

The Impact of State-Level Modernization Efforts on Participation in the
Supplemental Nutrition Assistance Program

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Julia Druhan, B.A.

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SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM

Julia Druhan, B.A.

Thesis Advisor: Priscilla Carver, PhD.

Abstract

This paper examines the effect of modernization efforts available to the States on participation in the Supplemental Nutrition Assistance Program (SNAP). The 2002 and 2008 Farm Bills outlined and enacted several measures States could take to change the way SNAP is administratively implemented. Some of these measures may reduce barriers to participation and increase the number of eligible individuals participating in the program. This research, using data from the Survey of Income and Program Participation in 2010 looks at the impact of state implementation of these measures on SNAP participation during the recent recession. While a great deal of research has looked the impact of administrative changes and economic situations on SNAP participation, little research has been done since most States put recent modernization efforts into place. This research finds that six-month recertification rates and call centers that are used to conduct interviews have a negative impact on SNAP participation. Further, the analysis finds that electronic applications and reporting requirements of \$100 of earned or unearned income have a positive impact on SNAP participation. Twelve-month recertification rates, call centers that can process changes for clients and application systems that are integrated with other social service programs were not found to have an effect on SNAP participation. Perhaps the most notable effect found in this analysis is that of the use of

electronic applications, as it is a relatively new policy that could continue to impact rural and urban Americans alike as it is implemented into more states in the coming years.

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Introduction and Background

The Supplemental Nutrition Assistance Program (SNAP) formerly the Food Stamp Program (FSP) provides in-kind benefits to low income populations in order to “alleviate hunger and malnutrition by increasing purchasing power for eligible households who apply for participation.” (Food Stamp Act of 1977). The U.S. Department of Agriculture estimates that using SNAP benefits can increase food purchasing power of a family of four with one full time minimum wage worker by up to 36% (Ratcliffe, McKernan and Feingold, 2007).

During the mid-nineties, participation in SNAP fell from 74% of eligible beneficiaries in 1994 to 57% in 1999 (Ratcliffe, McKernan and Feingold, 2007). Following this decrease, the changes in SNAP participation rates were attributed to the strong economy and modifications to SNAP eligibility rules in the wake of welfare reform (Zedlewski and Rader 2005, Kornfeld 2002, and Danileson and Klerman 2006).

The 2002 Farm Bill initiated policy changes that allowed for states to alter the ways in which they implemented SNAP, including relaxing the assessment of vehicle costs when establishing eligibility, increasing the use of Electronic Benefit Transfer (EBT) systems, and changing the hours of operation for SNAP offices to better fit the schedules of working beneficiaries (Cunnyngham 2004). The 2008 Farm Bill furthered these State-level options and allowed for waivers to face-to-face interviews for eligible states, electronic applications, longer recertification periods and the use of call centers as a method for SNAP beneficiaries to update the status of their benefits (Dean and Rosenbaum, 2008).

During the late 1990's and early 2000's the federal government began to penalize states for errors in benefit disbursement. Quality Control measures put into place by the federal

government established stricter reporting and accountability on behalf of states in an effort to cut down on errors in the program. Ultimately, states had perverse incentives to restrict participation by encouraging shorter recertification periods in an effort to cut back on waste, fraud and abuse (Kabbani 2003). Most research has found that states with shorter recertification periods see a decrease in participation in SNAP due to the increased transaction costs for SNAP participants with continually applying for benefits (Kabbani 2003, McKernan and Ratcliffe 2003, Kornfeld 2003, Currie and Grogger 2001, Mills, Gregory, Laliberty and Rodger 2004).

Despite low participation amongst eligible populations in the late nineties, participation increased again during the mid-2000's (Feingold 2008). This increase could be due to better outreach on behalf of states but is likely primarily due to the weakened economy (Feingold 2008, USDA). In 2010, during an average month, there were approximately 40.3 million people, or 18.6 million households, participating in SNAP, 49% of which were children (USDA).

