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

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September 21, 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 ...

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

2. Figures: Event Studies

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

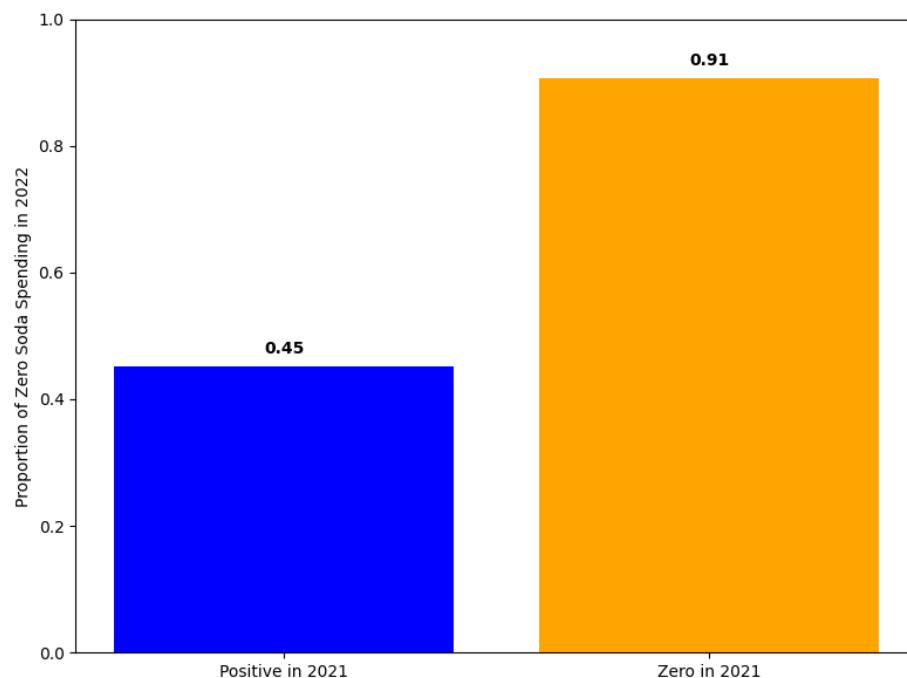3. Tables

   - TWFE/DDD Model Estimates

Figure 1: Proportion of households with 0 soda consumption conditional on Whether 0 consumption in previous year
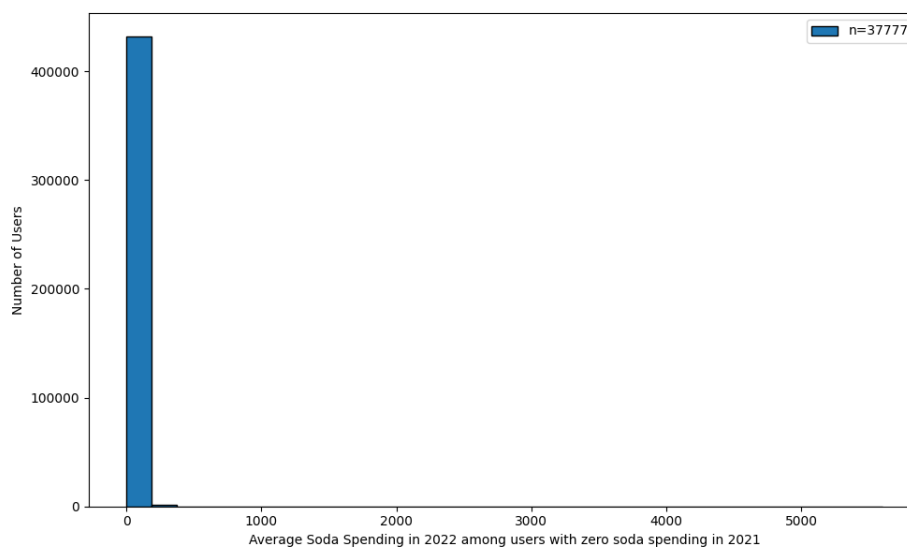

Figure 2: Number of Household with Positive consumption given 0 consumption in previous year

