Do State Supplemental Nutrition Assistance Program Policies affect Older Adults and People with Disabilities?

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March 25, 2026

Abstract:
This study examines the effect of state SNAP policies on food insecurity and access to SNAP benefits for older adults and people with disabilities. Although SNAP is a federal program, states have considerable power to choose which policies to adopt, when to adopt them, and to what extent those policies cover their population. We use state policy variation from the SNAP Policy Database and the SNAP State Options Reports along with recent difference-in-differences and event study methods that are robust to staggered, non-absorbing, and multivalued policy adoption. We find that Broad-Based Categorical Eligibility increases SNAP receipt among older adults by 3.1 percentage points (21.7%) and the Elderly Simplified Application Project increases receipt among people with disabilities by 9.3 percentage points (21%). Additionally, we find that the Combined Application Project reduces food insecurity among older adults by 2.9 percentage points (17.5%) and the Standard Medical Deduction reduces food insecurity among people with disabilities by 8.7 percentage points (18.8%). The magnitudes of these coefficients are larger for older adults and people with disabilities compared to the general population suggesting that these populations are sensitive to the state policy environment.

JEL Codes: J14, I38

Key Words: SNAP, older adults, people with disabilities, policy

Acknowledgments:
The research reported herein was performed pursuant to grant RDR18000003 from the US Social Security Administration (SSA) funded as part of the Retirement and Disability Research Consortium. The opinions and conclusions expressed are solely those of the author(s) and do not represent the opinions or policy of SSA, any agency of the Federal Government, or NBER. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of the contents of this report. Reference herein to any specific commercial product, process or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply endorsement, recommendation or favoring by the United States Government or any agency thereof. We thank members of the Economic Research Service and seminar participants at the University of Nebraska-Lincoln, the University of Kansas, and the Southern Economics Association Conference for helpful comments. Ginther acknowledges support from NIH grants 1P20GM152280.

1 Introduction

In 2018, approximately one in five households containing a member with a functional limitation indicated that they had insufficient resources to afford adequate food. For working-age people whose condition is severe enough to limit their ability to work, this statistic increases to one in three people (Coleman-Jensen 2020; Swenor, Cahill, and Samuel 2021). In fact, evidence indicates that food insecurity's connection to chronic disease is stronger than its connection to income (Gregory and Coleman-Jensen 2017). The Supplemental Nutrition Assistance Program (SNAP) is a U.S. federal program intended to help households experiencing food insecurity; in 2015, approximately eleven million individuals with a functional or work-limiting condition participated in SNAP, about one quarter of total SNAP participants at the time (Carlson, Keith-Jennings, and Chaudry 2017).

Senior citizens accounted for about 14 percent of SNAP caseloads in 2018 and this percent is expected to grow based on trends in population aging (Hodges 2021). Given that 40 percent of individuals with disabilities are also senior citizens (Carlson, Keith-Jennings, and Chaudry 2017), and that SNAP policies treat people with disabilities and older adults the same, concerns about the economic security of older adults are closely related to the same concerns about people with disabilities.

Many studies examine the economic consequences of disability and find that disability lowers earnings and employment (e.g., Autor et al. 2015) and is associated with poverty and food insecurity (e.g., Moffitt and Ribar 2016). For example, the U.S. Department of Agriculture's Economic Research Service finds that food insecurity is two to three times more prevalent among households with a working-age adult with a disability compared to those households with able-bodied working-age adults (Coleman-Jensen and Nord 2013). Further research shows that

access to SNAP broadly reduces food insecurity in the U.S. (Deb and Gregory 2016; Moffitt and Ribar 2016), however since 1996 states have had considerably more discretion over administering the SNAP program, leading to differences across states in who receives SNAP benefits (Food and Nutrition Service 2022). This state-level variation allows us to examine the causal effect of these policies on SNAP access. This study contributes to our understanding of how state SNAP policies affect older adults and people with disabilities. Most previous SNAP literature studies the general population or specifically excludes people with disabilities. Those that do focus on them are either narrow in their policy analysis or the subset of people with disabilities they include. Ours is the first study to consider the causal impact of several state policies on SNAP access for people with disabilities.

This paper uses two-way fixed effects and event study methods that are robust to the heterogenous treatment effects that are likely to exist in a complex policy environment such as SNAP policies. We find that increasing eligibility through Broad-Based Categorical Eligibility increases SNAP receipt among adults age 60 and older by 3.1 percentage points (a 21.7% increase at the mean) and simplifying the application through the Elderly Simplified Application Project increases receipt among people with disabilities by 9.3 percentage points (21%). In contrast, we find that implementing a Standard Medical Deduction (SMD) reduces SNAP participation of older adults by 2.5 percentage points (17.6% at the mean). Additionally, we find that simplifying the application through the Combined Application Project reduces food insecurity among older adults by 2.9 percentage points (17.5%) and the SMD reduces food insecurity among people with disabilities by 8.7 percentage points (18.8%). The magnitudes of these coefficients are larger for older adults and people with disabilities compared to the general population. Thus, the most vulnerable populations are the most responsive to state policy

choices, despite federal rules designed to provide broader access to older adults and people with disabilities.

The rest of this paper proceeds as follows: Section 2 provides institutional knowledge about SNAP, its policies, and eligibility rules. Section 3 reviews scholarly literature and elaborates on the contribution of this paper. Section 4 describes the data and provides descriptive statistics. Section 5 details the empirical strategy and the model. Section 6 contains the results and robustness checks. Section 7 discusses the analysis and concludes the paper.

2 The Supplemental Nutrition Assistance Program (SNAP)

2.1 Eligibility

SNAP is a federal program administered by the Food and Nutrition Service (FNS) agency of the U.S. Department of Agriculture. Its purpose is to improve food security among low-income households by providing beneficiaries with a monthly cash transfer that they can spend on food products at participating businesses. Once an individual applies for benefits, there is an initial interview and, if accepted, the individual needs to get recertified at regular intervals to maintain benefits. The individual may also need to report significant changes in income or employment status that would affect eligibility.

Characteristics such as age, ability, assets, household structure, labor force participation, and income determine SNAP eligibility. During the time period considered in this study, an individual is classified as a senior citizen if they are 60 years or older, and as a person with a disability if they are receiving payments for their disability from Social Security Disability Insurance, Supplemental Security Income (SSI), Veterans Affairs, or miscellaneous government

agencies.[1] Eligibility requirements for people with disabilities and older adults are different from the general population. In 2025, SNAP rules allow a household up to $3,000 in countable resources to be eligible, but this amount increases to $4,500 if the household contains an older adult or person with a disability. Vehicles count as an asset if used recreationally or for daily commuting, but they can be exempt if used to transport a physically disabled household member. Households consisting entirely of people with disabilities or older adults are exempt from work requirements. Finally, most households must be under both a net and gross income limit determined by their household size to be eligible, but households with older adults or members with disabilities only need to meet the net income limit (Food and Nutrition Service 2025). These all make it easier to obtain SNAP benefits for older adults and people with disabilities. Nevertheless, state policies may affect access to SNAP regardless of age or ability and thus are the focus of this paper.

2.2 Description of SNAP policies

Although SNAP is a federal program, states administer it. Since the Personal Responsibility and Work Opportunity Act passed in 1996, states have had significant leeway in establishing policies that determine SNAP access. We focus our research on policies that target or may disproportionately affect people with disabilities or older adults:

- Broad Based Categorical Eligibility (BBCE) – Households that receive benefits from TANF-funded programs may be eligible through BBCE. Under BBCE, states can increase or eliminate the asset test or increase the gross income limit. States also choose which types of

[1] The "One Big Beautiful Bill Act" passed in 2025 expanded work requirements, raising the age limit for able-bodied adults without dependents (ABAWD) from 54 to 64. Older adults aged 55–64 must now work or face a 3-month benefit limit.

households BBCE applies to, such as all households, households with dependent children, or households with dependent care expenses.

- The Elderly Simplified Application Project (ESAP) – The ESAP simplifies the entire application process for those 60 years and older or with a disability by streamlining the verification process, waiving the recertification interview, and extending benefits to 36 months.
- The Standard Medical Deduction (SMD) – States that offer the SMD allow households with older adults or members with disabilities to claim a standard deduction instead of itemizing expenses. Without it, these households would have to itemize medical expenses (over $35 per month) as a deduction.
- The Combined Application Project (CAP) – The CAP is a joint effort by the Social Security Administration, FNS, and states to improve access to nutrition for SSI recipients. It offers joint application and recertification for SNAP and SSI benefits when individuals participate in SSI (Food and Nutrition Service 2019).

3 The Effect of State Policies on SNAP Access

Many studies examine the economic consequences of disability and find that disability lowers earnings (Autor et al. 2015; Deshpande 2016; Meyer and Mok 2019), employment (Autor et al. 2015; Maestas, Mullen, and Strand 2013; Meyer and Mok 2019), and is associated with poverty (Moffitt and Ribar 2016) and food insecurity (Coleman-Jensen and Nord 2013; Moffitt and Ribar 2016; Henly, Brucker, and Coleman-Jensen 2023). People with disabilities, especially those without spouses (Autor et al. 2019), often rely on the social safety net for economic security, such as turning to other programs while waiting for disability insurance (DI) (Coe et al. 2014) and turning to DI to alleviate financial distress (Deshpande, Gross, and Su 2021).

SNAP's purpose is to help those experiencing extreme economic insecurity. Research shows that SNAP caseloads increase during economic downturns (Dickert-Conlin et al. 2021; Ganong and Liebman 2018; Ziliak, Gundersen, and Figlio 2003) and when Unemployment Insurance benefits end (Rothstein and Valletta 2017). Further research shows that access to SNAP reduces food insecurity (Deb and Gregory 2016; Moffitt and Ribar 2016) and criminal recidivism (Tuttle 2019).

There is a growing body of research that shows state SNAP policies affect access to SNAP. Within this literature there are a variety of approaches to policy analysis, ranging from studying a single SNAP policy (such as time until recertification (Kabbani and Wilde 2003), simplifying the recertification process (Gray 2019), outreach efforts (Finkelstein and Notowidigo 2019), or work requirements (Gray et al. 2023; Harris 2018; Brantley, Pillai, and Ku 2020)), to multiple policies simultaneously, to using an index of SNAP policies.

Some authors choose to study multiple policies simultaneously. Early work by Hanratty (2006) studies the effects of reduced recertification times, simplified reporting, and vehicle exemption policies. Ratcliffe, McKernan, and Finegold (2008) study the effect of 15 SNAP policies along with other federal policies aimed at low-income individuals and Ziliak (2013) studies 12 SNAP policies along with other policies, demographics, and economic conditions, while Dickert-Conlin et al. (2021) studies the effects of 11 policies. More recent work studies Broad-Based Categorical Eligibility (BBCE) alongside the Combined Application Project (CAP), the Elderly Simplified Application Project (ESAP), and the standard medical deduction (SMD) (though they note their analysis is not causal) (Dean, Gothro, and Bleiweiss-Sande 2022).

Several authors adopt a policy index approach to studying SNAP policies. Ganong and Liebman (2018) use eight policies related to increasing eligibility and easing 'transaction costs'

(such as the CAP or ESAP) and find these policies increase enrollment. Stacy, Tiehen, and Marquardt (2018) also use policy indices to measure the effect of state policies on SNAP usage, though they differ and expand their index construction. These authors use the ten most significant SNAP policies based on previous work to construct their index. They find that increases in the index predict increases in SNAP participation and note the index could be useful as an instrument, which authors such as Han (2020) use to study the effect of SNAP policies on school lunch and Women, Infants, and Children (WIC) participation.

Johnson-Motoyama et al. (2022) develop an income-generosity policy index that includes states offering a more generous income test under BBCE, transitional SNAP benefits, simplified reporting, and excluding child support from income. They find that an increase in the state income-generosity policy index increases SNAP caseloads for families with children.

Finally, Jones et al. (2022) study the effect of SNAP policies on SNAP participation focusing on older adults. They use the Stacy, Tiehen, and Marquardt (2018) policy index and construct a simulated eligibility variable as a different approach to measuring the effect of policies on participation. Using data from the Current Population Survey, they find that expanding eligibility increases participation among seniors and non-seniors, but the effect is stronger for non-seniors. They also find little evidence that outreach policies and transaction cost policies affect participation. The authors acknowledge that the SNAP policies they analyze also apply to people with disabilities but do not analyze outcomes for them. Table 1 compares these policy indices used in previous studies.

