

Income Shocks and Consumer Response: Evidence from the 2018-19 US Government Shutdown

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Section 1

Introduction

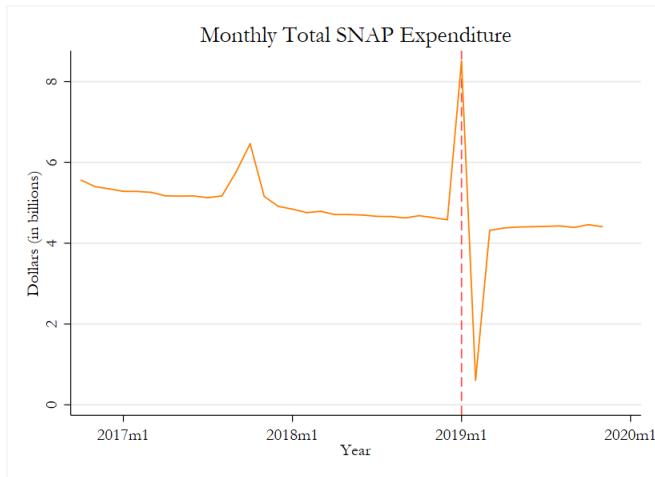
How do individuals respond to income shocks?

- Keynes' *marginal propensity to consume* vs. Friedman's *Permanent Income Hypothesis (PIH)*
- In theory, PIH tells us:
 - **Permanent** shocks affect average consumption, while **transitory** shocks are smoothed over the entire lifetime
 - If there is a **liquidity** shock (timing of payments), so long as the total stream of payments stays the same, consumption in each time period should not change
- In practice: credit constraints, “weakness of will”, and impatience may affect individuals' ability to smooth consumption over their lifetime and across income shocks

This study

- **Research question:** How do individuals respond to positive liquidity shocks (transfers of payments from later to earlier periods)?
- **Approach:** Leverage an exogenous shock on a stream of payments by looking at Supplemental Nutrition Assistance Program (SNAP) recipients during the 2018-19 US government shutdown

SNAP disruption in the data



Data source: USDA SNAP Data Tables.

Contributions

1. Evidence on positive liquidity shock

- Previous work → negative liquidity shocks (government workers during the 2013 government shutdown [Baker and Yannelis, 2017](#); [Gelman et al. 2019](#); literature review [Jappelli and Pistaferri review \(2010\)](#))

2. Evidence on disruption in SNAP payments

- Benefits of SNAP for users documented extensively: improvements in food security ([USDA 2013](#)), reported health ([Gregory and Deb, 2015](#)), adherence to medication among the elderly ([Srinivasan and Pooler, 2017](#)), and long-term outcomes for children in families that receive SNAP ([Hoynes, Schanzenbach, and Almond, 2016](#)); reduction in health care costs ([Berkowitz, Seligman, and Basu, 2017](#))

Contributions (cont.)

3. Evidence on consumption behavior of SNAP beneficiaries

- Changes in consumption and store P [Hastings and Washington \(2010\)](#); MPC for SNAP benefits [Hastings and Shapiro \(2018\)](#); changes in food nutritional content over the SNAP cycle [Hastings, Kessler, and Shapiro \(2019\)](#); financial planning strategies [Kinsey et al. \(2019\)](#); [Shapiro \(2005\)](#), [Wild and Ranney \(2000\)](#)

Section 2

Setting and institutional details

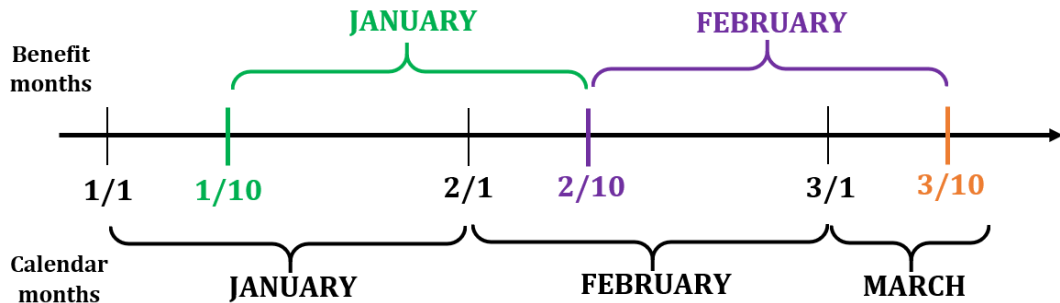
SNAP administrative details

- Supplemental Nutrition Assistance Program (SNAP, aka “food stamps”): monthly assistance to low-income families to make certain food purchases
- Administration of SNAP benefits:
 - Federal gov’t sends benefits to individual states, who then transfer them to SNAP recipients’ Electronic Benefits Transfer (EBT) cards (similar to debit cards)
 - Households (HH) are eligible for SNAP if income is below the threshold for their HH size and make-up (thresholds higher for HH with elderly or disabled members); monthly benefits capped by HH size
- SNAP can only be used to purchase select food items [List of foods](#)
- 2018: \$61 billion to administer, providing support to over 40 million individuals and 20 million HHs. ([USDA SNAP Data Tables](#))

