Issue # 7: Numerator Data - Descriptive Statistics 2023-2024

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This Write-up contains tables and plots for the descriptive analysis 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.

1. Tables

- FAH/FAFH department codes (less granular grouping) and soda category (more granular grouping) codes
- Number of users by state-year
- Demographics by treatment status
- Spending by treatment status
- Soda spending by treatment status
- Food and soda spending percentiles

2. Figures: Distribution of ...

- proportion of food spending out of total spending
- proportion of FAH/FAFH spending out of total food spending
- proportion of FAH/FAFH on SNAP out of SNAP spending
- soda spending/winsorized spending
- Proportion of soda spending out of total food spending
- proportion of soda on SNAP out of total SNAP spending
- proportion soda at home/away from home

Table 1: Food at Home vs. Food Away from Home Categories

Food at Home	Food Away from Home
Snack	Shelf Stable Meals
Canned	Deli & Prepared Foods
Dairy	LSR Beverages
Beverages	LSR Breakfast
Alcohol Beverages	LSR Snack & Sides
Packaged Bakery (Bread & Alternatives)	LSR Sauces & Condiments
Condiments	Resto Beverages
Frozen Foods	LSR Italian
Candy (Snacks)	LSR Sandwiches & Wraps
Meat	LSR Salads
Seafood & Fish	LSR Mexican
Breakfast	LSR Entrees
In-Store Bakery (Bread & Alternatives)	LSR Mexican
Herbs & Spices	
Balanced Nutrition and Snacks	
Cooking, Food & Beverages	
Cannabis Beverages	
Baking & Cooking	
Cake Supplies	
Kitchen & Dining	
Pasta & Noodles	
Beans & Grains	
Refrigerated Foods	

Table 2: Soda Categories

Soda Category

LSR Citrus & Berry Soda
Citrus & Berry Soda
Pepper & Skipper Soda
Club Soda
Root Beer & Cream Soda
LSR Pepper-Style Soda
LSR Root Beer & Cream Soda
Specialty & Natural Soda

Table 3: Number of Users in Affected and Unaffected States

State	2023	2024
Household affected in Jan 2026		
FL	15629	16433
IA	2130	2233
ID	920	974
IN	4921	5172
LA	2731	2852
NE	1335	1385
OK	2107	2194
UT	1556	1640
WV	1321	1367
Subtotal	32650	34250
Household affected after Jan 2026		
AK	401	433
CO	2968	3149
TX	16750	17583
Subtotal	20119	21165
Treated States	52769	55415
Control States	146803	154281
Total	199572	209696

Table 4: User-Month Panel - Demographics

		Mean (SD)		Min	Max
	Treated States	Control States	Total		
Income	84765.04 (62529.83)	90797.79 (65926.64)	89814.82 (65423.14)	10000.00	275000.00
Household Size	2.74 (1.45)	2.82 (1.48)	2.80 (1.47)	1.00	7.00
Age	50.82 (13.72)	49.01 (13.56)	49.30 (13.60)	19.00	67.50
Married	0.59 (0.49)	0.56 (0.50)	0.57 (0.50)	0.00	1.00
Education (years)	13.85 (1.32)	13.90 (1.35)	13.89 (1.34)	10.00	16.00
White	$0.74 \\ (0.44)$	$0.67 \\ (0.47)$	0.68 (0.46)	0.00	1.00
Black	$0.09 \\ (0.29)$	0.11 (0.32)	0.11 (0.31)	0.00	1.00
Asian	$0.02 \\ (0.15)$	0.07 (0.25)	0.06 (0.24)	0.00	1.00
Hispanic	0.13 (0.34)	0.12 (0.33)	0.13 (0.33)	0.00	1.00
Ever Child Number of States Number of Users	0.22 (0.42) 9 34,384	0.24 (0.43) 46 $176,074$	0.24 (0.43) 55 $210,458$	0.00	1.00

Notes: NJ and NH have no data points. Income's 'less than 20000' category is coded as 10000, and 'more than 250000' is coded as 275000. Other income buckets are coded as the mean of a bucket. Education's 'advanced' category is coded as 16, and 'less than high school' is coded as 10.