However, recent methodology research finds that including multiple policies of interest can bias each other (de Chaisemartin and D'Haultfœuille 2023) and non-binary treatment can increase biases (de Chaisemartin and D'Haultfœuille 2020). Perhaps due to this and the complex

policy environment, the works listed above find different results of the effects of state policies on SNAP participation.

This study builds upon existing literature in two dimensions. First, it contributes to our understanding of how SNAP policies affect people with disabilities. While we include older adults in our analysis, a growing literature explores how SNAP policies affect them, particularly with respect to food security. The disability literature has done little to consider the effect of SNAP policies on people with disabilities, and what literature there is tends to focus on how the federal programs interact, such as how access to SNAP affects SSI and SSDI applications (Lindner and Nichols 2014; Stith 2022) or how DI wait times affect SNAP applications (Coe et al. 2014). Similarly, the SNAP literature has done little to consider how policies affect access for people with disabilities despite SNAP policies aimed at this demographic group. Most of the literature listed previously either looks at the population in general or specifically excludes people with disabilities. Studies that focus on people with disabilities are either narrow in their policy analysis or only analyze a subset of the population with disabilities. For example, Gray (2019) studies only the effect of the simplified reverification process and Li, Zuo, and Heflin (2023) only study the SMD. Hanratty (2006) studies the effects of reduced recertification times, simplified reporting, and vehicle exemption policies, but the analysis on disability is limited to only families with children.

Along this dimension, this paper utilizes data from the SNAP State Options Reports (SOR) which allows us to analyze SNAP policies previously understudied. Most previous literature relied on only the SNAP Policy Database for policy data. Ratcliffe, McKernan, and Finegold (2008) use the SOR, but many new policy options have become available since 2008. Ganong and Liebman (2018) use the SOR, but only to extend the analysis of variables that

overlap between the Policy Database (which at the time ended in 2016) and the SOR. Of particular interest to this study, the SOR contains information on ESAP and SMD.

Second, we contribute to a growing literature that uses robust two-way fixed effects (TWFE), difference-in-differences, and event study estimation strategies to estimate the effect of SNAP policies. Though much of the recent SNAP literature uses policy indices with TWFE regressions, recent econometric studies find TWFE models with staggered policy adoption to contain inherent biases in the presence of heterogeneous treatment effects (Goodman-Bacon 2021), with non-binary policy variables and policies that get rescinded to be particularly problematic (de Chaisemartin and D'Haultfœuille 2020). Melvin and Smith (2022) use Goodman-Bacon's decomposition and Callaway and Sant'Anna's (2021) estimator to check robustness of the effect of Electronic Benefit Transfer cards on SNAP enrollment. Wang et al. (2026) also use Callaway and Sant'Anna's estimator and find that BBCE adoption increases SNAP participation among the general population and for older adults and people with disabilities. Kleinman (2026) also uses the Callaway and Sant'Anna estimator and finds CAP increases SNAP take-up among SSI recipients.

In contrast, our study looks at BBCE and CAP simultaneously, along with ESAP and SMD, and uses the de Chaisemartin and D'Haultfœuille (2024) estimator, which, in addition to being robust to staggered and non-absorbing treatment, is robust to simultaneous treatment variables, non-binary treatment, and treatment that increases and decreases multiple times. We also analyze individual-level receipt of SNAP benefits in contrast to Wang et al. who study state-level participation rates, and we study the broader SNAP definitions of older adults and people with disabilities than Kleinman who focuses on the SSI population only.

4 Data

4.1 SNAP Policy Data

The SNAP policy data come from two sources: the SNAP Policy Database and the SNAP State Options Reports. The U.S. Department of Agriculture provides both sources, but Economic Research Service maintain the Policy Database, and Food and Nutrition Service maintain the State Options Reports. The SNAP Policy Database reports policies for each state and D.C. for each month from 1996 through 2020. It includes information on eligibility, recertification and reporting, benefit methods, online applications, fingerprinting policies, vehicle policies, and coordination with other low-income assistance programs. In addition, we use annual information from issues of the SNAP State Options Reports available from 2002 to 2018. These reports contain information on coordination with TANF and Medicaid, disqualification policies, application processes, and further reporting, eligibility, and benefit methods for the states and D.C. (along with Guam and the Virgin Islands). In addition, the State Options Reports contain information on the Elderly Simplified Application Project and Standard Medical Deduction.

We create indicator variables for states adopting the policies listed in Section 2.2. In addition, for BBCE, we create a categorical variable that represents the state does not have BBCE, or the gross income limit is 130, 160 or 165, 185, or 200 percent of the federal poverty level. Finally, we perform year-month level analysis; because the State Options Reports are annual, we find the midpoint between each report release date and impute the value for each year-month based on the nearest report.

There is substantial policy variation across states and time. Table 2 shows the number of states that have selected policies in the years 2000, 2008 and 2016, and the average index value at the state level. On average, states have become more generous over time. In 2000, very few states enacted SNAP policies. By 2008, there are large increases in states offering BBCE and the

CAP. By 2016, even more states have adopted BBCE, and a large number continue to offer the CAP or started to offer the Standard Medical Deduction (SMD). Figure 1 shows the distribution of policies across the states in 2016. South Carolina has adopted the most policies targeting older adults and people with disabilities. In contrast, Tennessee and Utah have adopted none of these policies.

4.2 Survey of Income and Program Participation (SIPP)

The main data sources for measuring individual factors, such as SNAP participation and disability, are the 2001, 2004, 2008, and 2014 panels of the SIPP. Each panel covers approximately four calendar years, so the analysis covers October 2000 up through December 2016. For example, the 2014 SIPP panel begins in January of 2013 and covers the calendar years of 2013, 2014, 2015 and 2016. The U.S. Census Bureau administers the SIPP, and it contains monthly, individual-level responses to survey questions. The monthly nature of the SIPP is particularly appealing because SNAP benefits are issued monthly and policies from the SNAP Policy Database can change monthly.

Another advantage of the SIPP is the quality of the data. Research shows that measurement error of SNAP participation exists in surveys such as the American Community Survey, the Current Population Survey, and the SIPP due to factors such as recall error, salience of program participation, stigma, survey cooperation, and attrition. When comparing these three surveys, the SIPP performs better at reducing measurement errors in each of these areas. It is also worth noting that the specific nature of these measurement errors leads to underreporting of SNAP participation, so the results shown later may represent a lower bound of the impact of SNAP policies (Celhay, Meyer, and Mittag 2024).

The SIPP asks respondents if they received SNAP benefits in the given month and we use this as our outcome variable. It also asks standard demographic questions, and questions about household size which we include as control variables. The SIPP contains two variables that we use to restrict the sample: It asks survey-takers what the total household income is and contains a variable that represents the poverty threshold for the household. We combine these variables to create an income-to-poverty ratio and restrict the sample to observations that have a value of 200% or less of the poverty line. We define the older adult population as anyone age 60 and up, and the population with disabilities using the variables described below and under age 60. For this study, there are 3,474,435 observations across 198,332 individuals, 45,829 of which we classify as older adults and 15,062 as people with disabilities.

4.3 Disability Definition

We base our definition of disability on the SNAP definition. SNAP considers a person disabled if they are: receiving income because of a disability from Supplemental Security Income (SSI), Social Security Disability Insurance (SSDI), or state programs (if they are based on SSI rules); receiving income because of a permanent disability from a government agency; a veteran who is totally disabled, or a survivor of a permanently disabled veteran receiving Veterans' Affairs (VA) benefits; or receiving annuity under the Railroad Retirement Act and are eligible for Medicare or considered disabled under SSI.

The SIPP asks survey-takers if they are receiving SSI, and if they are receiving Social Security payments and why. We use these responses to construct indicators of SSI and SSDI receipt, respectively. Because we are not able to confirm if state payments are based on SSI rules, we ignore this condition but note that our measure may undercount eligible people. The SIPP similarly asks if respondents are receiving federal, state, or local government pension

payments and why, VA benefits and why, and pension from the Railroad Retirement Act and if they are covered by Medicare. We use these responses to capture the remaining conditions for disability consideration as best as possible, noting again that this measure may undercount people because Medicare coverage is only a proxy for Medicare eligibility.

Table 3 provides summary statistics for the individuals in the sample. The columns from left to right represent the total sample, people with disabilities, and the older adult population. One noteworthy observation is that people with disabilities are noticeably more likely to participate in SNAP, while the older adult population participates at a slightly lower rate than the general population. Figure 2 shows the percentage of the population that is age 60 or older in 2016 using estimates from SIPP. Close to one-fourth of the population consists of older adults in Florida, Maine, Montana, and Vermont. Figure 3 shows the percentage of the population with a disability. Alabama, Arkansas, Mississippi, North Dakota, and Oregon have the highest shares of people with disabilities ranging from 6% to 8% of the population.

4.4 Current Population Survey

In addition to the SIPP, we use data from the annual Current Population Survey for the years 2004 to 2016. Food security variables come from the Food Security Supplement and demographic variables come from the Annual Social and Economic Supplement. The food security survey asks an adult in each household questions about food insecurity, including being unable to afford food, reducing size or meals because of low income, or being hungry because of too little food. We created an indicator variable if the adults in the household were designated as food insecure or very food insecure. The survey additionally includes an indicator variable for if the household is under 185% of the poverty line, which we use to restrict the sample, and a

question about SNAP receipt. We use the demographic variables to construct our measure of disability using variables parallel to those in the SIPP.

4.5 Additional Data

The University of Kentucky Center for Poverty Research compiles data from multiple sources into a single dataset called the National Welfare Dataset. It contains annual data on the population, employment, poverty, welfare, and politics from 1980 to 2023 for each state. We use this dataset to control for the poverty rate, state GDP, average state personal income and AFDC/TANF caseloads. In addition, we control for the unemployment rate using state-month data from the U.S. Bureau of Labor Statistics.

5 Empirical Approach

To estimate the effect of state SNAP policy changes on food insecurity and SNAP receipt of people with disabilities and older adults we use the following event study: Let *t* represent a given year, *s* represents a given state, and *i* represent a given individual. Then our model is:

$$Y_{ist} = \alpha_0 + \sum_{j=-3, j\neq 0}^{j=6} D_{j(st)}\,\beta_j + f_s + \delta_t + \epsilon_{ist}$$

where f_s are state fixed-effects, δ_t are year fixed-effects, and ϵ_{ist} is the error term. Y_{ist} is an indicator variable equal to one if the person is receiving SNAP benefits or is food insecure or very food insecure depending on the outcome being discussed. Because the outcome variables are binary, our models are Linear Probability Models, and we interpret the coefficients as representing a percentage-point change in the probability of an individual receiving SNAP benefits or being food insecure. $D_{j(st)}$ is an indicator equal to one if, at year *t*, state *s* is *j* years away from a change in the policy of interest. We cluster standard errors at the state level because that is the level that the policies occur at, and standard errors are robust to heteroskedasticity.

Previous research has used two-way fixed effects (TWFE) and difference-in-differences (DID) estimation to estimate the causal impact of varying state policies on access to SNAP benefits. However, since those papers were published, studies have critically re-examined TWFE and DID estimation (see, for example, de Chaisemartin and D'Haultfœuille 2020 and Goodman-Bacon 2021). TWFE may underestimate the effect of treatment turning off if the effect of treatment persists into those time periods. Groups that are always treated can substantially bias results because they show up in most comparisons and get used as control groups for late adopters (Goodman-Bacon 2021).

Furthermore, in the presence of heterogeneous treatment effects, negative weights can be a concern. Research shows that the naïve TWFE DID estimates can be broken down into a weighted average of group-time Average Treatment Effects (ATEs). While these weights sum to one, the calculation does not require they be non-negative. This can cause the TWFE coefficient to be biased and even be of the opposite sign to every group-time ATE if negative weights are prevalent enough, large enough, or attached to a large enough ATE. These concerns are particularly prevalent in scenarios where some groups are treated for a long time, treatment is non-binary (such as a policy index), or with covariates (de Chaisemartin and D'Haultfœuille 2020).

Multiple policy treatments further compound these identification challenges. de Chaisemartin and D'Haultfœuille (2023) show that if the TWFE specification includes multiple treatments, then the bias will likely be exacerbated. To address this and other challenges, de Chaisemartin and D'Haultfœuille (2024) propose an alternative estimator that is robust to heterogeneous effects and multiple treatments (DCDH).

