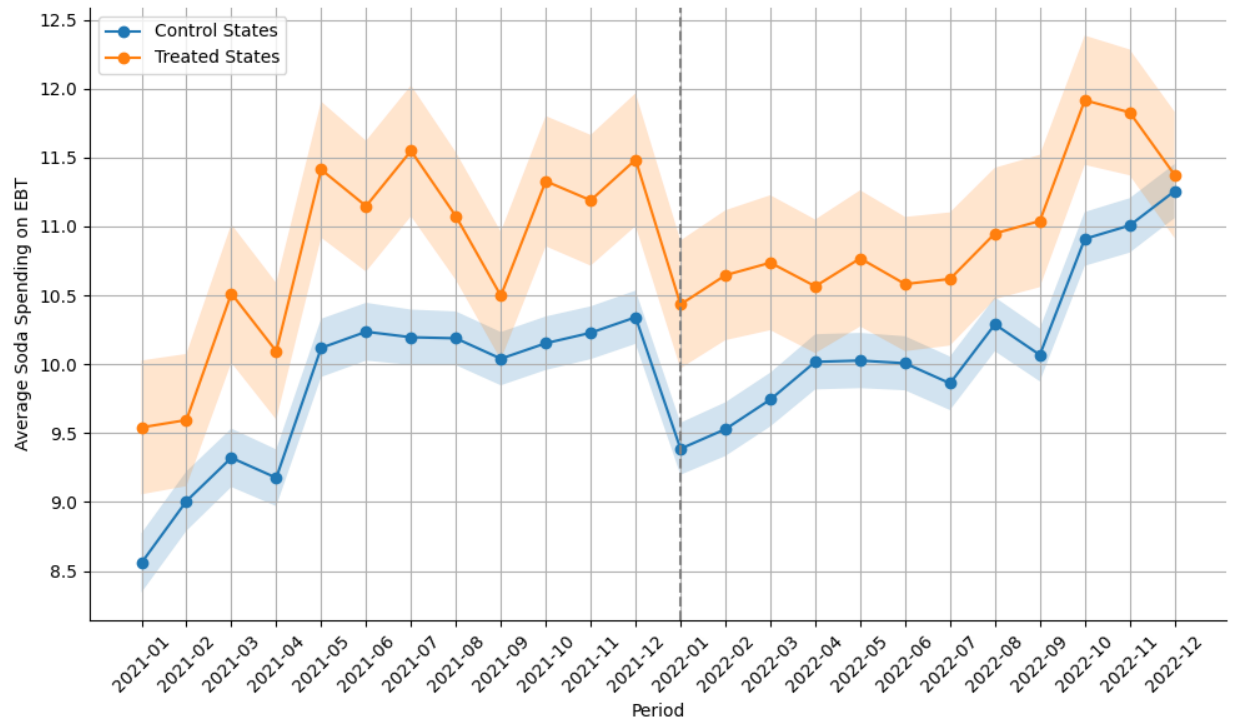


Figure 5: Monthly Average of Soda Spending on EBT

(a) level



(b) log