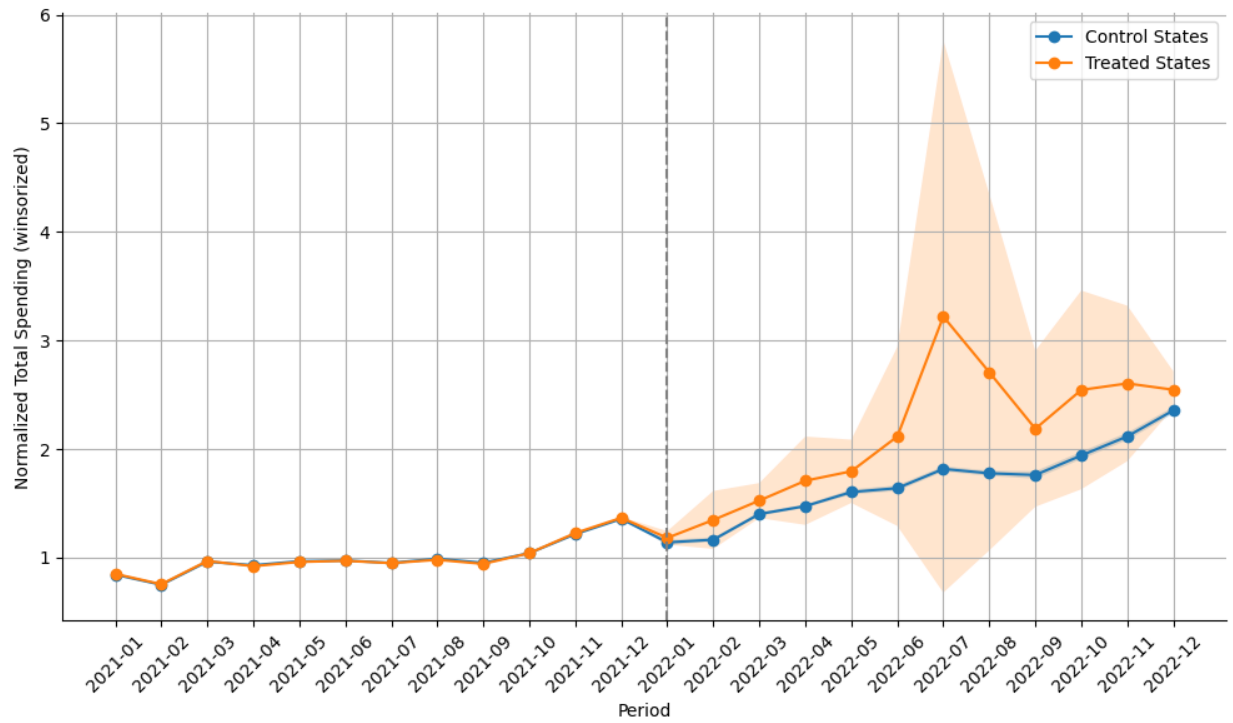# Figure 3: Monthly Average of Total Spending

(a) Normalized

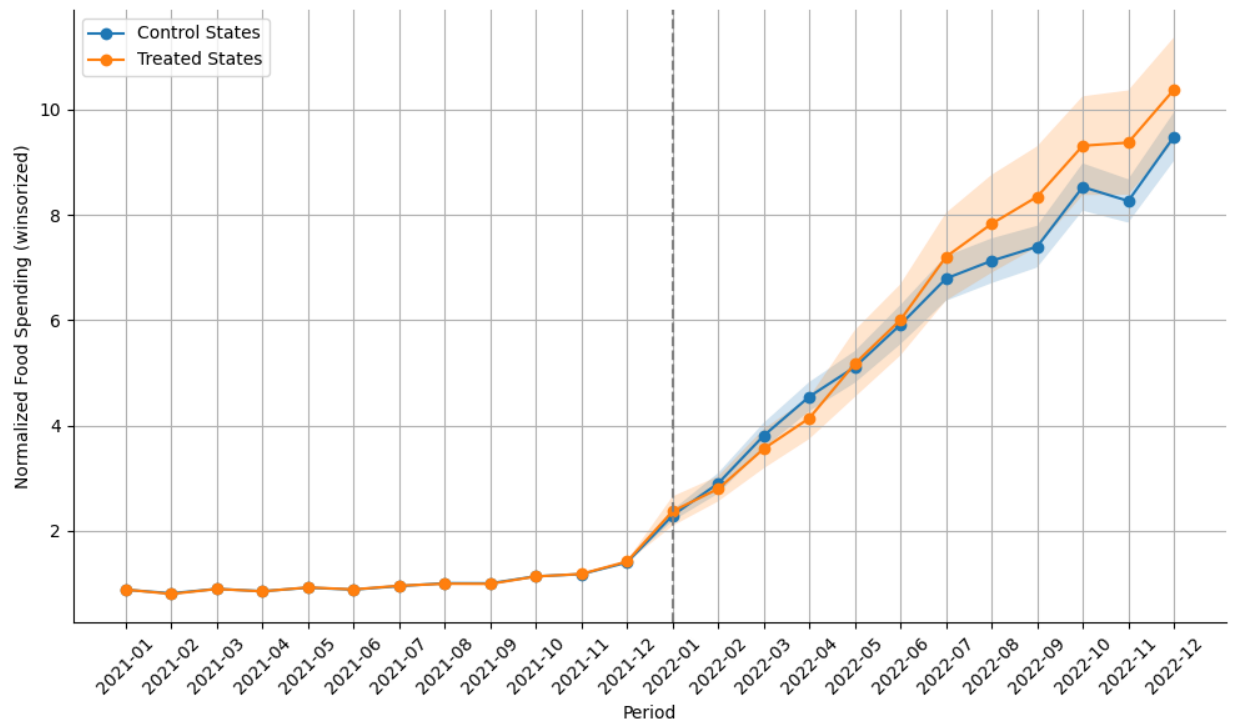Figure 4: Monthly Average of Food Spending