The traditional TWFE DID estimator identifies the average treatment effect on the treated (ATT). Instead of identifying the ATT, the DCDH estimator identifies the actual-versus-status-quo effect (AVSQ), the period-specific average treatment of being treated for *j* periods by comparing (in our case) states that change policy at time *t* to those states with the same first period treatment status that have not switched at time *t*.[2] In the situation where all groups start untreated and are treated for *k* periods, the AVSQ simplifies to the average treatment effect of being treated for *k* periods. In addition to event study estimates, the DCDH estimator produces the average cumulative (total) effect (ACE) per treatment unit. This identifies the average effect of a one unit increase in the policy treatment including the contemporaneous and lagged effects of the policy. The ACE is analogous to the standard ATT averaged over all treatments and groups in the standard DID design. The DCDH estimator is robust to multiple treatments, non-absorbing, and non-binary treatments, and it captures intertemporal effects of current and past levels of treatments on outcomes.

In the presence of multiple treatments, de Chaisemartin and D'Haultfœuille (2023) recommend three approaches. First, if the treatments are distinct, then estimate the AVSQ for each treatment separately. Second, estimate the effect of one treatment while including the other treatments as covariates. This allows us to compare units with the exact same treatment status before the policy changes and to control for correlated policies, and the DCDH estimator is immune to the biases from TWFE. Third, for policies that are adopted in stages, they recommend using discrete levels of the treatment. We employ this approach in the case of Broad-Based Categorical Eligibility (BBCE) that has multiple income thresholds across the states.

[2] We implement this estimator using the *did_multiplegt_dyn* package in Stata.

To identify the causal effect of state policies on SNAP benefit receipt, there should be no anticipation of the policy changes, no correlated shocks, and parallel trends in outcomes. In the case of no anticipation, "status-quo" period one outcomes must follow the same evolution across all groups, and there should be no change in access to SNAP benefits before the policies change. We use our event study and placebo estimators to test for changes in SNAP receipt prior to the policy change. Second, no correlated shocks mean that no other policies change that potentially affect SNAP receipt. Controlling for other policies as covariates will allow us to address this potential challenge. Third, parallel trends must hold for groups with the same period one treatment. Using our event studies, we can explore whether states have similar pre-trends before the policy change. Our food insecurity analysis have the same conditions and arguments.

For the populations, we use the general population as a baseline that contains everyone, including older adults and people with disabilities. We define the people with disabilities and older adult populations in Section 4.2. The final population is the younger and able population, which excludes people with disabilities and older adults. We use this sample to perform falsification tests: this population should be unaffected by the policies we study, with the potential exception of the BBCE.

The β_js of each period are the coefficients of interest. Given that the individuals we observe do not affect the adoption or timing of SNAP policies, we can treat SNAP policies as exogenous and those individuals in states with adopted policies as the treatment group. We are then interested in how treatment affects these individuals. The policies operate through improving eligibility by making the income or asset test easier to pass, or through making the application simpler, which reduces the relative cost of applying for benefits. Through either

channel, economic theory motivates that agents will substitute towards the now cheaper good, and we would expect an increase in SNAP participation.

6 Results

6.1 SNAP Participation

Table 4 contains the average cumulative (total) effect of SNAP policies on the probability of an individual receiving SNAP benefits. These estimates account for each policy individually with no other controls. We find that any BBCE program increases receipt among older adults by 3.28 percentage points (23.1% at the mean) and 1.55 percentage points (8.6%) for the general population. Our BBCE index shows magnitudes approximately half of that: 1.6 percentage points (11.3%) and 0.78 percentage points (4.3%), respectively. The BBCE index only captures changes in income generosity by incremental steps (for example, moving from 130% of the poverty line to 160% of the poverty line) while the BBCE indicator captures those changes or changes in asset test generosity, which likely explains the different magnitudes.

We find the Elderly Simplified Application Project (ESAP) increases receipt among people with disabilities by 7.64 percentage points (17.2%). The point estimate for the CAP is relatively large for people with disabilities (4.03 percentage points, 9.10%) but is not statistically significant. We find counterintuitive results for the SMD (allowing a standard medical deduction reduces SNAP participation), but the only estimate statistically different from zero is for older adults at -2.29 percentage points (-16.1%). For all estimates, we find the placebo effects to be jointly null, indicating we cannot reject a null hypothesis that there is no anticipation. Finally, for the young and able, our falsification population, we see the estimates are small in magnitude and not statistically significant.

Table 5 contains estimates from the same populations but controlling for the other policy variables that we consider. Overall, we find similar but more attenuated results. BBCE increases SNAP receipt for older adults by 3.08 percentage points (21.7%) and for the general population by 1.42 (7.89%). The index increases receipt by 1.51 (10.6%) and .721 (4.00%), respectively. The CAP increases receipt for people with disabilities by 3.82 (8.62%) but is statistically insignificant. The falsification estimates continue to be small statistically and in effect size, and the no anticipation assumption continues to hold. In contrast, the effect of the ESAP for people with disabilities is stronger (9.31 percentage points, 21.0%), the SMD effect for older adults is slightly stronger (-2.5, -17.6%), and the SMD is now statistically significant for the general population (-1.49, -8.28%).

Figure 4 through Figure 8 contain the results for the event study version of this analysis for people with disabilities and older adults without controlling for covariates. Each figure contains three years of estimated effects prior to the policy change to check pretrends, and up to six years after to observe heterogeneous effects over time, all with 95% confidence intervals. Figure 4 shows that the indicator variable of having a BBCE policy in a state has no effect on people with disabilities in any year while older adults experience an immediate and persistent increase in SNAP receipt. Figure 5 shows almost identical results for our BBCE index, which increases with income generosity, with only minor difference in the magnitudes of each estimate. Figure 6 shows the CAP increases receipt for people with disabilities in years four through six, with only year five being statistically significant. There appears to be no effect on older adults. Figure 7 shows the results for the ESAP. Given the ESAP's late adoption in our sample, we are only able to estimate three years of effects. For people with disabilities, we see a large increase in receipt that grows to statistical significance in years two and three and no significant effect for

older adults. Finally, Figure 8 shows the SMD to largely have no effect on people with disabilities, and a marginally but persistently negative effect for older adults that only achieves statistical significance in years one and five.

Appendix Figure A1 through Appendix Figure A5 present event studies for the total population and young and able adults. Young and able adults serve as placebos for all policies except for BBCE because this policy is not specific to older adults and people with disabilities. The BBCE indicator and index increase SNAP participation for the total population. Appendix Figure A1 and Appendix Figure A2 show young and able adults have an upward trend in SNAP receipt after BBCE policies are implement but these effects are not statistically significant. Appendix Figure A3 and Appendix Figure A4 show that CAP and ESAP have no significant effect on receiving SNAP benefits with except for one year for the total population. The SMD is associated with lower but statistically insignificant effects on SNAP benefits for the total population and young and able adults. These estimates suggest that the policies targeting older adults and people with disabilities are not affecting populations who do not qualify.

6.2 Robustness checks

Using the estimates in Table 5 as our baseline, Table 6 checks their robustness by additionally including the demographic variables displayed in Table 3 along with the number of household members and state-level control variables discussed in Section 4.5. For older adults, these estimates are slightly larger but still comparable to previous estimates: 3.84 percentage points (27.0%) for BBCE, 1.85 (13.0%) for the BBCE index, and -2.57 (-18.1%) for the SMD. For people with disabilities, the ESAP continues to be the only policy with statistical significance, and the estimate is slightly larger as well (9.78 percentage points, 22.1%). For the

general population, both BBCE variables are slightly weaker and lose significance. The SMD, however, is stronger at -1.99 percentage points (11.1%).

Table 7 checks robustness by using only states that never change treatment status as the comparison group. Overall, we find slightly weaker but similar results. BBCE and the BBCE index increase receipt for older adults by 2.92 (20.6%) and 1.43 (10.1%) percentage points, respectively, but lose significance for the general population. The ESAP is slightly stronger for people with disabilities than the baseline results (9.65 percentage points, 21.8%). The SMD is largely unchanged for older adults (-2.46, -17.3%) and slightly stronger for the general population (-1.59, -8.83%).

Finally, Table 8 checks robustness by only considering the effects of increases in treatment. These estimates are identical to Table 5 except for some minor differences in the BBCE index estimates. For the BBCE, CAP, and SMD, there is only one instance of a state rescinding the policy, each. No states have rescinded the ESAP in our sample, and the BBCE index only decreases in generosity three times. Taken together these results show that state policies do have significant effects on SNAP participation by older adults and people with disabilities. Next we consider the impact of these policies on food insecurity.

6.3 Food Insecurity

Table 9 shows the estimated average cumulative (total) effect on food insecurity. Unlike our previous results, the CAP reduces food insecurity for older adults by 2.92 percentage points (17.5% at the mean). We find the SMD reduces food insecurity by 8.72 percentage points for people with disabilities (18.8%). The remaining estimates are statistically insignificant; however, these cumulative average total effects can mask significant heterogeneity over time. Figure 9 and Figure 10 respectively show that BBCE and the BBCE index significantly reduce food insecurity

for people with disabilities two to three years past the policy change, and one year after the policy change for older adults. Figure 11 shows the CAP significantly reduces food insecurity among older adults for three years after the policy change but has no impact on people with disabilities. Figure 12 shows the ESAP has no effect on people with disabilities but a marginal reduction for older adults two years after policy adoption. In contrast, Figure 13 shows the SMD reduces food insecurity for people with disabilities in years one and five but has no impact on older adults.

7 Conclusion

This paper examines whether state Supplemental Nutrition Assistance Program (SNAP) policies affect SNAP participation for older adults and people with disabilities. We broadly find evidence that adopting policies that target people with disabilities or older adults increases the probability of receiving benefits. In general, these policies are more salient for older adults than for people with disabilities. In states that adopt BBCE, SNAP participation by older adults increases by 22% and increases for the general population by 8%. One potential explanation is that older adults are more sensitive to increased income limits and the elimination of the asset tests compared to the general population. This contrasts with previous literature that finds larger effects for the non-senior population than the senior population, though they measure eligibility more broadly than just BBCE (Jones et al 2022). Our estimate for older adults is larger but similar to other research that finds BBCE increases (state-level) participation for older adults by 16%, but our estimate of the general population effect is much smaller than their 15% (Wang et al 2026). We find that BBCE policies have no impact on SNAP receipt by young and able-bodied adults. We find some evidence in the event studies that BBCE policies reduce food insecurity for both older adults and people with disabilities.

We also find that transaction cost policies, measured by the Combined Application Project (CAP) and the Elderly Simplified Application Project (ESAP), affect people with disabilities. The ESAP policy increases SNAP participation by 21% for people with disabilities, while the CAP program has heterogeneous effects, increasing SNAP participation four years after implementation. These results align with a vast literature that shows transaction costs, also called administrative burden, play an important role in access to government programs (see for example, Heinrich 2016). Older adults are not as sensitive to ESAP and CAP. These results align with previous literature that find transaction cost policies have little effect on older adults (Jones et al 2022). Our results for ESAP also align with previous research that finds the ESAP to have a negligible effect for older adults, though the authors state their analysis is not causal (Dean, Gothro, and Bleiweiss-Sande 2022). Our estimates for CAP are not as strong as previous research (Kleinman 2026), but our sample is much broader. CAP only applies to SSI applicants and recipients, so our attenuated results can be consistent with previous research. When we analyze food insecurity, we find that CAP reduces it for older adults by 17%.

In contrast to previous studies, we find that the Standard Medical Deduction (SMD) significantly reduced SNAP participation for older adults by 16% but had no impact on people with disabilities. We also find SMD significantly reduced SNAP participation in the total population by roughly 8%. For every group, the impact of SMD was negative on receiving SNAP benefits. Previous research using a two-way fixed effects estimator finds that the SMD is associated with a 20 percent increase in the number of households participating in SNAP (Li, Zuo, and Heflin 2023). Potential biases in their estimates and/or differences in data used may explain this difference. In some cases, a relatively low (less than $200) allowance for medical deductions could rationalize the negative impact of SMD on older adult households. Event

studies show that SMD had no impact on food insecurity for older adults, but significantly reduced food insecurity for people with disabilities in years one and five after the policy was adopted. Given how our estimates of the impact of SMD differ with previous literature, additional analysis should be conducted to determine whether the data, methods, or both are contributing to these significantly different outcomes.