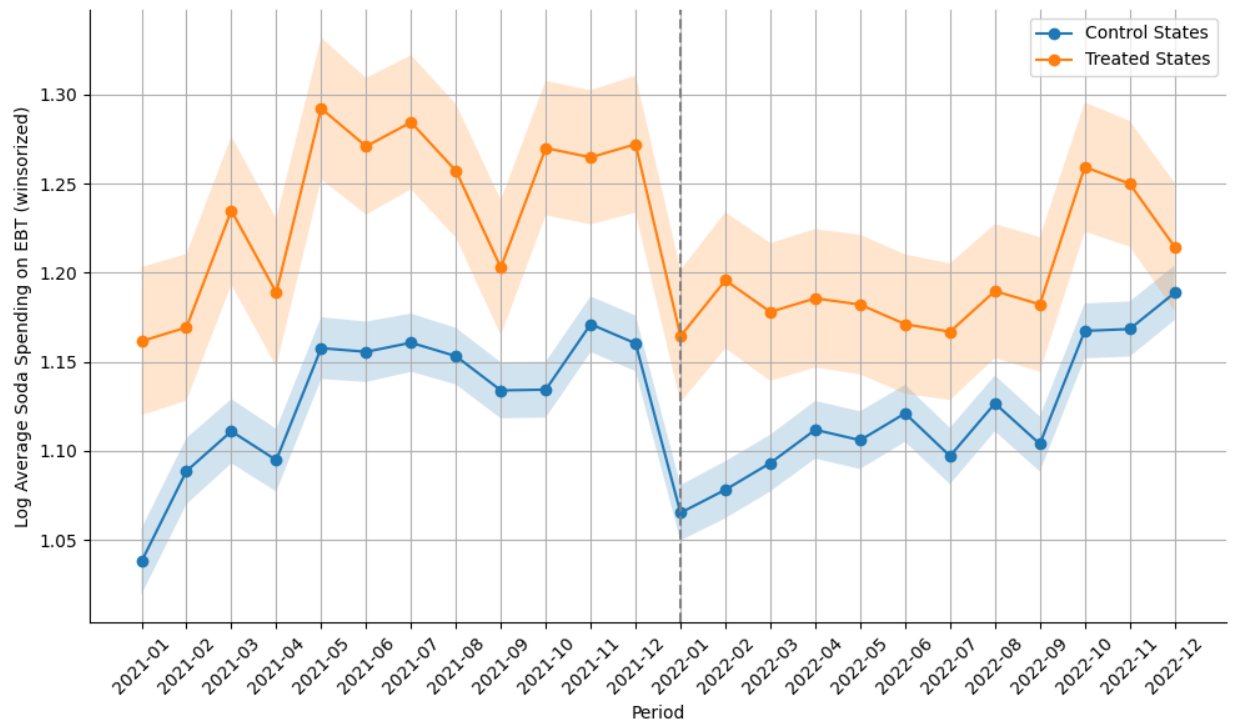


Figure 6: Monthly Average of Soda Spending by SNAP/Non-SNAP