(a) Normalized

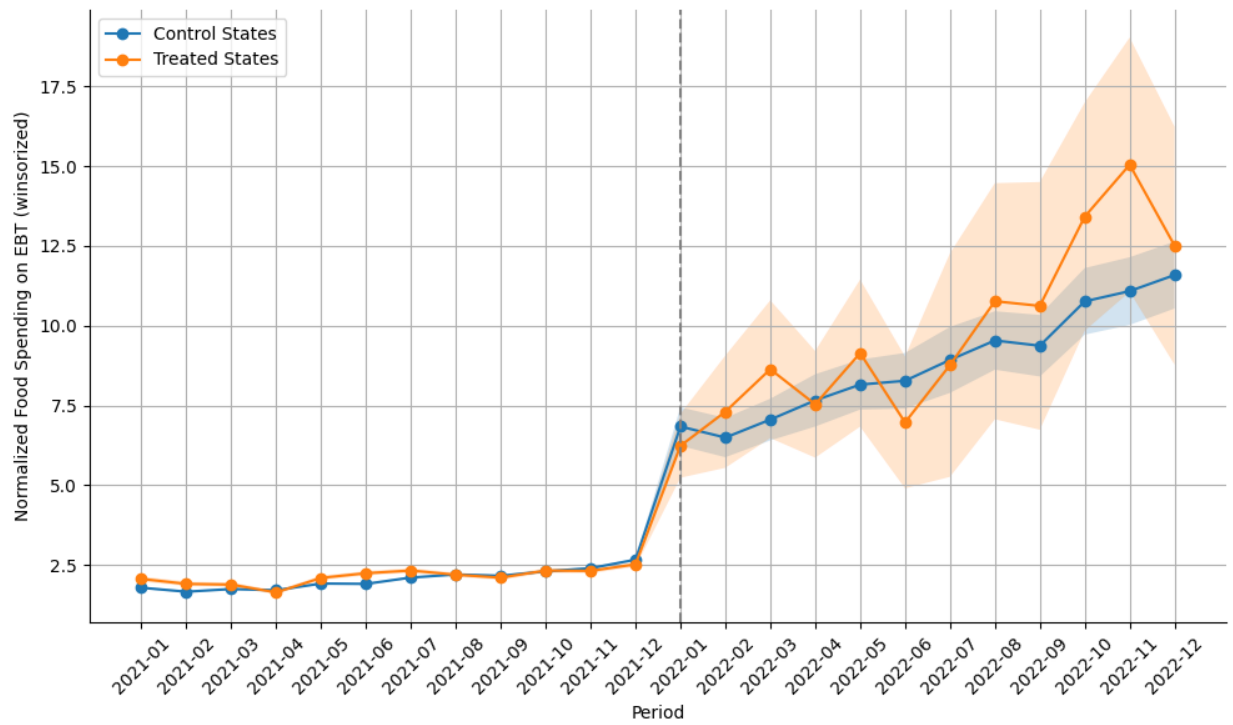Figure 5: Monthly Average of Food Spending on EBT