It is worth reiterating that SNAP participation is often under-reported. Thus, our estimates likely represent a lower bound of the true effect of these policies on participation (Celhay, Meyer, and Mittag 2024). In addition, our results are robust to including covariates, controlling for other SNAP policies, and the composition of the treatment and control groups.

These findings have important implications for these two populations. Research shows older adults tend to participate in SNAP at lower rates even when eligible, so policies that facilitate access can ensure the correct people are receiving benefits. Ample research shows people with disabilities are at risk for poverty and economic insecurity, so improving access to SNAP can improve economic wellbeing for those most at risk. Given that states have considerable discretion in the policies they adopt, there can be significant variation in how accessible SNAP is for these populations.

Overall, states are not as accommodative to these populations as they could be. Figure 2 shows the percent of each state population that is an older adult and Figure 1 shows the number of policies we study enacted by those states. Florida and Pennsylvania stand out as relatively high in both, but some states, such as Oregon, Montana, West Virginia, and Maine, have a high proportion of older adults but a below-average number of policies targeting them. States with a low proportion of older adults vary in the number of policies they adopt. Figure 3 shows the percent of each state population under age 60 with a disability according to SNAP rules.

Arkansas, North Dakota, Oregon, and most states east of the Mississippi River have a relatively high proportion of people with disabilities but have a low to average number of policies adopted for them. As the SNAP policy environment changes with recent federal legislation, states have the opportunity to support access to SNAP benefits with these targeted policies.

Tables and Figures

Table 1: Comparison of policies included in recent studies

Policies	Ganong & Liebman (2018)	Stacy et al (2018)	Jones et al (2022)
Issues EBT cards		X	
Face-to-face recertification waived	X		X
Call centers	X		X
% of pop. w/ 'short' recertifications	X (3 months)	X (3 months)	X* (6 months)
Simplified reporting	X	X	X
Fingerprints required		X	X
Online applications	X	X	X
Noncitizens eligible for SNAP		X	X*
Excludes at least 1 vehicle	X	X	X
Broad-based Categorical Eligibility	X	X	X
Combined Application Project	X		X
Application simplified for older adults			
Standard Medical Deduction			

Table 2: Count of state SNAP policies by year

	2000	2008	2016
State adopts Broad-Based Categorical Eligibility	5	18	40
State simplifies application for older adults and people with disabilities	-	-	8
State offers the Combined Application Project	1	15	17
State offers a standard medical deduction	-	-	19
BBCE index	0.14	0.87	2.04

Source: SNAP State Option Reports, SNAP Policy Database 2000-2016

Table 3: Summary statistics by SNAP definition

	General Population		Disability		Older Adults	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Receiving SNAP	18.6%	(.389)	45.6%	(.498)	14.9%	(.356)
Education						
Less than high school	29.9%	(.458)	33.9%	(.473)	34.9%	(.477)
High school	31.1%	(.463)	34.8%	(.476)	32.3%	(.468)
Some college	28.2%	(.45)	26.3%	(.44)	22.3%	(.416)
College	10.8%	(.31)	5.04%	(.219)	10.5%	(.306)
Marital Status						
Married	39.2%	(.488)	22.2%	(.415)	38.5%	(.487)
Divorced/Widowed	26.2%	(.44)	31.1%	(.463)	53.4%	(.499)
Never married	34.6%	(.476)	46.7%	(.499)	8.09%	(.273)
Race						
White	74.1%	(.438)	64.8%	(.478)	79.4%	(.404)
Black	18.5%	(.388)	28.9%	(.453)	14.4%	(.351)
Asian	3.9%	(.193)	1.67%	(.128)	3.68%	(.188)
Female	56.4%	(.496)	53%	(.499)	63%	(.483)
Hispanic	21.8%	(.413)	13.7%	(.344)	10.9%	(.311)
Age	45	(19.8)	43.9	(11.8)	72.6	(8.44)
Observations	3,474,435		271,732		918,053	

Source: Survey of Income and Program Participation, 2000 - 2016. Disability defined as receiving income from SSDI, SSI, government disability, railroad retirement, or veteran or survivor insurance programs and under age 60. Older adult defined as age 60 or older.

Table 4: Estimates of the effects of SNAP policies on probability of SNAP receipt

	Gen. Pop.	Disability	Older Adults	Young & Able
BBCE Indicator	.0155*	.0243	.0328***	.00873
	(.00608)	(.0292)	(.00983)	(.00792)
Observations Used	2,761,032	212,951	727,350	1,820,6664
p-value for placebo nullity test	.416	.507	.113	.98
BBCE Index	.0078*	.0132	.016***	.00444
	(.00307)	(.0148)	(.00483)	(.00404)
Observations Used	2,806,975	216,829	739,709	1,850,370
p-value for placebo nullity test	.399	.486	.105	.983
Combined Application Project	.013	.0403	.0119	.00875
	(.00697)	(.0207)	(.0134)	(.00771)
Observations Used	2,676,962	203,750	696,117	1,777,074
p-value for placebo nullity test	.86	.929	.564	.396
ESAP	.022	.0764*	.019	.0167
	(.0176)	(.0297)	(.0221)	(.0225)
Observations Used	457,187	40,539	138,163	278,485
p-value for placebo nullity test	.982	.171	.58	.944
Standard Medical Deduction	-.0139	-.0146	-.0229*	-.013
	(.00752)	(.0217)	(.0105)	(.00944)
Observations Used	1,344,148	111,191	371,757	861,200
p-value for placebo nullity test	.925	.317	.311	.551
Outcome Mean	.18	.443	.142	.164
Observations	3,474,435	271,732	918,053	2,284,650
Individuals	198,332	15,062	45,829	148,877

*** p<.001, ** p<.01, * p<.05

Standard errors clustered at the state level in parentheses. We run each policy in its own regression.

Table 5: Estimates of the effects of SNAP policies on probability of SNAP receipt with policy covariates

	Gen. Pop.	Disability	Older Adults	Young & Able
BBCE Indicator	.0142*	.0199	.0308**	.00725
	(.00615)	(.0348)	(.01)	(.00829)
Observations Used	2,761,032	212,951	727,350	1,820,664
p-value for placebo nullity test	.415	.52	.111	.981
BBCE Index	.00721*	.011	.0151**	.00373
	(.00311)	(.0177)	(.00494)	(.00422)
Observations Used	2,806,975	216,829	739,709	1,850,370
p-value for placebo nullity test	.398	.498	.103	.984
Combined Application Project	.0125	.0382	.0109	.0087
	(.00706)	(.0211)	(.0135)	(.00775)
Observations Used	2,676,962	203,750	696,117	1,777,074
p-value for placebo nullity test	.879	.931	.603	.394
ESAP	.0257	.0931**	.0237	.0188
	(.0171)	(.0318)	(.0208)	(.0222)
Observations Used	457,187	40,539	138,163	278,485
p-value for placebo nullity test	.966	.198	.723	.86
Standard Medical Deduction	-.0149*	-.0201	-.025*	-.013
	(.0074)	(.0225)	(.0105)	(.00933)
Observations Used	1,344,148	111,191	371,757	861,200
p-value for placebo nullity test	.935	.312	.316	.691
Outcome Mean	.18	.443	.142	.164
Observations	3,474,435	271,732	918,053	2,284,650
Individuals	198,332	15,062	45,829	148,877

*** p<.001, ** p<.01, * p<.05

Standard errors clustered at the state level in parentheses. We run each policy in its own regression while controlling for the other policies.

Table 6: Estimates of the effects of SNAP policies on probability of SNAP receipt with all covariates

	Gen. Pop.	Disability	Older Adults	Young & Able
BBCE Indicator	.0126	.0169	.0384**	.00248
	(.0076)	(.038)	(.0138)	(.00852)
Observations Used	2,755,596	212,780	725,823	1,816,926
p-value for placebo nullity test	.742	.364	.5268	.911
BBCE Index	.00601	.00784	.0185**	.00116
	(.00385)	(.0193)	(.00679)	(.00434)
Observations Used	2,801,539	216,658	738,182	1,846,632
p-value for placebo nullity test	.752	.383	.279	.911
Combined Application Project	.0133	.0384	.0134	.0109
	(.00699)	(.0213)	(.0141)	(.00814)
Observations Used	2,672,917	203,632	695,007	1,774,257
p-value for placebo nullity test	.834	.959	.561	.888
ESAP	.0224	.0978**	.0227	.0133
	(.0154)	(.032)	(.0197)	(.0222)
Observations Used	444,754	40,163	134,772	269,819
p-value for placebo nullity test	.973	.639	.764	.907
Standard Medical Deduction	-.0199**	-.0403	-.0257*	-.0174
	(.00767)	(.0262)	(.0102)	(.00998)
Observations Used	1,331,715	110,815	368,366	852,534
p-value for placebo nullity test	.925	.349	.284	.881
Outcome Mean	.18	.443	.142	.164
Observations	3,474,435	271,732	918,053	2,284,650
Individuals	198,332	15,062	45,829	148,877

*** p<.001, ** p<.01, * p<.05

Standard errors clustered at the state level in parentheses. We run each policy in its own regression while controlling for the other policies. All regressions control for age, race, ethnicity, sex, education, marital status, number of household members; state-year GDP, total state personal income, TANF caseloads, and poverty rate; and state-month unemployment rates.

Table 7: Estimates of the effects of SNAP policies on probability of SNAP receipt using only states that never switch treatment as controls

	Gen. Pop.	Disability	Older Adults	Young & Able
BBCE Indicator	.0114	.0159	.0292**	.00327
	(.00715)	(.0381)	(.0107)	(.00915)
Observations Used	1,721,912	135,740	454,873	1,131,246
p-value for placebo nullity test	.514	.404	.0808	.977
BBCE Index	.00579	.00895	.0143**	.00171
	(.00361)	(.0193)	(.00526)	(.00466)
Observations Used	1,767,855	139,618	467,232	1,160,952
p-value for placebo nullity test	.49	.383	.069	.984
Combined Application Project	.0126	.0381	.0104	.00917
	(.00721)	(.0215)	(.0131)	(.00761)
Observations Used	2,265,291	172,205	583,732	1,509,333
p-value for placebo nullity test	.738	.907	.48	.378
ESAP	.0275	.0965**	.0257	.0206
	(.0172)	(.0324)	(.0208)	(.0223)
Observations Used	443,751	39,260	133,854	270,637
p-value for placebo nullity test	.946	.125	.735	.887
Standard Medical Deduction	-.0159*	-.0227	-.0246*	-.0146
	(.00766)	(.0218)	(.0106)	(.00952)
Observations Used	1,254,328	103,888	347,510	802,930
p-value for placebo nullity test	.919	.294	.273	.797
Outcome Mean	.18	.443	.142	.164
Observations	3,474,435	271,732	918,053	2,284,650
Individuals	198,332	15,062	45,829	148,877

*** p<.001, ** p<.01, * p<.05

Standard errors clustered at the state level in parentheses. We run each policy in its own regression while controlling for the other policies.

Table 8: Estimates of the effects of SNAP policies on probability of SNAP receipt using only states that increase policy adoption as treated

	Gen. Pop.	Disability	Older Adults	Young & Able
BBCE Indicator	.0142*	.0199	.0308**	.00725
	(.00615)	(.0348)	(.01)	(.00829)
Observations Used	2,761,032	212,951	727,350	1,820,664
p-value for placebo nullity test	.415	.52	.111	.981
BBCE Index	.0072*	.0101	.0152**	.00371
	(.00312)	(.0177)	(.00496)	(.00424)
Observations Used	2,761,032	212,951	727,350	1,820,664
p-value for placebo nullity test	.415	.52	.111	.981
Combined Application Project	.0125	.0382	.0109	.0087
	(.00706)	(.0211)	(.0135)	(.00775)
Observations Used	2,676,962	203,750	696,117	1,777,074
p-value for placebo nullity test	.879	.931	.603	.394
ESAP	.0257	.0931**	.0237	.0188
	(.0171)	(.0318)	(.0208)	(.0222)
Observations Used	457,187	40,539	138,163	278,485
p-value for placebo nullity test	.966	.198	.723	.86
Standard Medical Deduction	-.0149*	-.0201	-.025*	-.013
	(.0074)	(.0225)	(.0105)	(.00933)
Observations Used	1,344,148	111,191	371,757	861,200
p-value for placebo nullity test	.935	.312	.316	.691
Outcome Mean	.18	.443	.142	.164
Observations	3,474,435	271,732	918,053	2,284,650
Individuals	198,332	15,062	45,829	148,877

*** p<.001, ** p<.01, * p<.05

Standard errors clustered at the state level in parentheses. We run each policy in its own regression while controlling for the other policies.