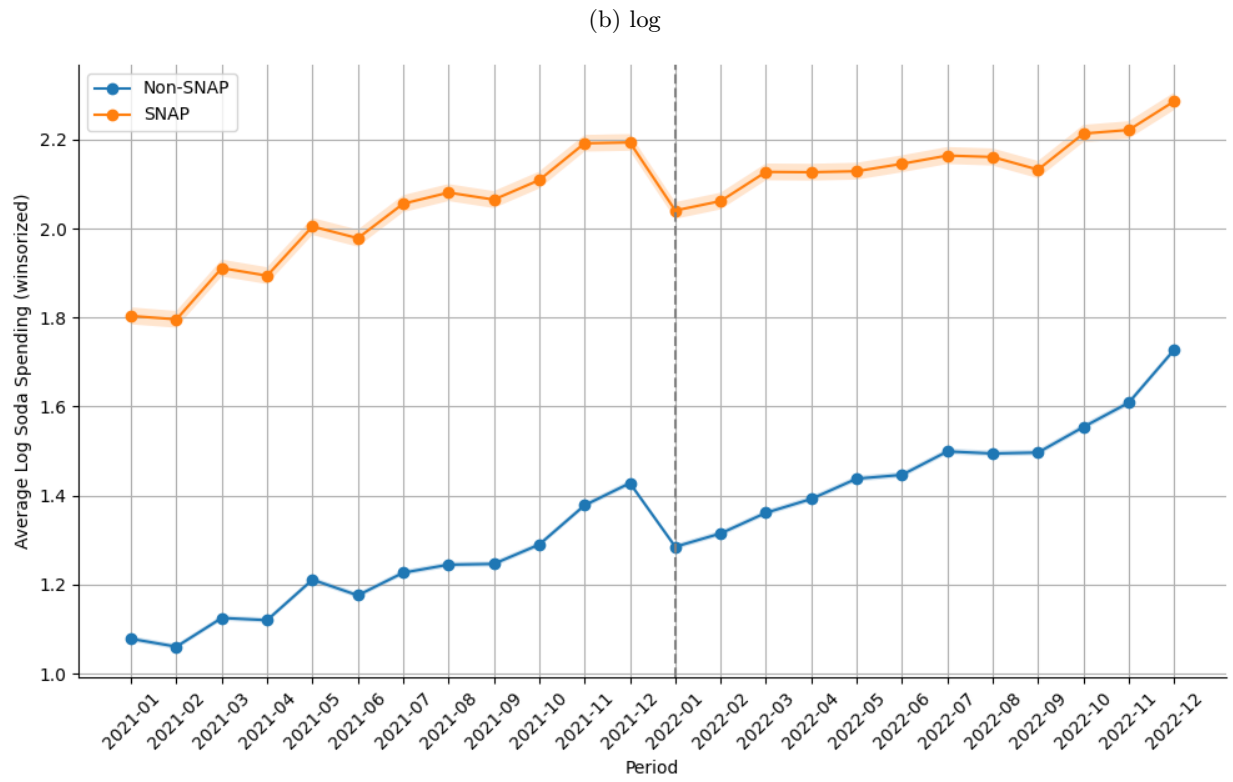
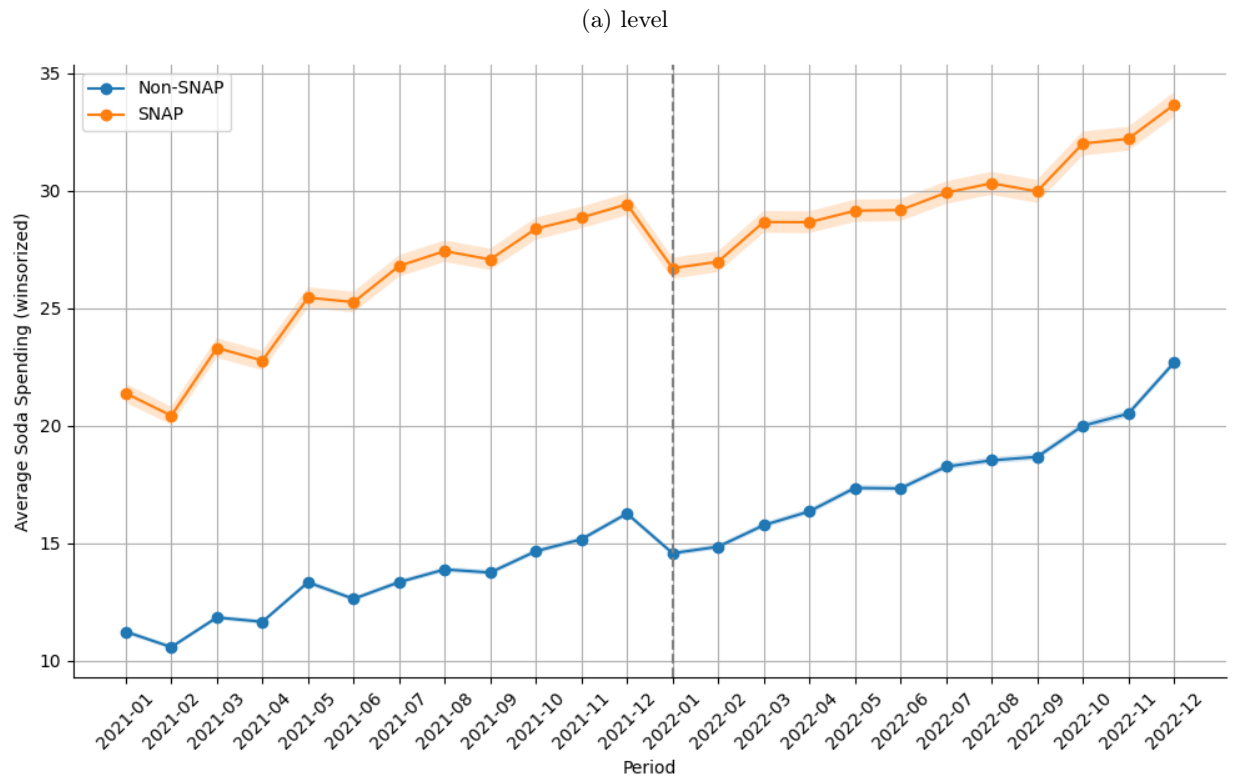
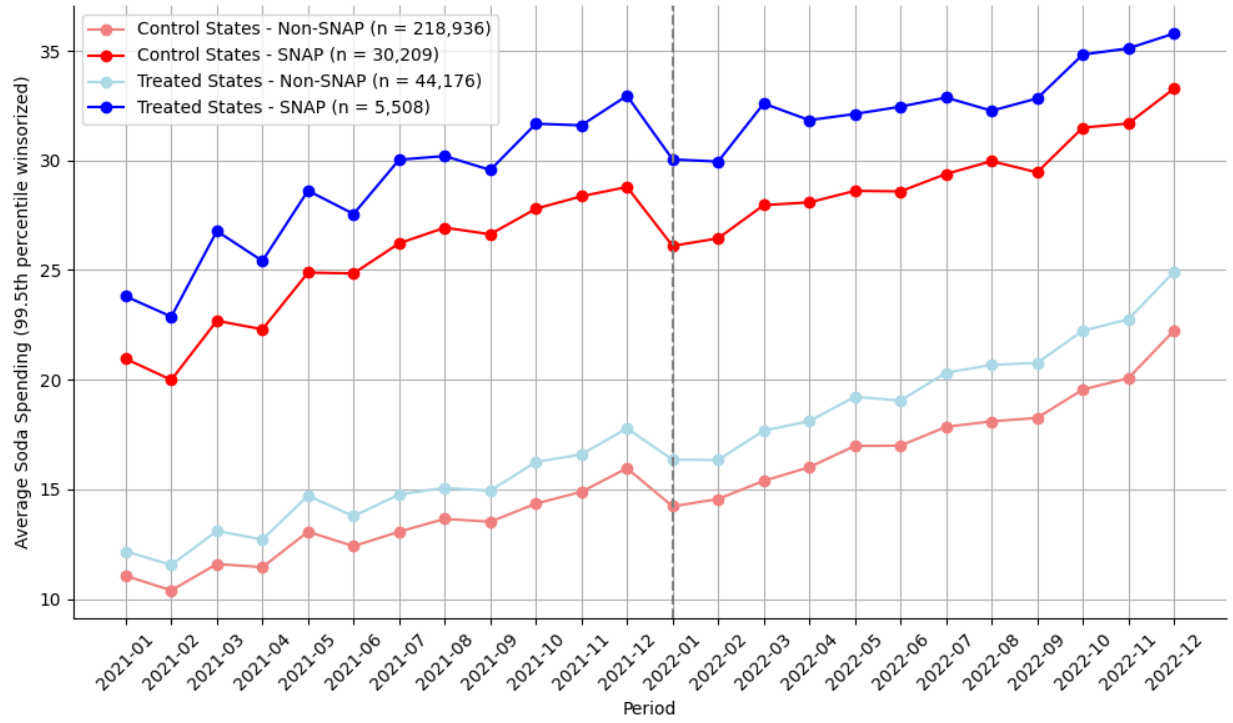