Household spending patterns

- The key word is “**supplemental**”
- HHs typically use up half of benefits within 1st week, over 3/4 by end of 2nd week, over 90% by end of 3rd week ([DOA, 2011](#))
- To cover end-of-cycle (EOC) gap, many HHs supplement SNAP benefits with social networks, food pantries, and other services

SNAP benefits timeline



NB: Exact day of receipt of SNAP benefits varies by state, but each beneficiary will receive the benefits on the same day of every month.

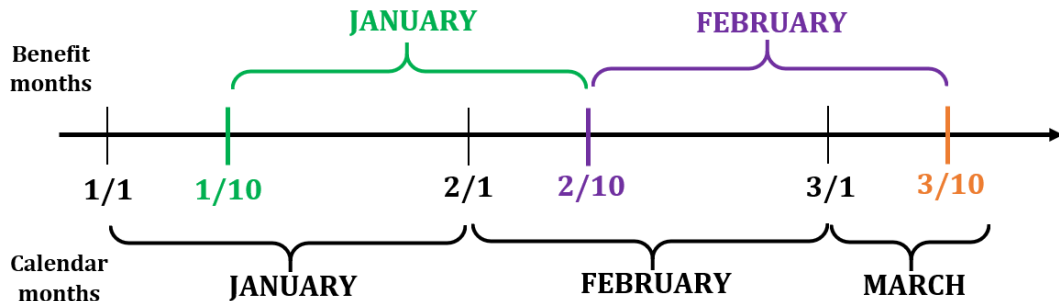
2018-19 US Government Shutdown

- The United States federal gov't shut down from December 22, 2018 until January 25, 2019
- Longest gov't shutdown in US history that caused disruptions in the operation of the federal government, including several benefit programs like SNAP

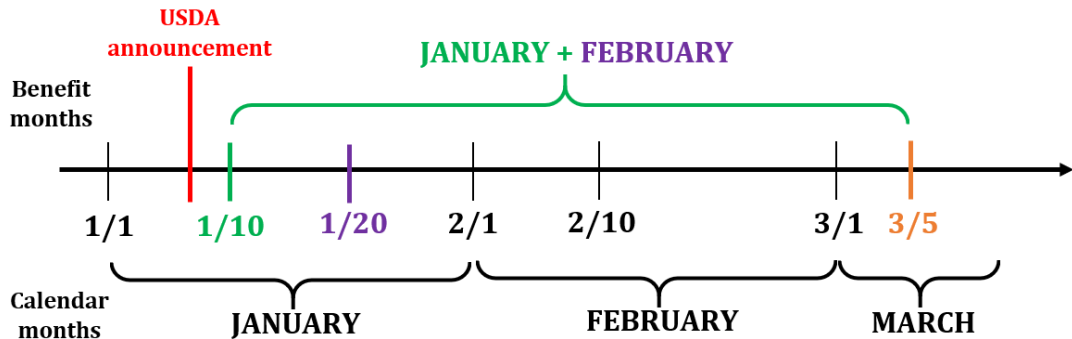
Disruption to SNAP benefits

- Uncertainty about when fed. gov't would reopen → on January 8 USDA instructed states to pay out February benefits before January 20
 - Decision based on a pre-established budget provision
- After federal gov't reopened at end of January, states had already paid out February benefits and did not pay out additional benefits in February → gap between benefit payments
- At least 35 states adjusted March payment schedules to reduce benefits gap; some additionally adjusted April payment schedules

SNAP benefits timeline



Disruption to the SNAP benefits timeline



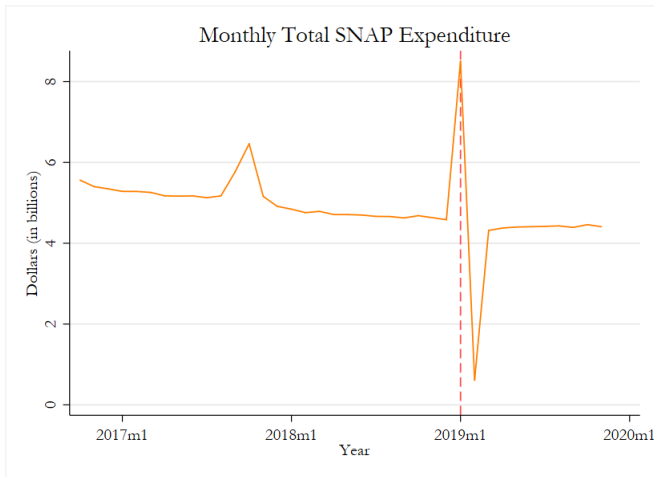
Impact of the SNAP benefits disruption

- Despite adjustments to benefit payout dates, HHs could still face up to 50 days between SNAP payments
- HHs may use early February payments to cover January EOC gap, at the cost of worsening end-of-February EOC gap
- Barriers to effectively budgeting benefits during the government shutdown:
 - Lack of information about change in payment schedule
 - Confusion and misinformation
 - HH income fluctuations or unexpected expenses (NB: not unique to shutdown period)
 - Differing abilities among SNAP participants