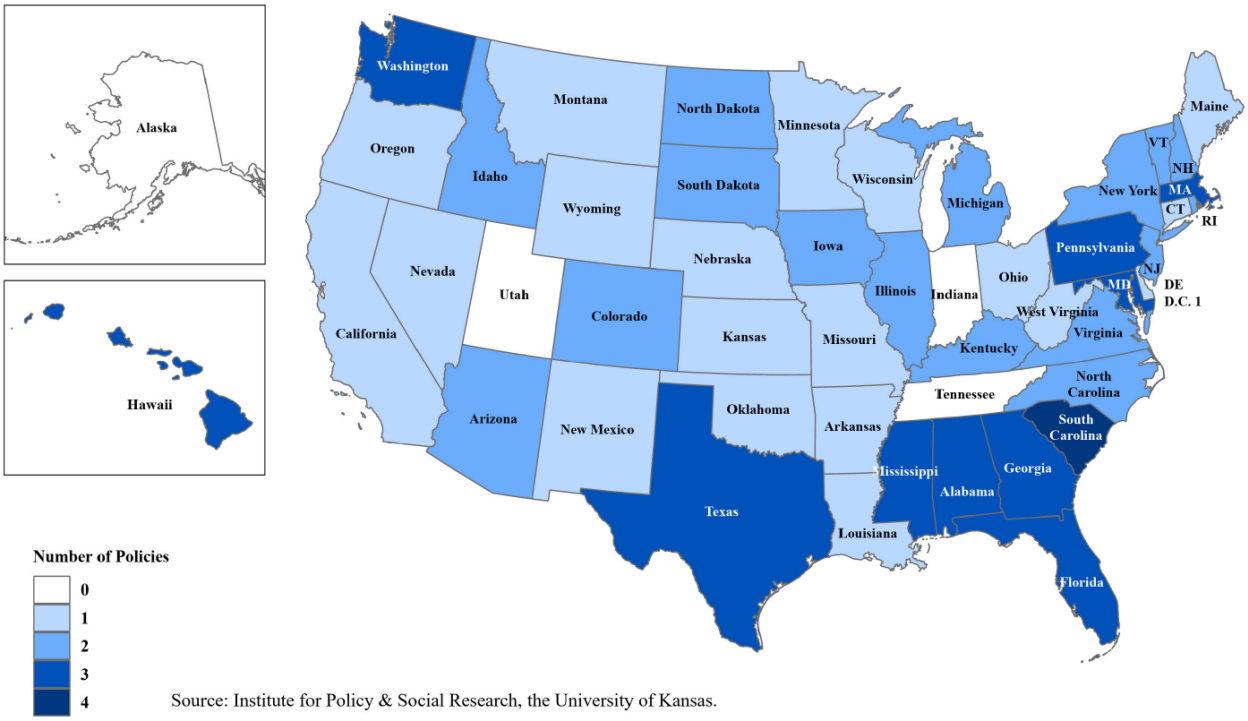
Table 9: Estimates of the effects of SNAP policies on probability of being food insecure

	Gen. Pop.	Disability	Older Adults	Young & Able
BBCE Indicator	-.0209	-.091	-.0248	-.0124
	(.0122)	(.0546)	(.0249)	(.0142)
Observations Used	117,755	3,142	34,283	80,330
p-value for placebo nullity test	.578	.294	.252	.675
BBCE Index	-.0121	-.0524	-.014	-.0073
	(.00667)	(.0321)	(.0133)	(.00798)
Observations Used	125,422	3,351	36,651	85,420
p-value for placebo nullity test	.494	.32	.242	.609
Combined Application Project	-.00623	-.00869	-.0292**	.00702
	(.013)	(.0472)	(.0108)	(.0166)
Observations Used	133,379	3,568	38,767	91,040
p-value for placebo nullity test	.0304	.0032	.418	.0159
ESAP	-.0111	-.0939	-.0285	-.00547
	(.0174)	(.0585)	(.0207)	(.0222)
Observations Used	24,193	513	7,985	15,691
p-value for placebo nullity test	.874	.968	.821	.963
Standard Medical Deduction	.00184	-.0872*	.0102	.0025
	(.0146)	(.0432)	(.0168)	(.0179)
Observations Used	77,150	1,919	23,970	51,261
p-value for placebo nullity test	.00448	.564	.585	.0238
Outcome Mean	.254	.463	.167	.284
Observations	202,369	5,230	59,416	137,723

*** p<.001, ** p<.01, * p<.05

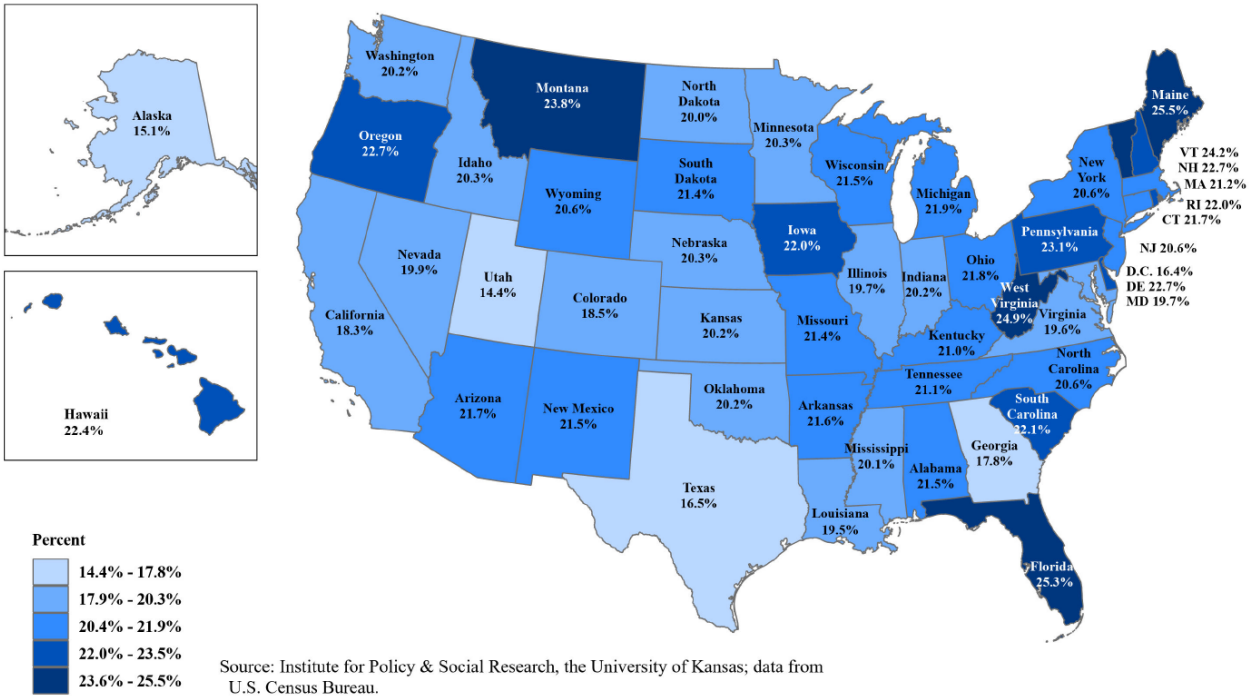
Standard errors clustered at the state level in parentheses. We run each policy in its own regression.

Figure 1: Count of Policies that Target Older Adults or People with Disabilities, 2016



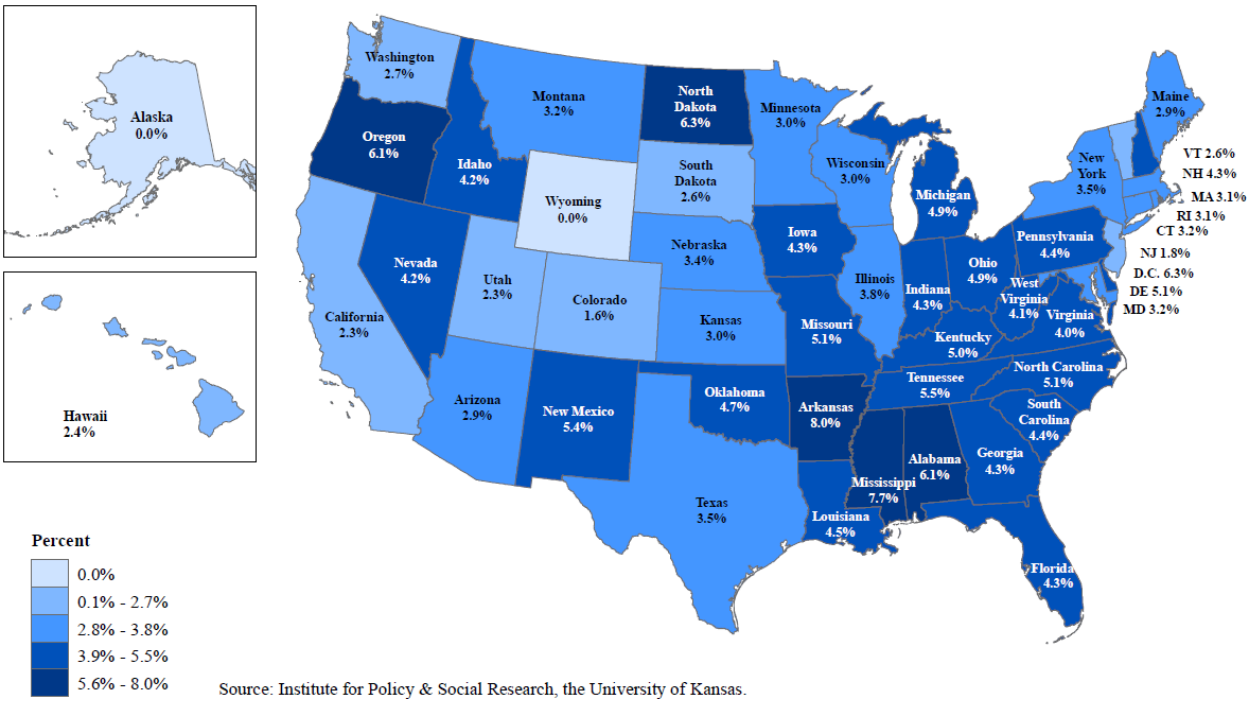
Source: Institute for Policy & Social Research, the University of Kansas.

Figure 2: Percent of the Population Age 60 and Older, 2016



Source: Institute for Policy & Social Research, the University of Kansas; data from U.S. Census Bureau.

Figure 3: Percent of the Population under Age 60 with a Disability, 2016



Source: Institute for Policy & Social Research, the University of Kansas.