Figure 7: Monthly Average of Soda Spending by SNAP \times state

(a) level



(b) log

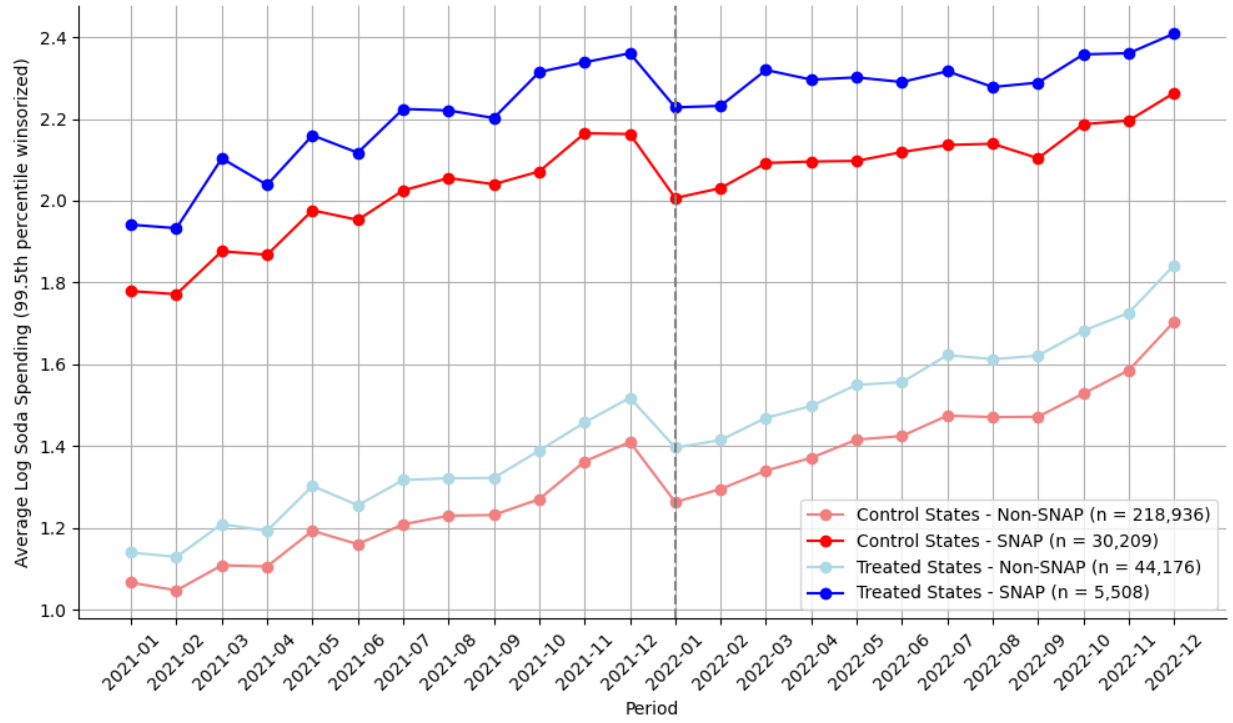


Figure 8: Proportion of Food Spending out of Total Spending