(a) Normalized

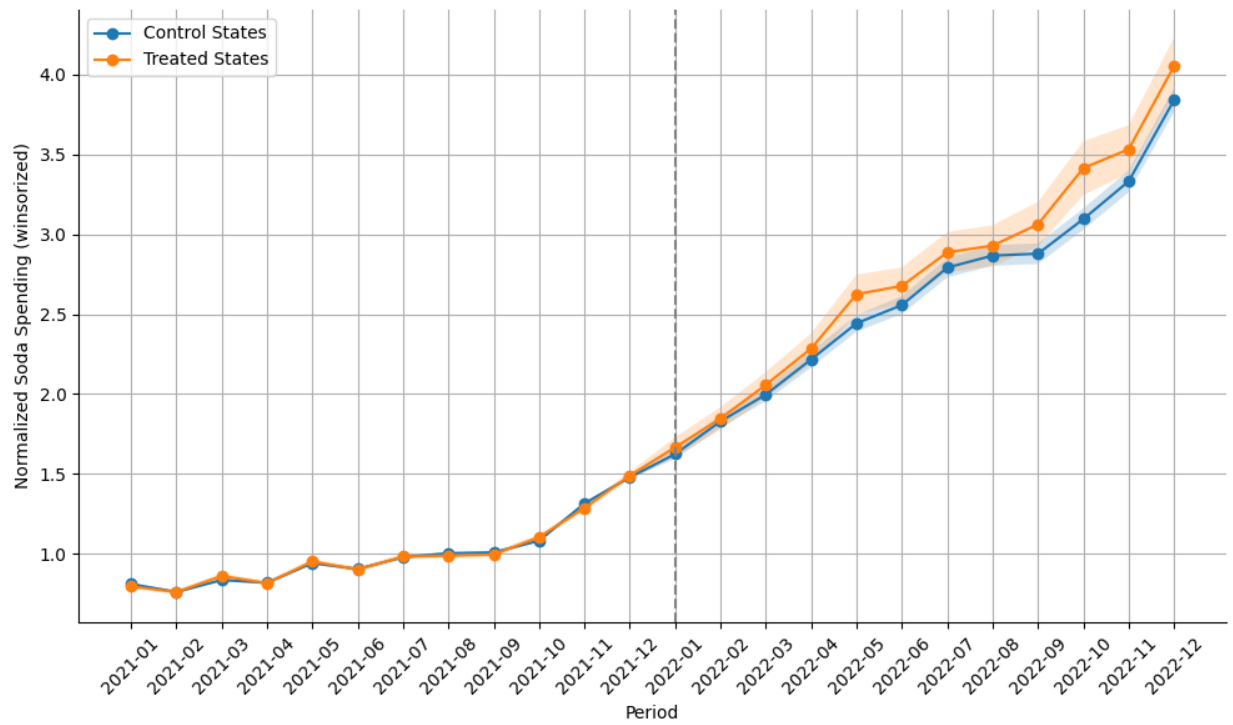Figure 6: Monthly Average of Soda Spending

(a) Normalized

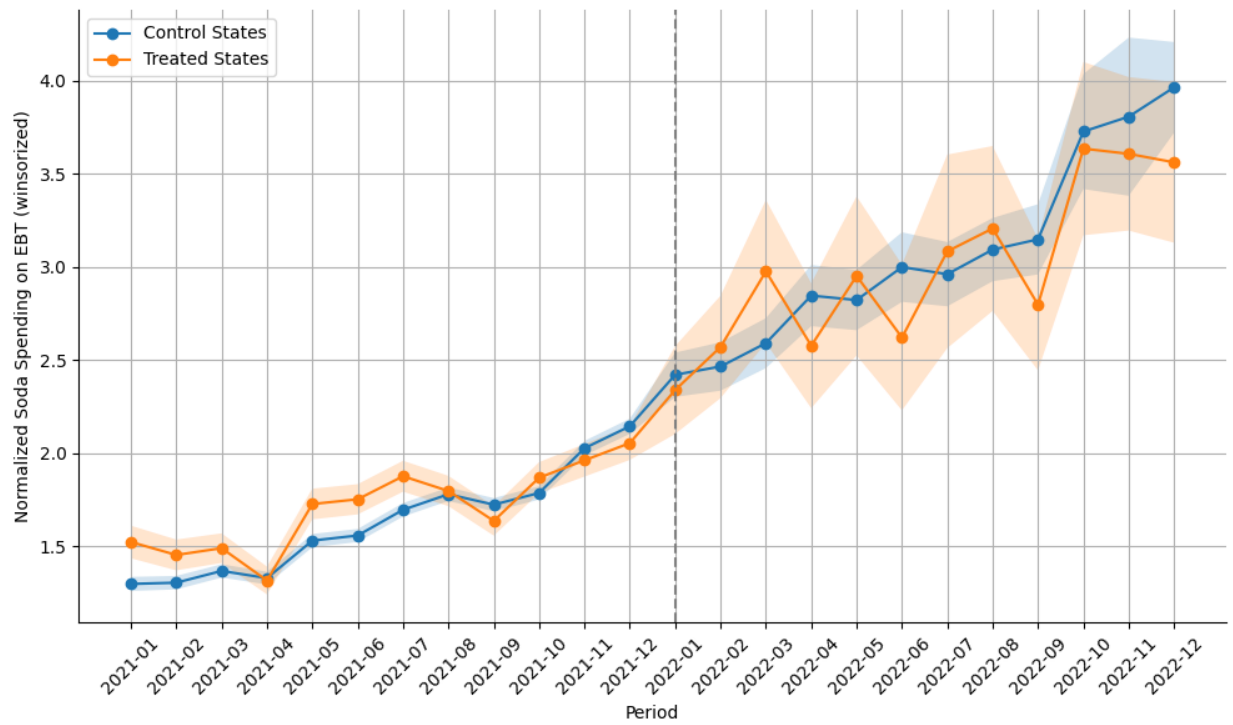Figure 7: Monthly Average of Soda Spending on EBT