Figure 4: Effects of the BBCE Indicator on SNAP Receipt

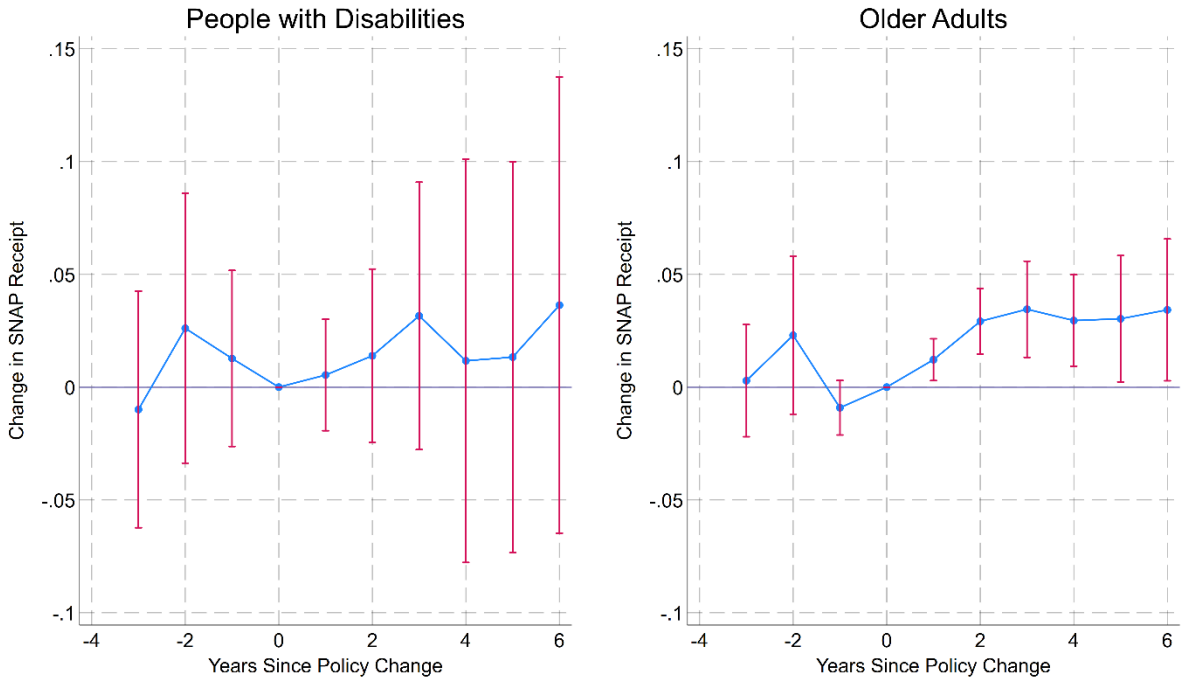


Figure 5: Effects of the BBCE Index on SNAP Receipt

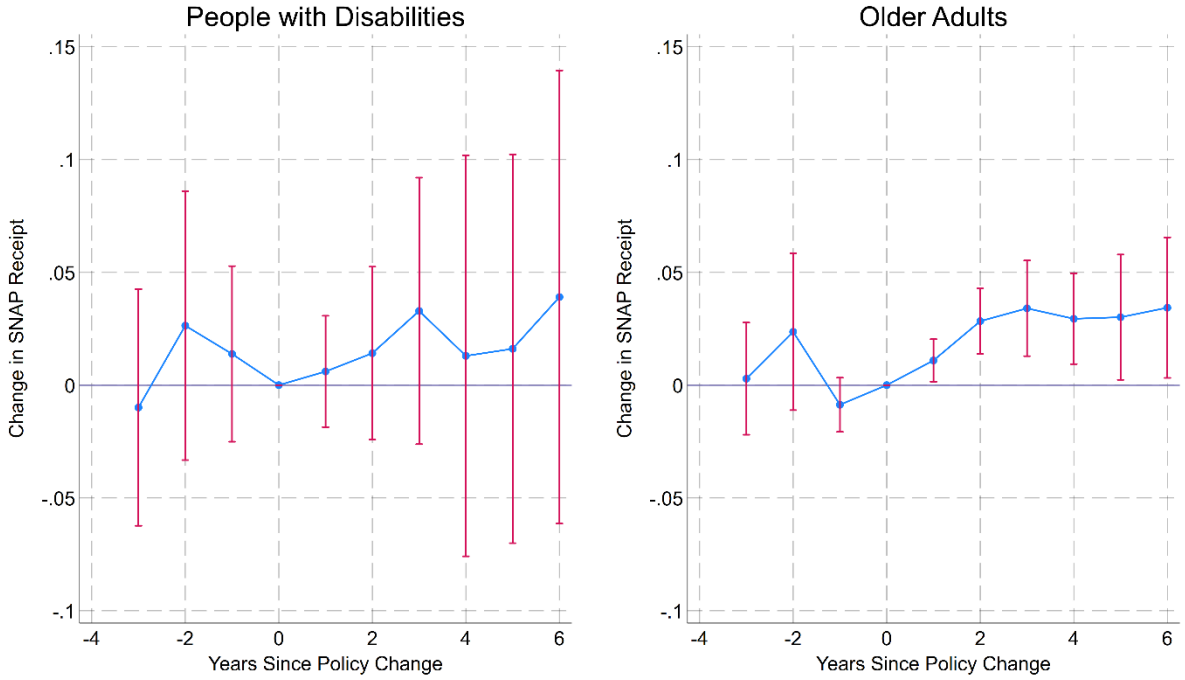


Figure 6: Effects of the Combined Application Project on SNAP Receipt

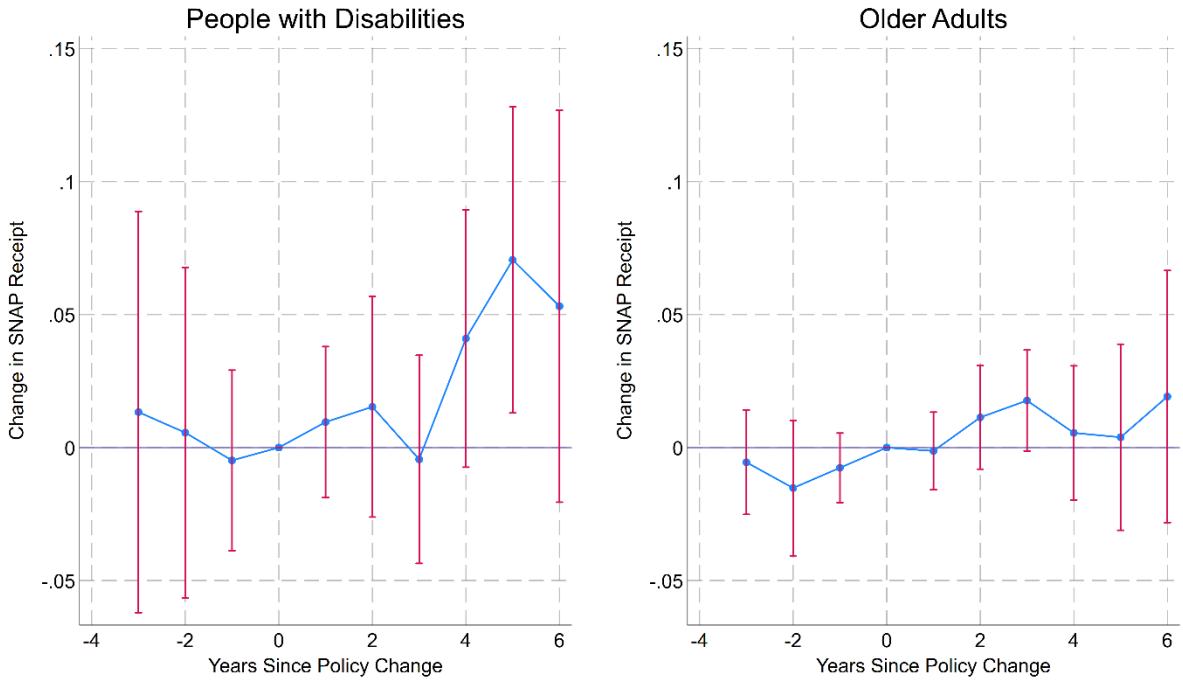


Figure 7: Effects of the Elderly Simplified Application Project on SNAP Receipt

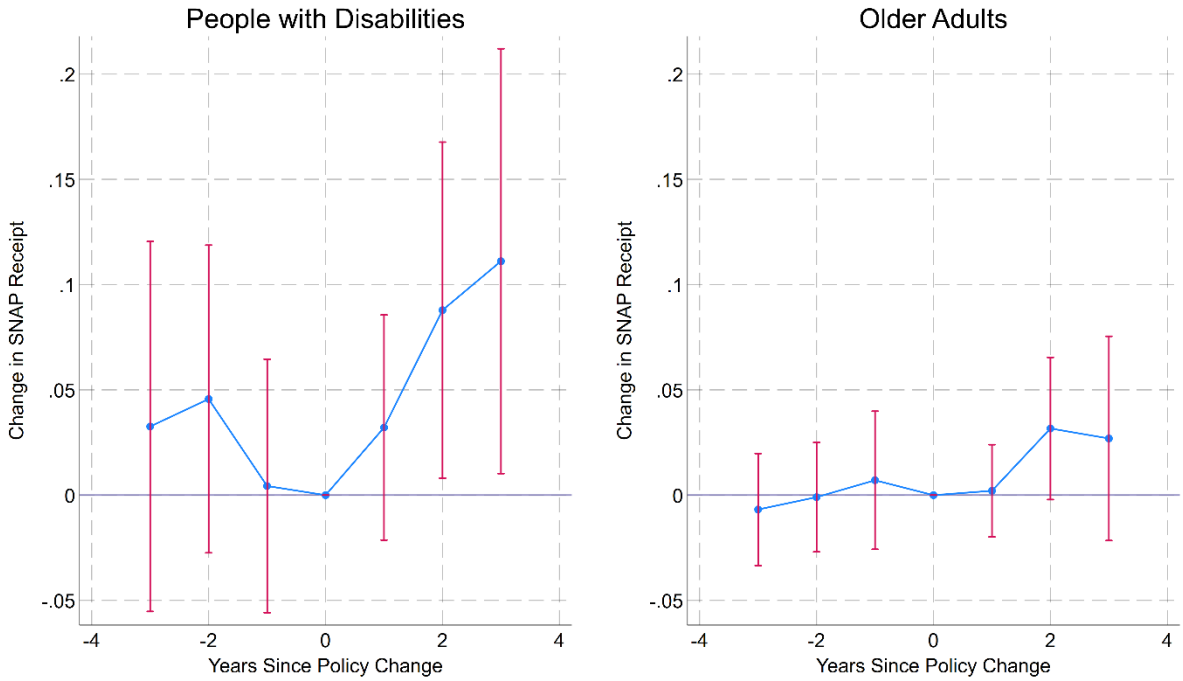


Figure 8: Effects of the Standard Medical Deduction on SNAP Receipt

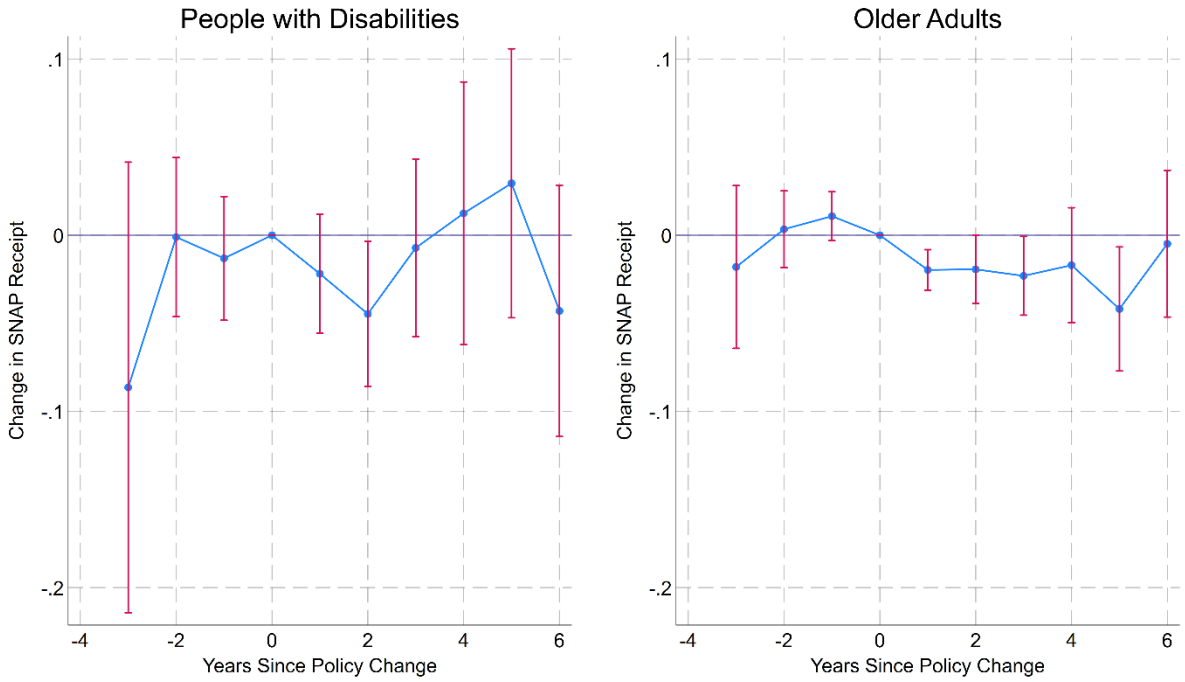