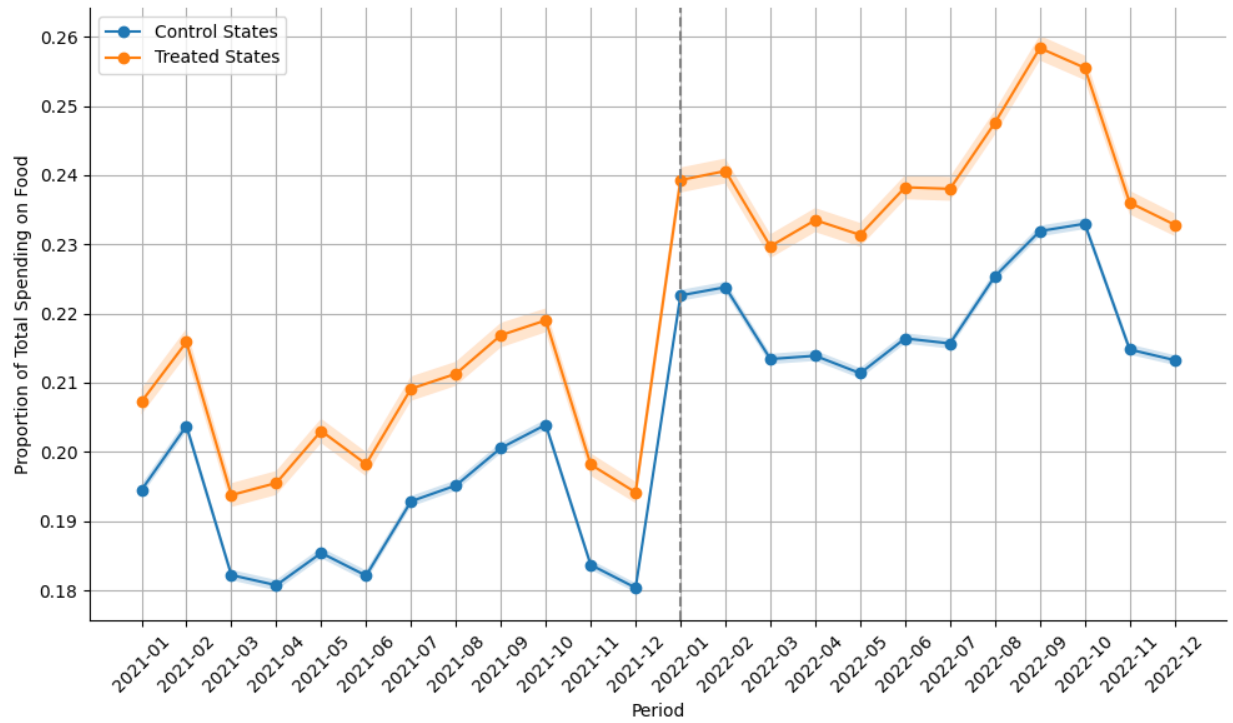


Figure 9: Proportion of Food Spending on EBT out of Total Food Spending

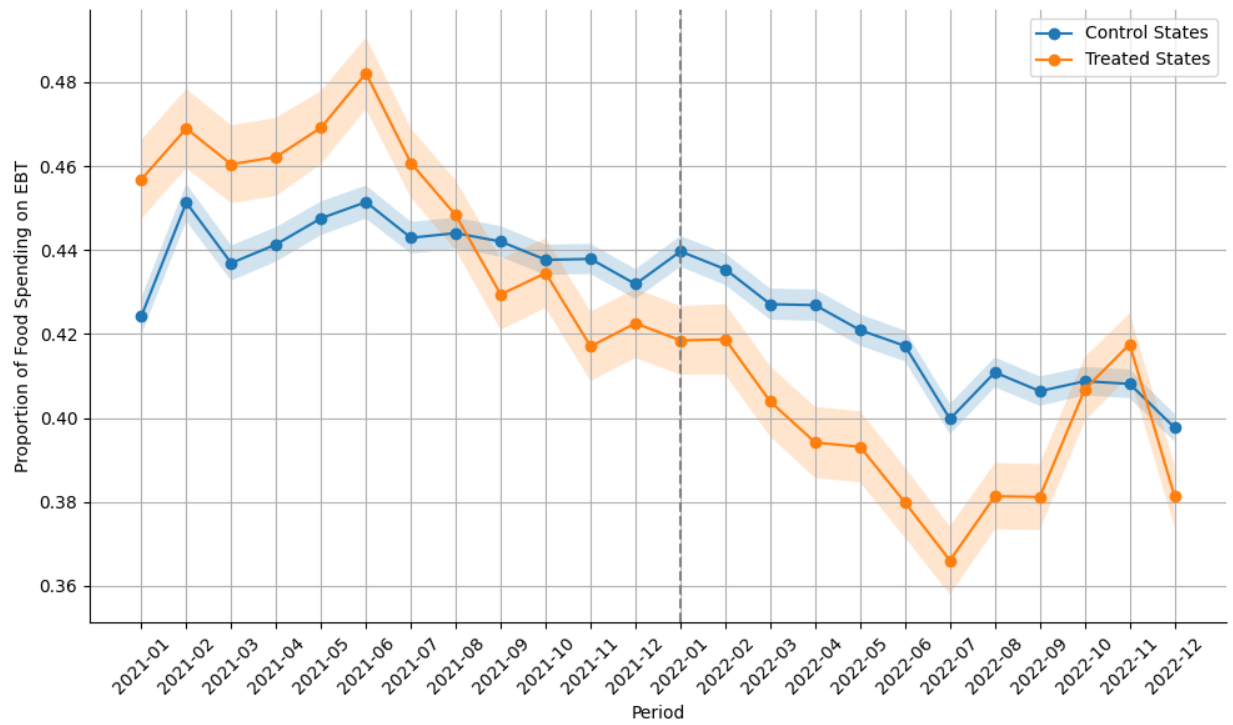