(a) Normalized

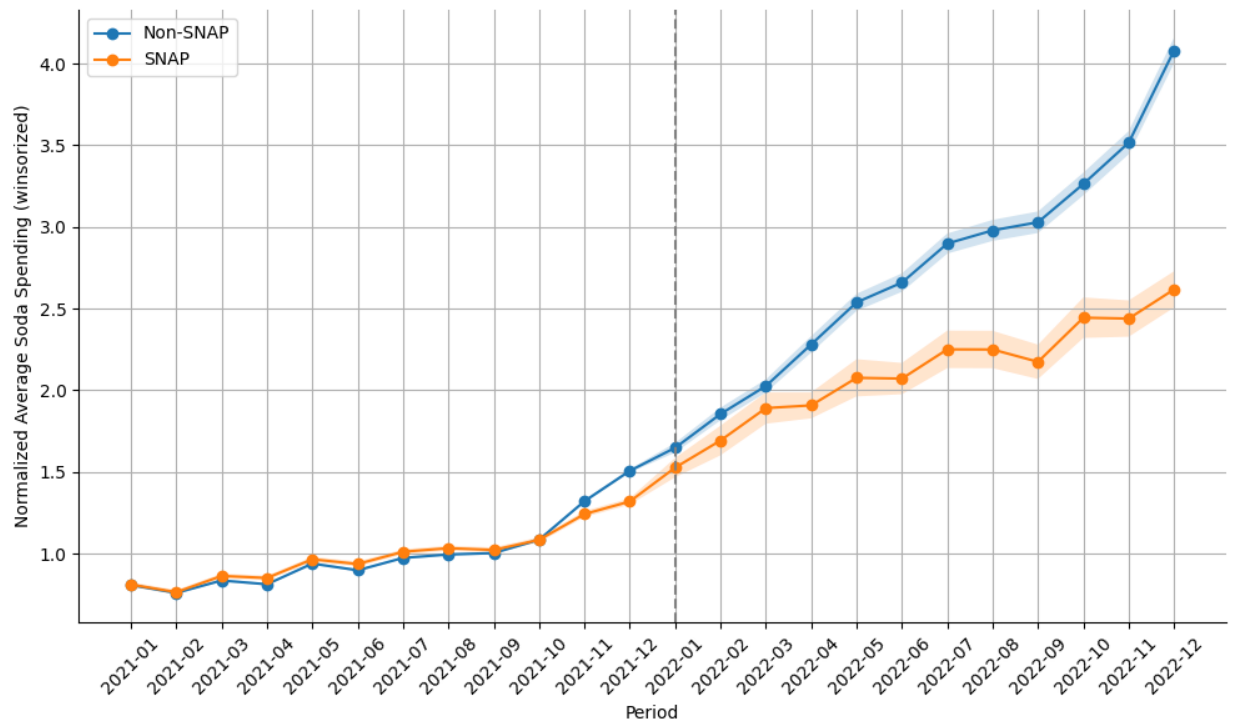Figure 8: Monthly Average of Soda Spending by SNAP/Non-SNAP