Figure 9: Effects of the BBCE Indicator on Adult Food Insecurity

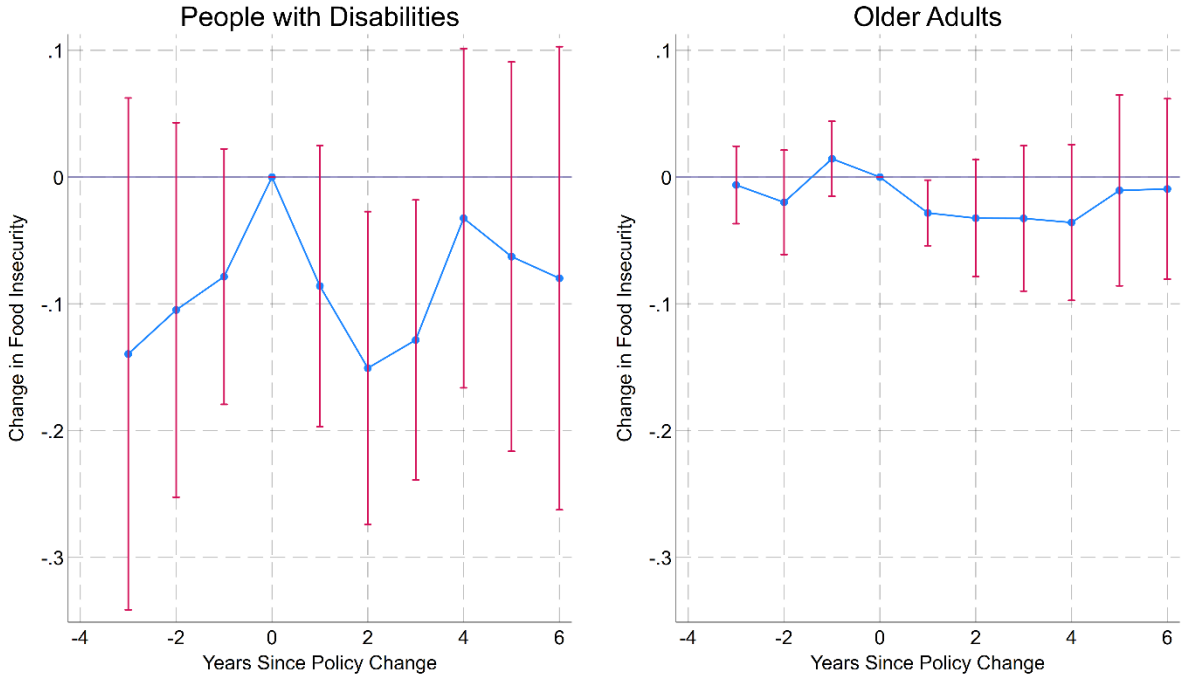


Figure 10: Effects of the BBCE Index on Adult Food Insecurity

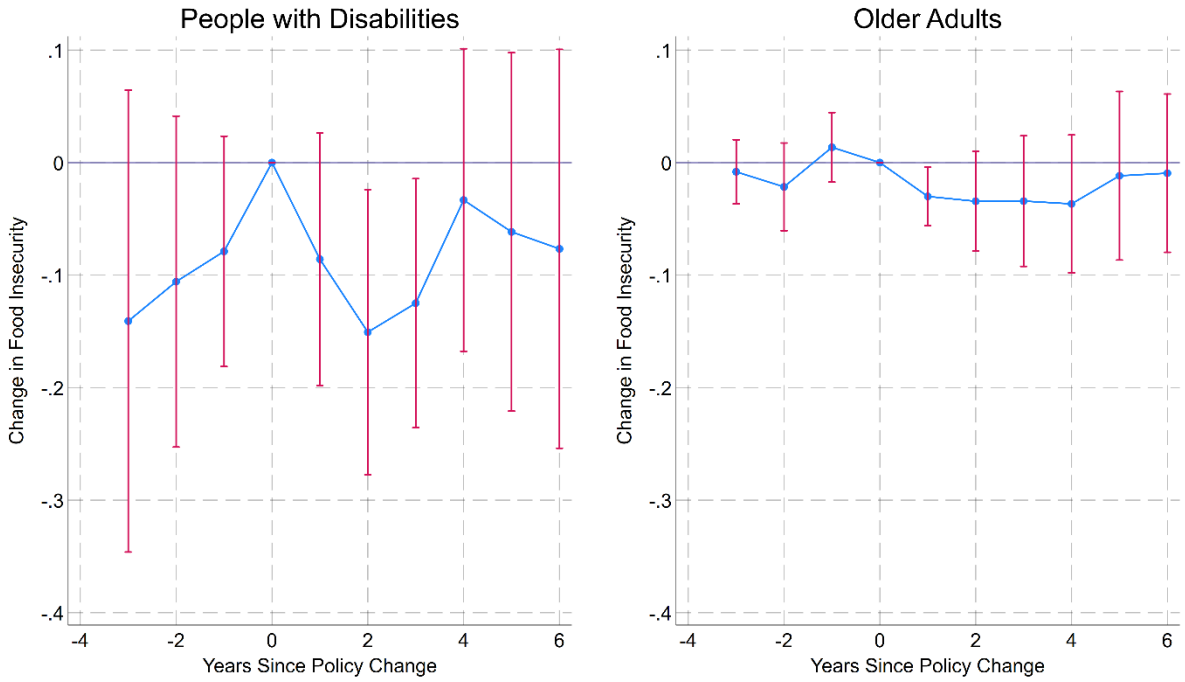


Figure 11: Effects of the Combined Application Project on Adult Food Insecurity

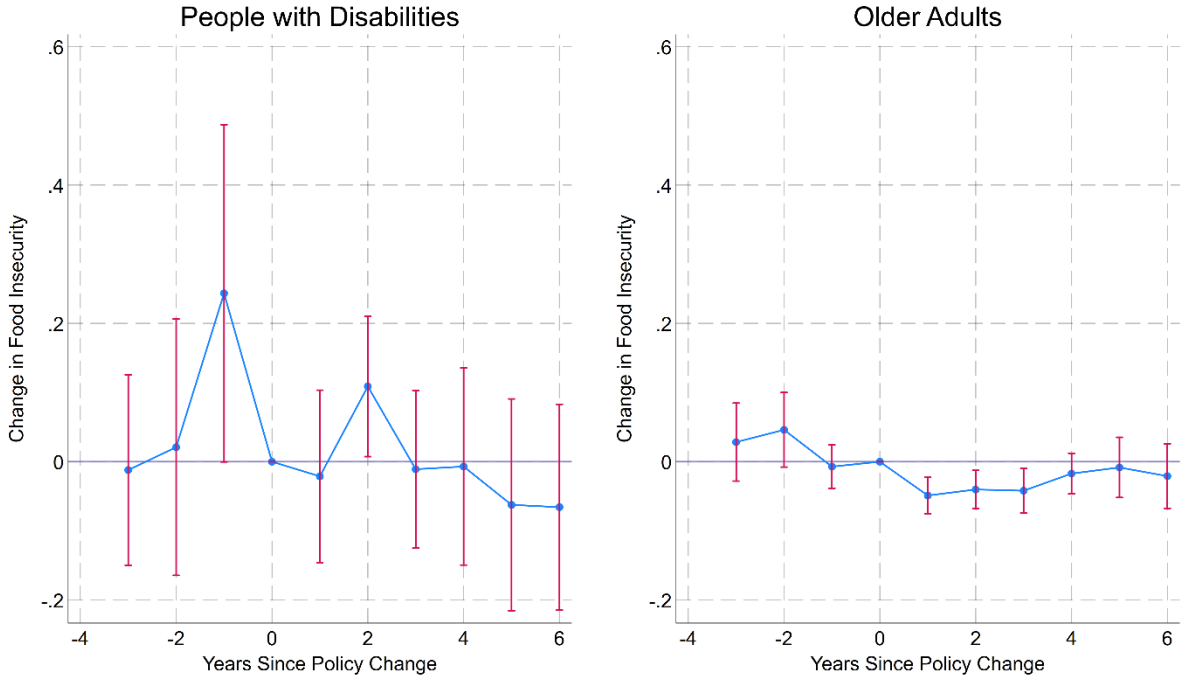


Figure 12: Effects of the Elderly Simplified Application Project on Adult Food Insecurity

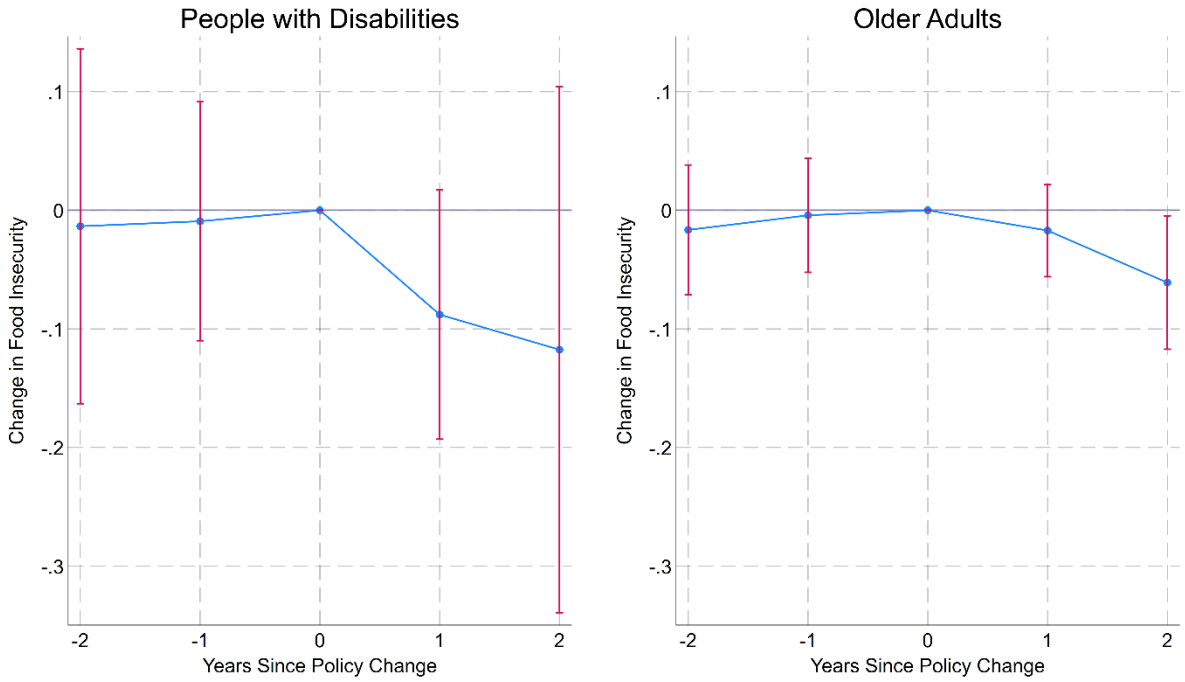
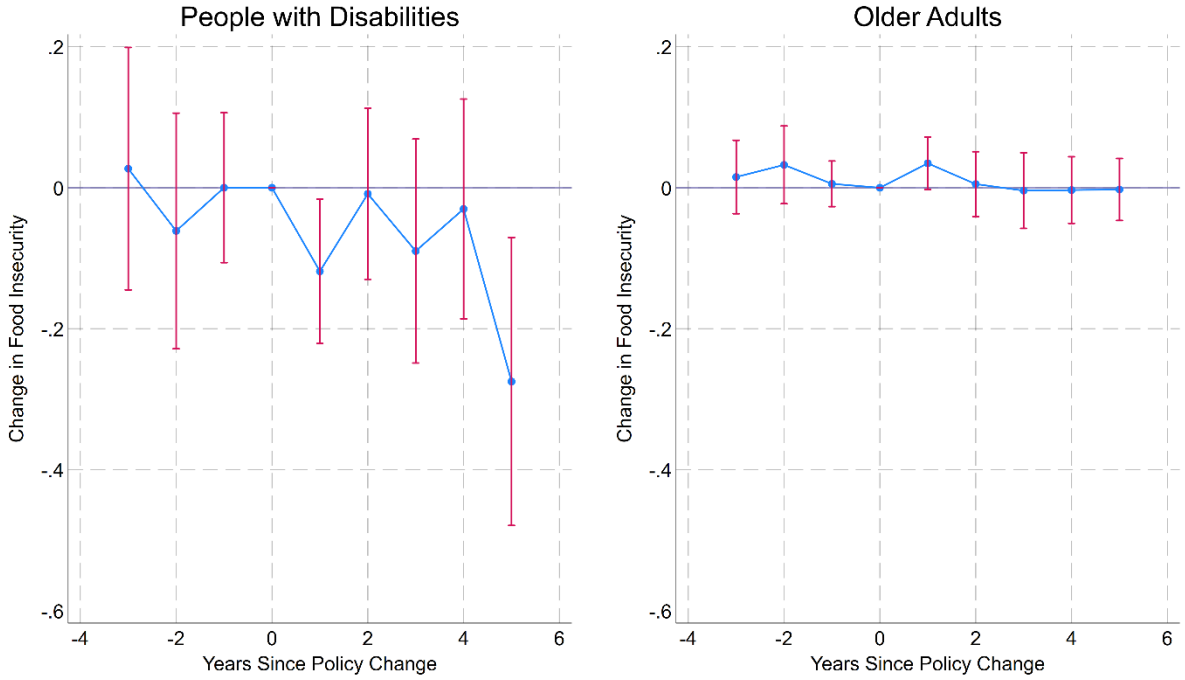