Figure 10: Proportion of Soda Spending out of Total Food Spending

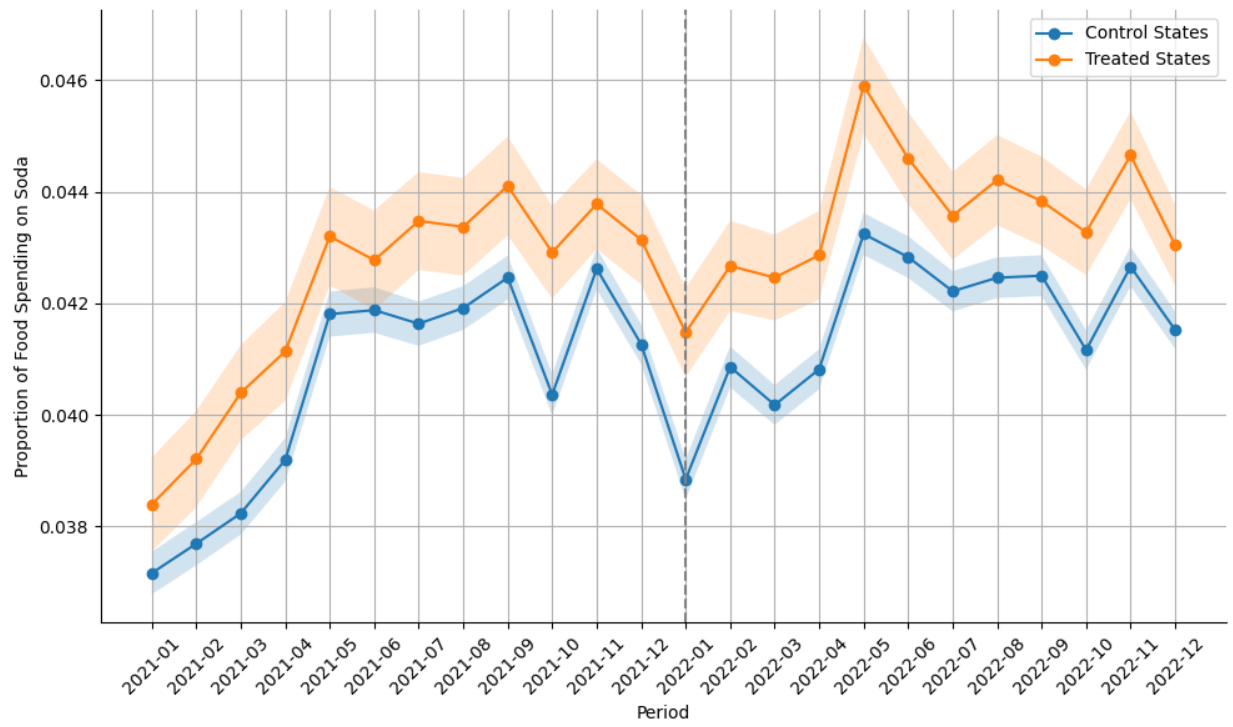


Figure 11: Proportion of Soda Spending on EBT out of Total Soda Spending