Table 5: User-Month Panel - Spending

		Mean (SD)		Min	Max
	Treated States	Control States	Total		
Food Spending	625.36 (645.24)	604.35 (669.35)	607.77 (665.53)	0.00	47053.16
Total Spending	2698.10 (2469.73)	2675.84 (2469.70)	2679.47 (2469.72)	0.00	205170.24
Prop. of Food Spending	0.26 (0.18)	0.25 (0.18)	0.25 (0.18)	0.00	1.00
Prop. of FAH Spending	0.93 (0.10)	0.93 (0.11)	0.93 (0.11)	0.00	1.00
Prop. of FAFH Spending	0.07 (0.10)	0.07 (0.11)	0.07 (0.11)	0.00	1.00
Prop of Food on EBT	0.33 (0.31)	0.33 (0.32)	0.33 (0.32)	0.00	1.00
Prop. of FAH on EBT	0.95 (0.12)	0.94 (0.13)	0.94 (0.13)	0.00	1.00
Prop. of FAFH on EBT	$0.05 \\ (0.12)$	0.06 (0.13)	0.06 (0.13)	0.00	1.00
Ever SNAP Number of States	$0.15 \\ (0.35) \\ 9$	0.16 (0.37) 46	0.16 (0.37) 55	0.00	1.00
Number of Users	34,384	176,074	210,458		

Notes: Prop. of food spending is calculated out of total spending. Prop. of FAH/FAFH spending and food on SNAP is calculated out of total food spending. Prop. of FAH/FAFH on SNAP is calculated out of total SNAP spending. Means are calcuated by averaging users' monthly spending/proportion, pooled over time and users. No winsorization.

Table 6: User-Month Panel - Soda Spending

	Mean (SD)			Min	Max
	Treated States	Control States	Total		
Soda Spending	11.89	10.95	11.10	0.00	2890.20
Soda Spending	(32.10)	(30.57)	(30.83)	0.00	2000.20
	0.00	0.00	0.00		
Prop. of Soda Spending	0.02	0.02	0.02	0.00	1.00
	(0.06)	(0.06)	(0.06)		
	1.00	1.00	1.00		
Prop. of Soda FAH Spending	(0.01)	(0.01)	(0.01)	0.00	1.00
	()	()	()		
	0.00	0.00	0.00	0.00	1.00
Prop. of Soda FAFH Spending	(0.01)	(0.01)	(0.01)		
Prop of Soda on EBT	0.03	0.03	0.03	0.00	1.00
Trop of Soda on EBT	(0.10)	(0.10)	(0.10)	0.00	1.00
Prop of Soda on EBT	0.31	0.31	0.31	0.00	1.00
out of Total Soda Spending	(0.41)	(0.41)	(0.41)		
Number of Hoors	24 204	176 074	210 450		
Number of Users	34,384	176,074	210,458		

Notes: Prop. of soda spending is calculated out of total food spending. Prop. of soda FAH/FAFH spending is calculated out of total food spending. Prop. of soda on SNAP is calculated out of total SNAP spending. Means are calcuated by averaging users' monthly spending/proportion, pooled over time and users. No winsorization.

Table 7: User-Month Panel - Food Spending Percentiles

percentile	2023	2024
50%	402.18	449.12
60	524.62	594.48
70%	675.68	780.16
80%	879.70	1044.46
90%	1217.62	1519.24
95%	1555.54	2038.36
96%	1665.20	2217.00
97%	1807.34	2457.20
98%	2013.40	2809.64
99%	2392.11	3452.26
99.5%	2822.90	4147.75
100%	34672.40	47053.16

Table 8: User-Month Panel - Soda Spending Percentiles

percentile	2023	2024
50%	0.00	0.00
60%	0.00	0.00
70%	4.56	4.56
80%	13.28	14.56
90%	31.38	37.16
95%	52.94	65.52
96%	61.10	75.96
97%	71.90	90.04
98%	88.72	113.82
99%	120.64	159.40
99.5%	156.61	212.36
100%	1909.32	2890.20