(a) Normalized

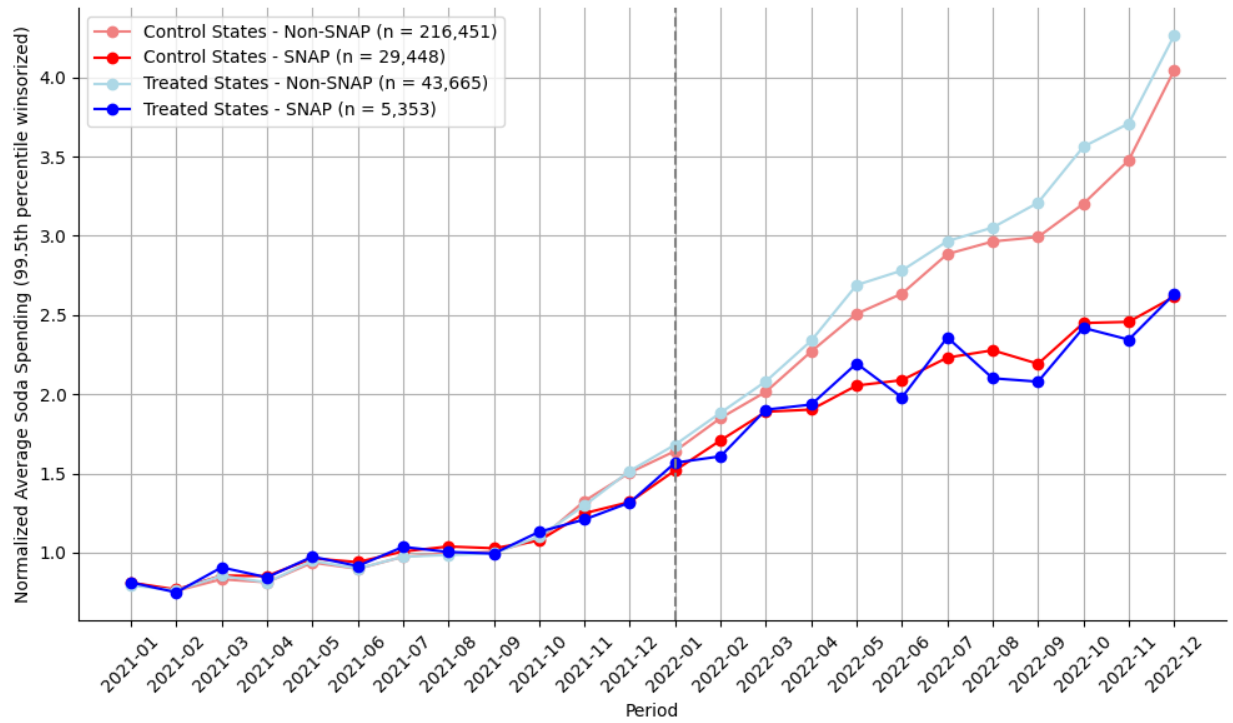Figure 9: Monthly Average of Soda Spending by SNAP × state