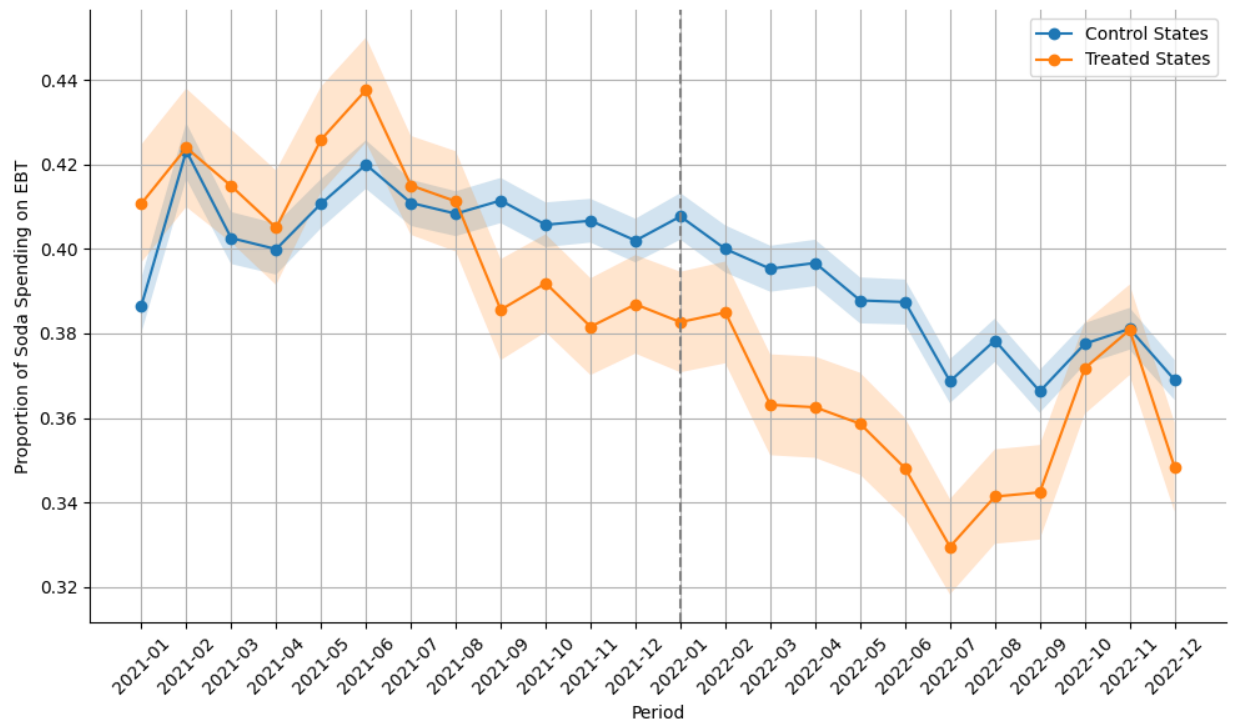


Figure 12: Event Study - TWFE

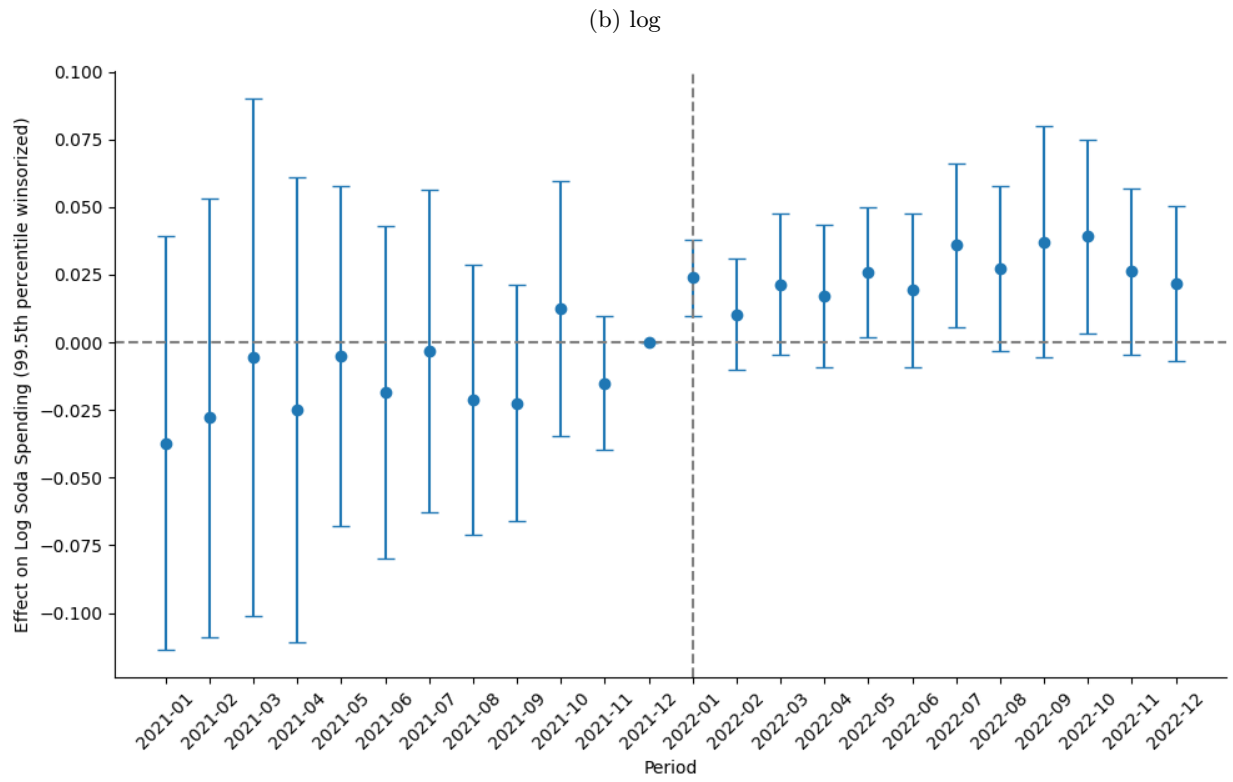
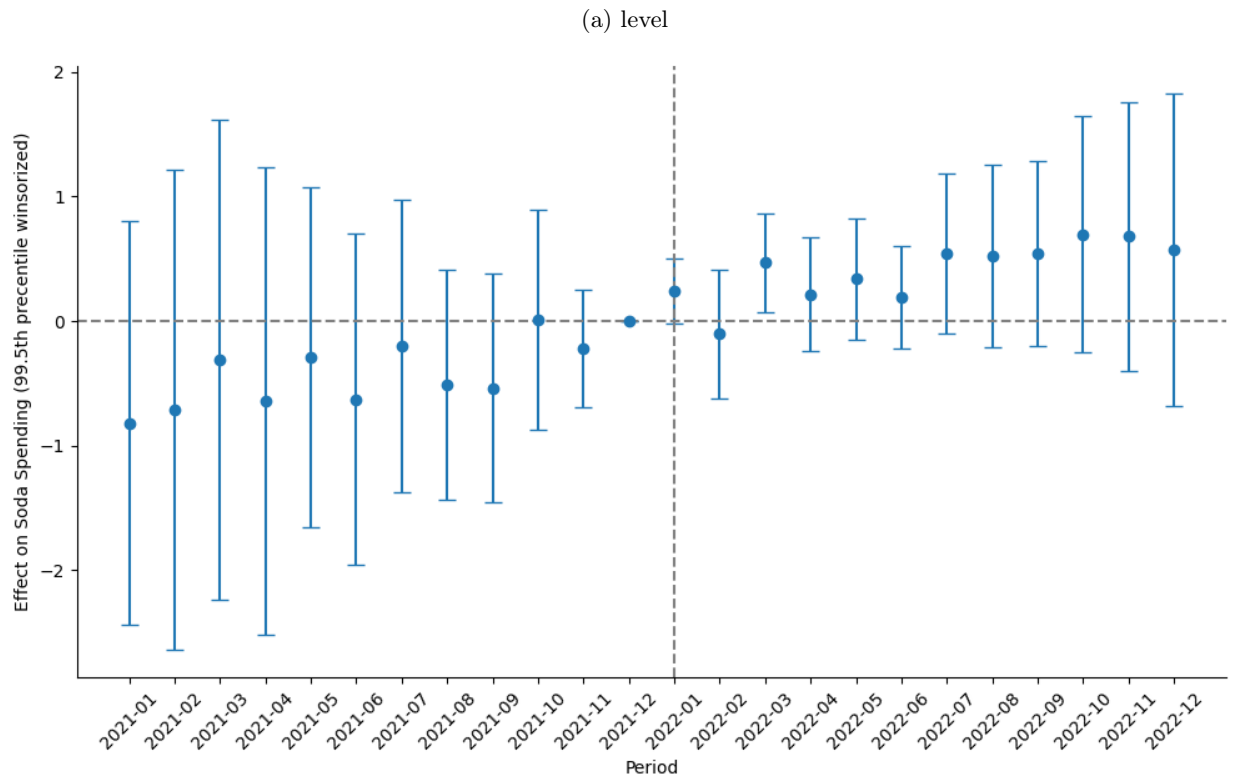