Section 3

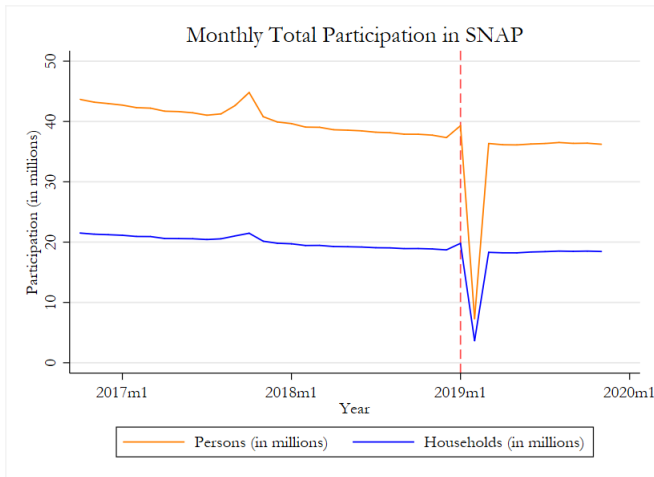
Proposed analysis and data

SNAP disruption in the data



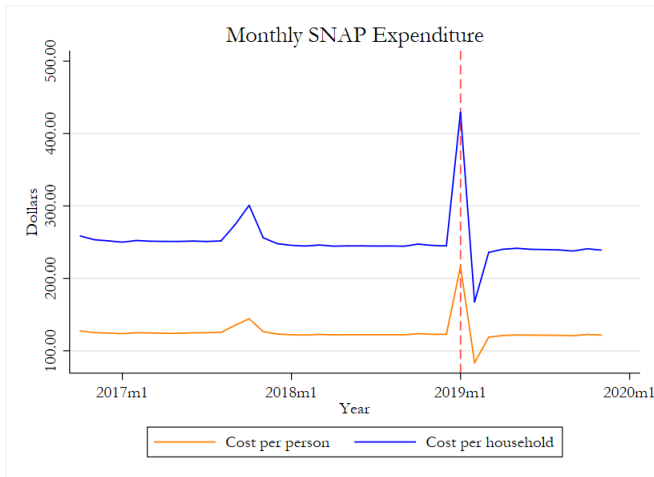
Data source: USDA SNAP Data Tables.

SNAP disruption in the data



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SNAP disruption in the data



Data source: USDA SNAP Data Tables.

Potential questions to explore

- 1 Do HHs ignore early distribution of February benefits?
- 2 Do HHs use early-distributed funds to close EOC gap of January benefits? If so, how do HHs use income that would have been used to cover EOC gap otherwise?
 - E.g., make additional payment on credit card debt/mortgage, doctor visit/other health spending
- 3 How do HH consumption decisions (e.g., types or quantity of goods purchased) change in response to the early distribution of February benefits?
- 4 Does the disruption increase HH reliance on other benefit programs or community resources (e.g., TANF, free meal programs for students, food pantries, etc.)?

Current analysis

- Biggest challenge: linking SNAP benefit information with consumer expenditure
- **Proposed analysis:** use the Nielsen Consumer Panel Data to see how aggregate consumption changed in counties/zip codes that have a lower/higher share of individuals receiving SNAP benefits

Pros and cons

- High-frequency, very detailed data on consumption
- Do not see individual-level income shocks and changes to consumption
- Need to control for other exposure to government shutdown (e.g., share population federal workers who may have been furloughed)

Other options

- NYC data on SNAP beneficiaries – application in progress
- Hope to link this to data on other social benefit use (e.g., TANF applications and benefits, access and use of free meals at schools, Medicaid use, etc.)
- Data on food pantry use
- Other suggestions?

Thank you!

SNAP eligible goods

- SNAP benefits **can** be used to purchase the following:
 - Fruits and vegetables; meat, poultry, and fish; dairy products (including baby formula);
 - Breads and cereals
 - Snack foods and non-alcoholic beverages
 - Seeds and plants, which produce food for the household to eat
- SNAP benefits **cannot** be used to purchase the following:
 - Alcoholic beverages or tobacco
 - Vitamins, medicines, supplements, or anything with a “Supplement Facts” label
 - Live animals (with some exceptions for consumption)
 - Prepared Foods fit for immediate consumption or hot foods
 - Any non-food items such as pet foods, cleaning supplies, hygiene items, or cosmetics

[Back](#)