(a) Normalized

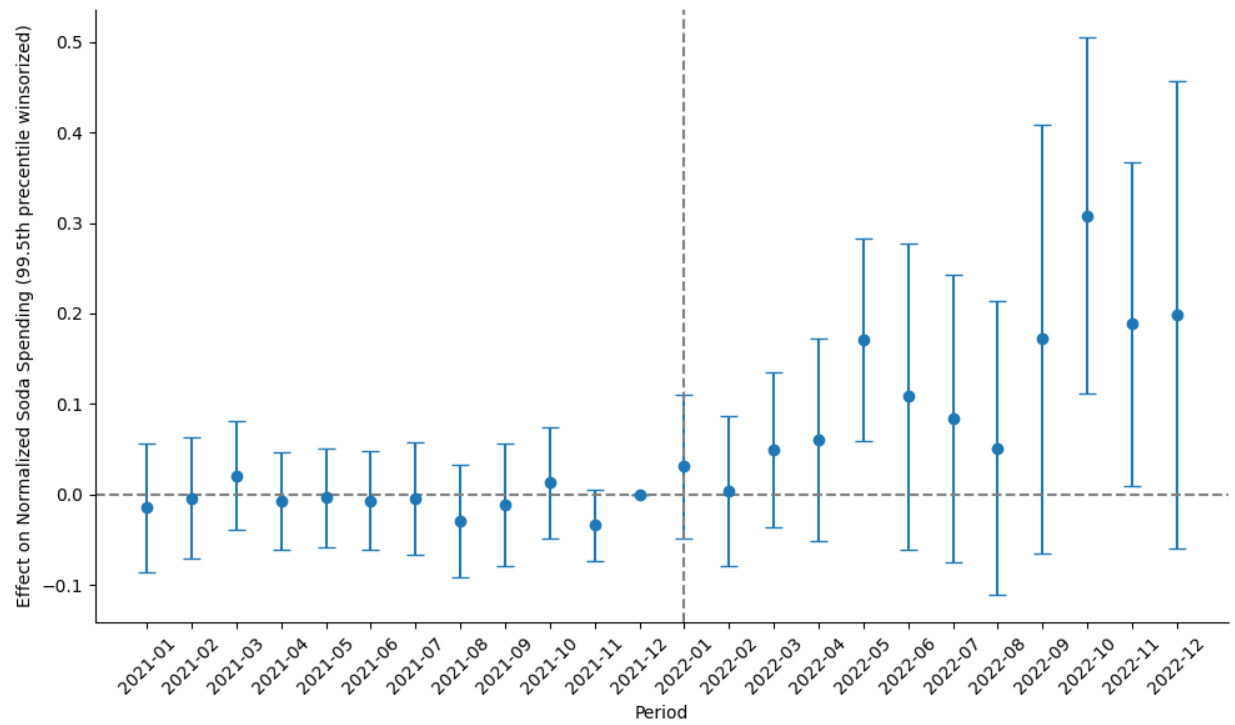## Figure 10: Event Study - TWFE

(a) Normalized

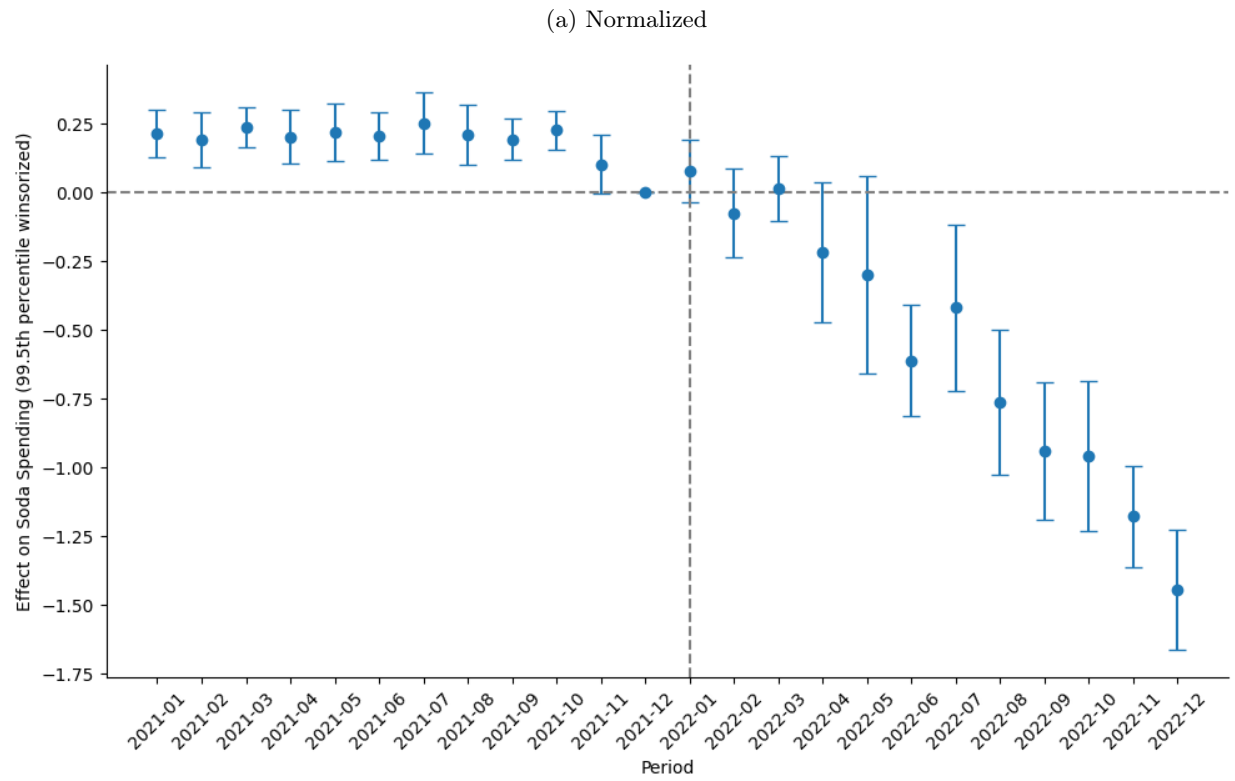Figure 11: Event Study - TWFE (Treatment Assignment = SNAP/Non-SNAP) within treated states