Figure 13: Event Study - TWFE (Treatment Assignment = SNAP/Non-SNAP) within treated states

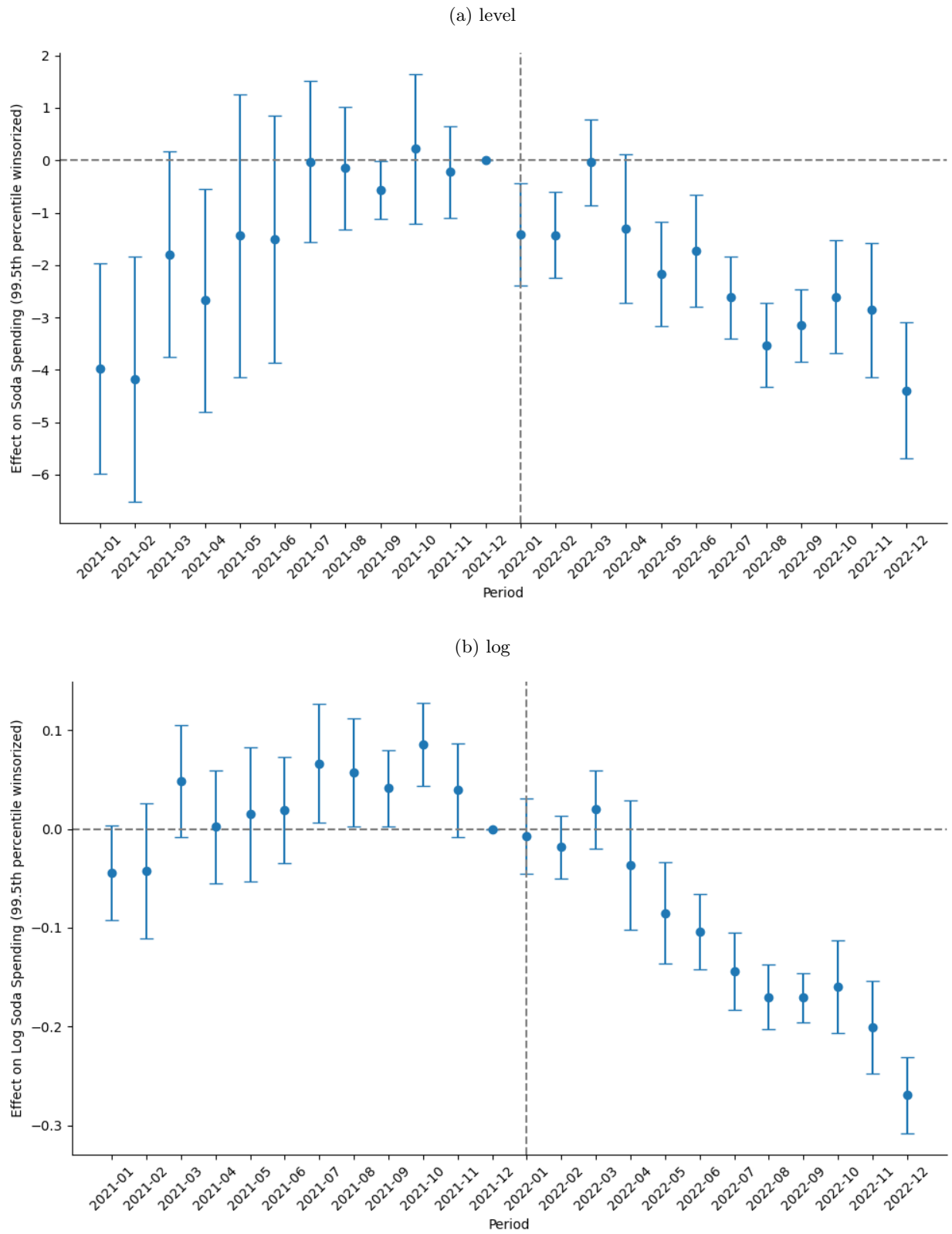


Figure 14: Event Study - DDD

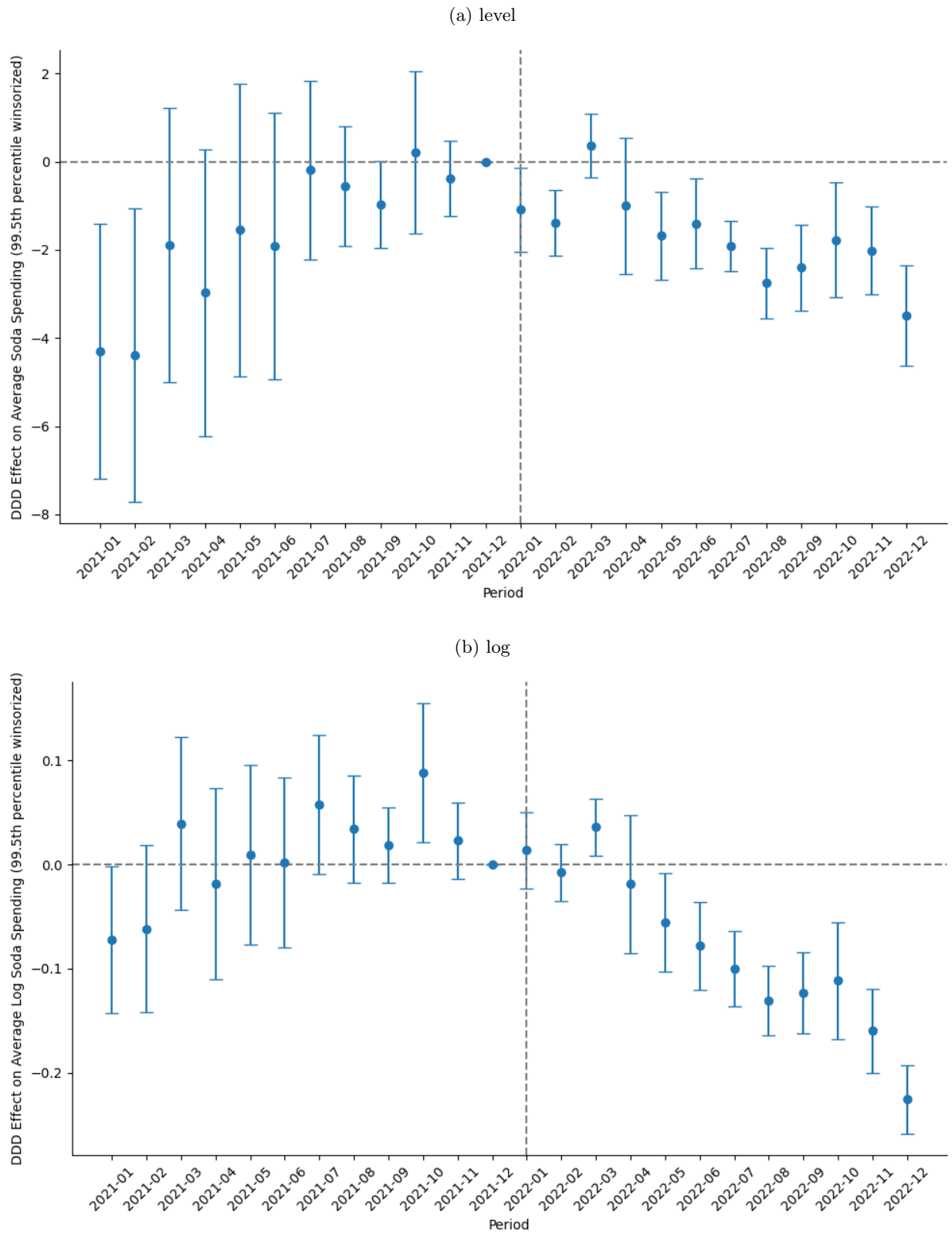


Table 1: Model Estimates

Term	TWFE	TWFE Log	TWFE	TWFE Log	DDD	DDD Log
Post	4.4167*** (0.3244)	0.2281*** (0.0124)	5.3247*** (0.6180)	0.2819*** (0.0250)	4.5535*** (0.2959)	0.2362*** (0.0118)
State \times Post	0.8045 (0.7158)	0.0391 (0.0273)				
SNAP \times Post			-0.9572* (0.5402)	-0.1364*** (0.0178)		
State \times SNAP \times Post					-0.1860 (0.9075)	-0.0907*** (0.0194)
N	6,849,036	6,849,036	1,136,859	1,136,859	6,849,036	6,849,036
R^2	0.0102	0.0096	0.0121	0.0123	0.0102	0.0096
User FE	Yes	Yes	Yes	Yes	Yes	Yes
Period FE	No	No	No	No	No	No
SE Cluster	state	state	state	state	state	state