Figure 1: Proportion of Food Spending

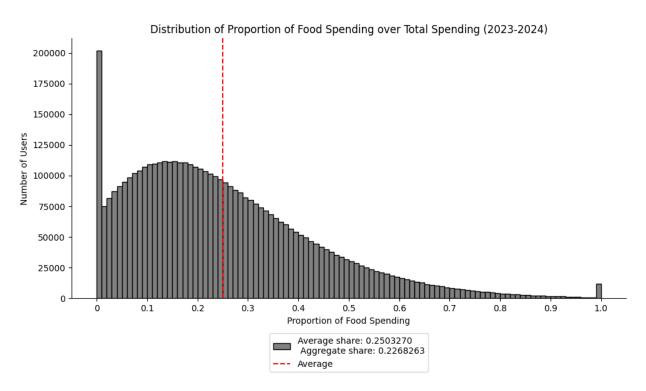


Figure 2: Proportion of FAH/FAFH Spending out of total food spending

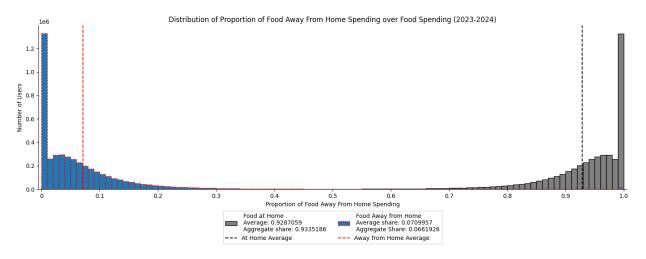
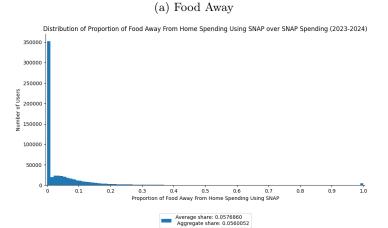


Figure 3: Proportion of FAH/FAFH SNAP Spending out of total SNAP spending



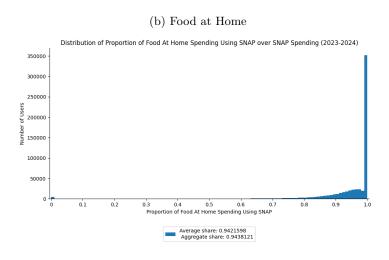
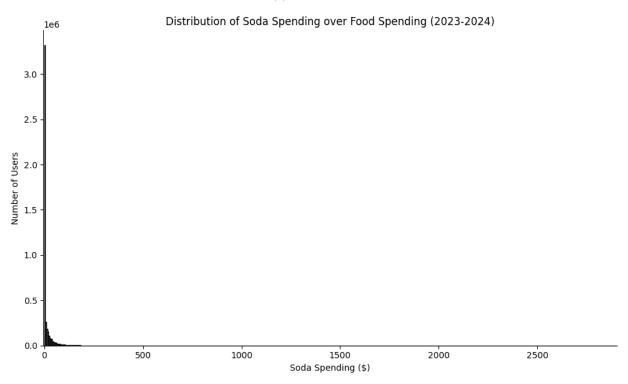


Figure 4: Soda Spending

(a) unwinsorized



(b) winsorized at 99.5%

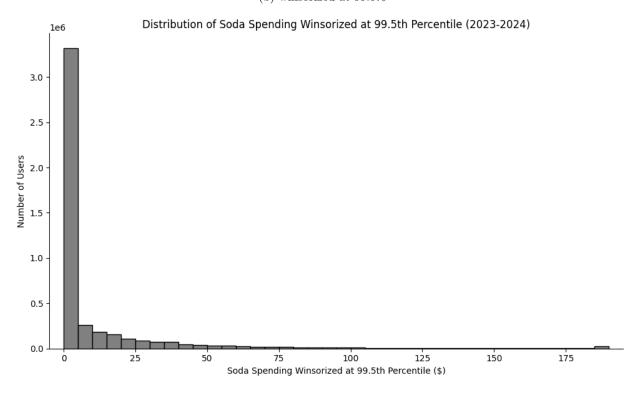


Figure 5: Proportion of Soda Spending out of total food spending

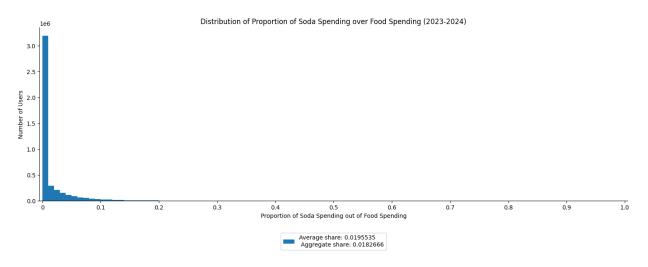


Figure 6: Proportion of Soda SNAP Spending out of total SNAP spending