(a) Normalized

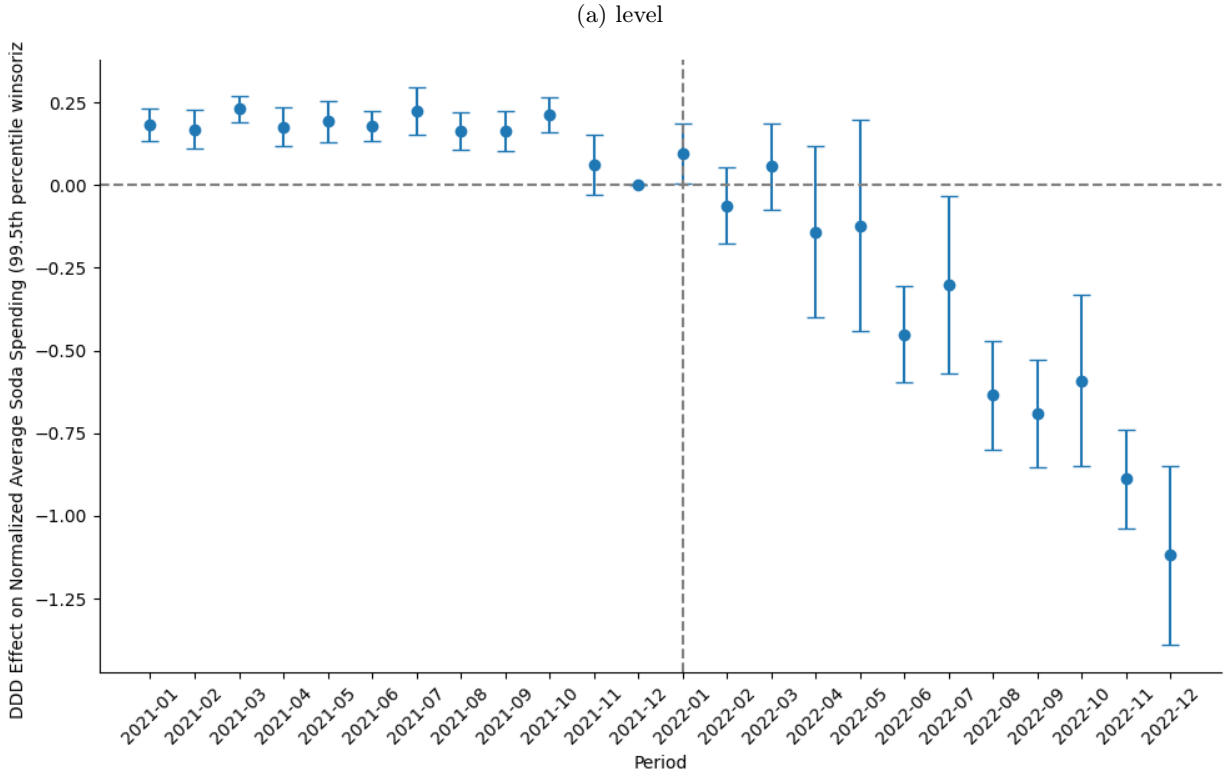## Figure 12: Event Study - DDD

(a) level

Table 1: Model Estimates

Term	TWFE	TWFE (SNAP)	DDD
Post	1.5892***	1.8101***	1.6223***
	(0.0301)	(0.0678)	(0.0340)
State × Post	0.1247*		
	(0.0679)		
SNAP × Post		-0.7500***	
		(0.1006)	
State × SNAP × Post			-0.5622***
			(0.0756)
N	5,435,110	914,314	5,435,110
R^2	0.0098	0.0117	0.0098
User FE	Yes	Yes	Yes
Period FE	No	No	No
SE Cluster	state	state	state