Although the federal government sets eligibility requirements for SNAP that apply to all Americans, States are responsible for the administrative portion of the program and thus, are responsible for deciding factors regarding application and recertification processes (USDA). When the 2008 Farm Bill passed, some states had already begun to attempt modernization efforts for their State SNAP programs while others had to begin to make sweeping changes to keep up with the new requirements and options available to them (Dean and Rosenbaum, 2008). It is unknown which, if any, of these policies have an impact on increased participation in SNAP, however, states with policies that allow for more accessibility to benefits and fewer

barriers to participation may see more eligible populations applying for and retaining benefits during their eligibility periods.

There are several factors that are contributing to less than full participation in SNAP. While some of these factors, such as the condition of the economy or the role that welfare reform played on SNAP participation, have been researched thoroughly in previous literature, the recent legislative impacts of the 2008 Farm Bill have yet to be the focus of a significant body of research.

Using 2010 data from the Survey on Income and Program Participation (SIPP), this paper examines the impact that varying modernization efforts implemented on the State level have had on participation in SNAP. Specifically, this analysis focuses on modernization efforts that could have had an impact on application, recertification, or barriers to access for low-income populations.

Review of Previous Literature

Previous research on SNAP participation has shown that participation rates tend to fluctuate with the state of the economy. Research regarding effects of economic factors on SNAP participation indicates that SNAP participation decreases during periods of strong economic growth and increases during times of economic duress (Cunningham, 2003). One study notes that the strong economy in the 1990's can explain approximately 20% of the decline in SNAP caseloads between 1994 and 1999 (Kornfeld, 2002). Given the struggling economic situation for the past 4 years, new research regarding the impact of recent modernization and recertification efforts at the state level will contribute to the current body of research from previous economic downturns.

Although evidence exists showing that SNAP participation is higher during particular economic situations, even when participation is at its highest, the program is never at full participation (Cunnyngham 2003, Kornfeld 2002, GAO-07-573). The Government Accountability Office (GAO) estimates that in 2004, 40% of the SNAP eligible population was not participating in the program (GAO-07-573). More recently, during an average month in 2008, 28.4 million people were participating in SNAP and almost half of all participants were children (USDA, 2009). Additionally, at some point in their adult lives, approximately 50% of the population between 20 and 65 will participate in SNAP (Rank and Hirschl, 2005). Most of this participation tends to be in short bursts, but a substantial number of people have reoccurring bouts of SNAP participation (Rank and Hirschl, 2005). Muted participation suggests that there may be barriers to participation regarding the application or recertification process. Conversely, reoccurring stints in the program may indicate that fluctuating incomes allow for the program to intervene when necessary to help get people back on their feet.

A large body of research examines why people leave SNAP and the impact that recertification periods have on continued participation in the program. Some of this research shows that longer recertification periods have a positive effect on SNAP participation (Ratcliffe, McKernan, Feingold 2007, Kabbani 2003). Kabbani found that shorter recertification periods accounted for about 10% of the decline in SNAP participation rates between 1994 and 2000.

Additional research examines the impact of recertification on single parents and families with children. For example, Currie and Grogger (2001) found that on average, among single parents, a one-month increase in recertification periods is associated with a 0.5 percentage point increase in SNAP participation. For families with children, longer recertification periods

have been associated with a 1 to 3 percentage point increase in SNAP participation (Hanratty, 2005); and additionally that frequent recertification rates have a negative effect on households with multiple children. Kornfeld estimates that increases in the frequency of recertification can lead to a 2.3 to 2.4 percent decrease in SNAP participation for this group (Kornfeld, 2002).

Nonetheless, some research conflicts with the findings reviewed above. McKernan and Ratcliffe (2003) for example, found that recertification periods of less than 3 months are not a deterrent to participating in the program. However, this same study found that beneficiaries facing medium length recertification periods between 4 and 6 months were less likely to participate in SNAP than those who had recertification periods of 7 months or longer (McKernan and Ratcliffe, 2003).

Previous research on reasons that eligible participants do not recertify for their SNAP benefits indicates that the administrative burdens that accompany recertification are a deterrent to continued participation (GAO-07-573). Among people interviewed for a USDA commissioned report regarding why people leave the program, 29% perceived themselves ineligible to reapply, 23% thought verification processes are too difficult, 16% were confused about the recertification process, 9% thought recertification is required too frequently, 7% would have missed work, 4% could not keep up with monthly reporting, and 3% had difficulty getting to a local SNAP office to recertify (Bartlett, Burstein and Hamilton, 2004). Confusion regarding continued eligibility, the processes for recertification and difficulty with the reporting requirements of SNAP can amount to administrative barriers that reduce continued participation in the program.