Figure 13: Effects of the Standard Medical Deduction on Adult Food Insecurity



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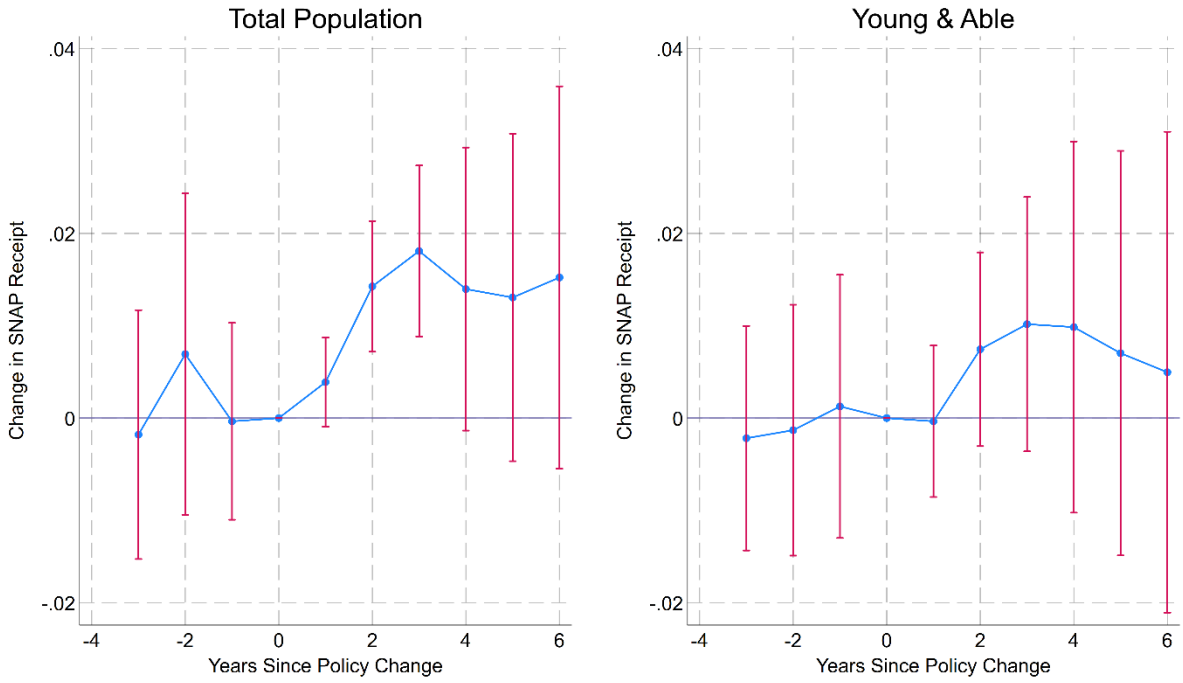
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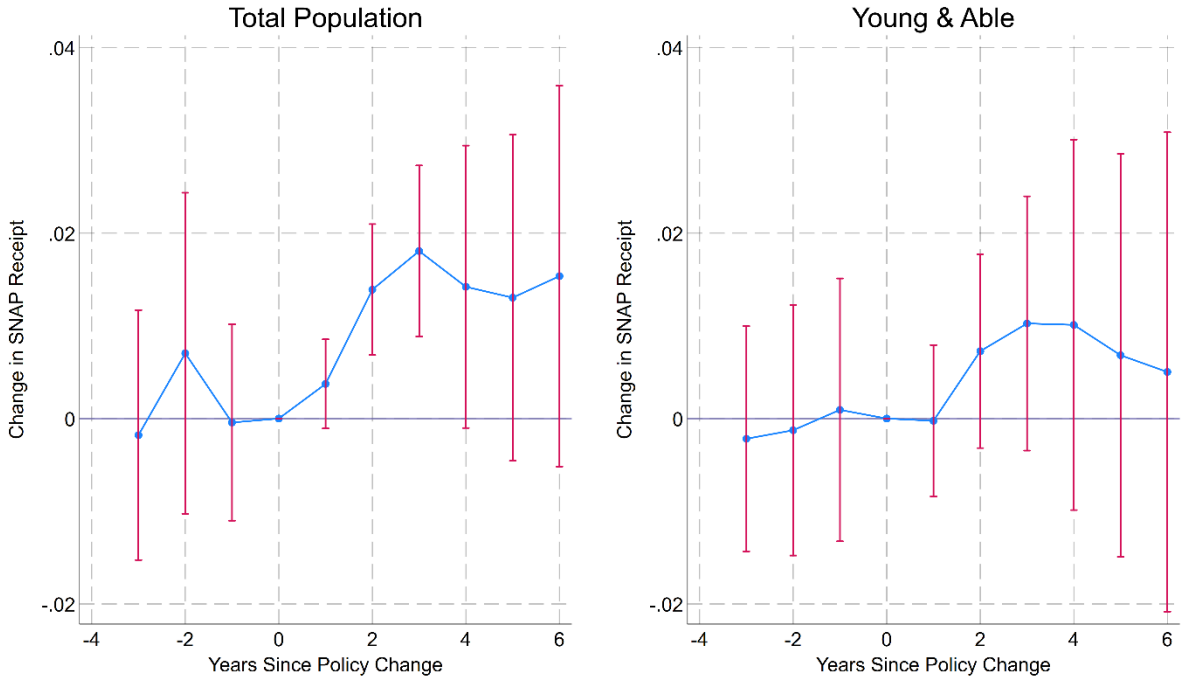
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Appendix

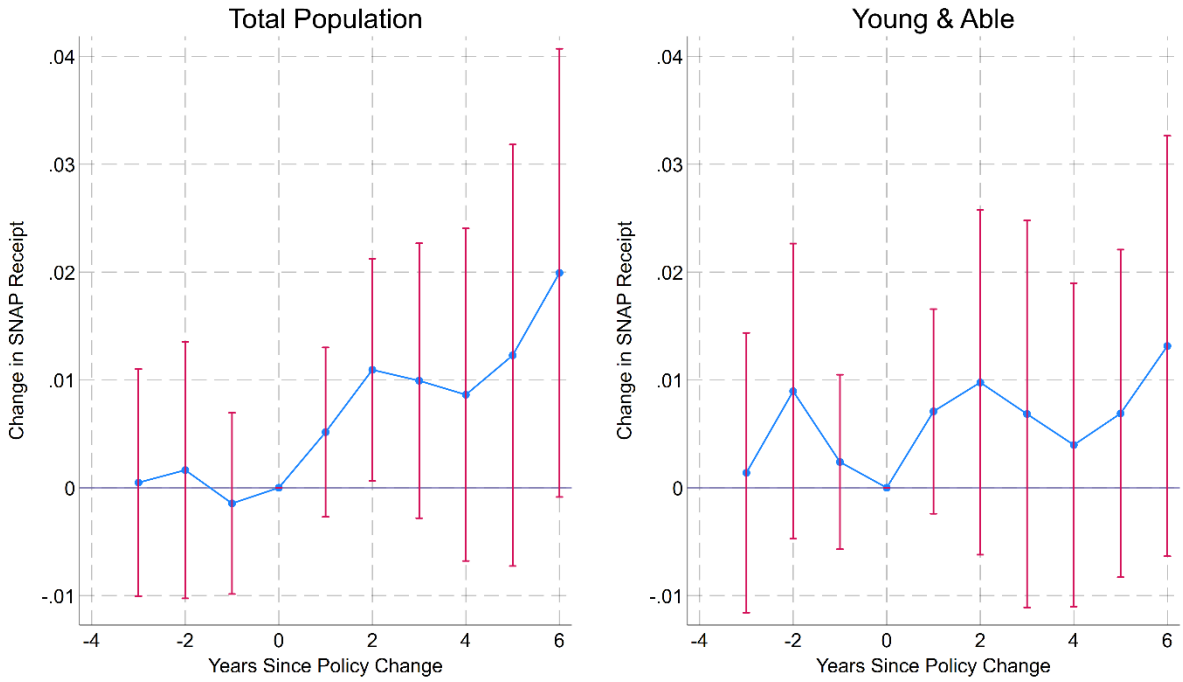
Appendix Figure A1: Effects of the BBCE Indicator for the General Population and Young and Able



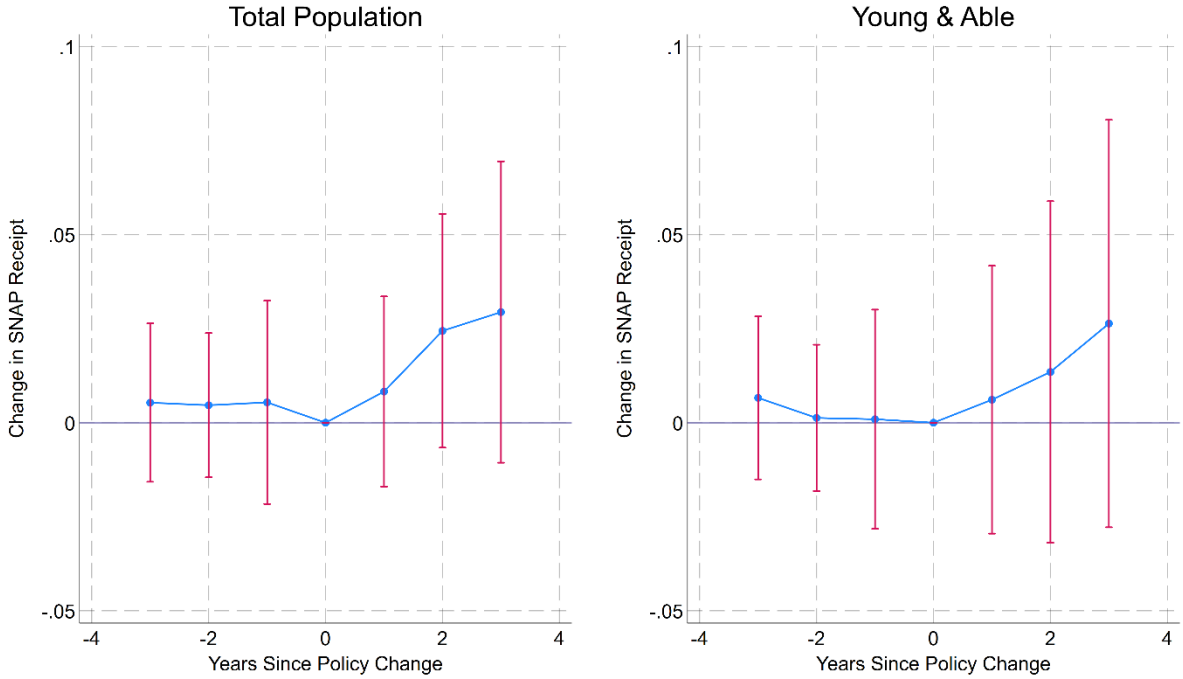
Appendix Figure A2: Effects of the BBCE Index for the General Population and Young and Able



Appendix Figure A3: Effects of the CAP for the General Population and Young and Able



Appendix Figure A4: Effects of the ESAP for the General Population and Young and Able



Appendix Figure A5: Effects of the SMD for the General Population and Young and Able