Previous research claims that the Farm Security and Rural Re-Investment Act of 2002, commonly referred to as the Farm Bill, was responsible for an increase in SNAP participation because it allowed for some leniency or expanded options in methods of administering benefits on behalf of states (Zedlewski and Radar, 2005). As a result, state-level modernization efforts have aimed at making it easier to navigate the application and recertification process (GAO-07-573).

All states now allow for initial application, updating of income or other eligibility measures, and recertification to take place through the mail and about half of the states are developing and beginning to use online tools to enable applicants to submit these documents to local SNAP offices electronically (GAO-07-573). Additionally, about half of states have applied for waivers of the face-to-face interview requirement and are either developing or beginning to use call centers to conduct eligibility interviews. Finally, a large number of states have begun to operate SNAP offices during non-traditional working hours in order to allow working beneficiaries recertify for benefits without missing work

These modernization efforts may encourage participation for eligible working populations or eligible rural populations because of increased access to resources to apply or recertify and ease of accessing benefits (McKernan and Ratcliffe, 2003 and Currie and Grogger, 2001). Further, since the average SNAP recertification takes 2.8 hours to complete and at least one visit to the local SNAP office, modernization efforts may decrease the burden on beneficiaries who are working and encourage people to recertify (Currie and Grogger, 2001). However, while states have made major efforts to increase access to SNAP benefits, there has

been little research and evaluation on these efforts to date, so understanding of the effectiveness of these measures is limited at best.

A sizeable amount of previous research done on participation and recertification rates has attributed welfare reform and economic factors as the main drivers of changes in SNAP caseloads. The Aid to Families with Dependent Children (AFDC) program, commonly referred to as welfare, experienced a dramatic shock during the 1990s when the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) was implemented. This law, also known as welfare reform, terminated AFDC and transitioned the program into Temporary Aid for Needy Families (TANF). TANF, which still exists today, has strict limits on how long recipients can receive benefits, is paid for out of discretionary spending, so it does not have unlimited funding like other entitlements, and has relatively few people participating.

Several researchers hypothesized that as families transitioned out of TANF they may also transition out of SNAP because of a lack of information regarding benefits for which they are still eligible. Extensive research on PRWORA has shown that 21% of the decline in SNAP participation during the 1990's can be attributed to changes in TANF policy (Kornfeld, 2002). Additionally, families leaving TANF between 2000 and 2003 were more likely to continue to receive SNAP benefits than families who left TANF between 1995 and 1997 when the initial welfare reform laws were first implemented and the largest number of people were leaving the program (Zedlewski and Radar, 2005). For families who were not participating in cash welfare programs, there was no change in SNAP participation between 1997 and 2003 (Zedlewski and Radar, 2005).

Research conflicting with the findings above suggests that SNAP participation is more responsive to changes in SNAP benefit amounts than it is to changes in other non-labor income or other program benefit amounts (Huffman and Jensen, 2008). This research finds that increases or decreases in total SNAP benefits are ultimately what impacts overall program participation, not changes in benefit levels for other programs. Additionally, a report by the USDA that examines reasons for failing to complete SNAP recertification notes that respondents did not mention receipt of TANF, termination of TANF benefits or being subject to TANF reporting requirements as reasons for not continuing to participate in SNAP (Bartlett, Burstein and Hamilton, 2004). This implies that changes in welfare policy and transitions to TANF had little impact on families who chose to remain on SNAP.

Although a considerable amount of research was conducted and evaluated during the late 1990's and early 2000's, most of the previous research available focuses on the impact of welfare reform on SNAP participation and very little research has been done to study the impacts of modernization efforts or how participation may have changed in recent years. This study aims to look at how participation in SNAP has been impacted by state-level policy in a more recent timeframe. Several previous studies have used the 2000 or 2004 panels from the Survey on Income and Program Participation, while this study uses the most recently available data from the same study, collected from 2008 to 2010. Finally, since there is such a large body of research on previous changes to SNAP policy, it is reasonable to examine the impact of newly implemented modernization policy on program participation.

Conceptual Framework and Hypothesis

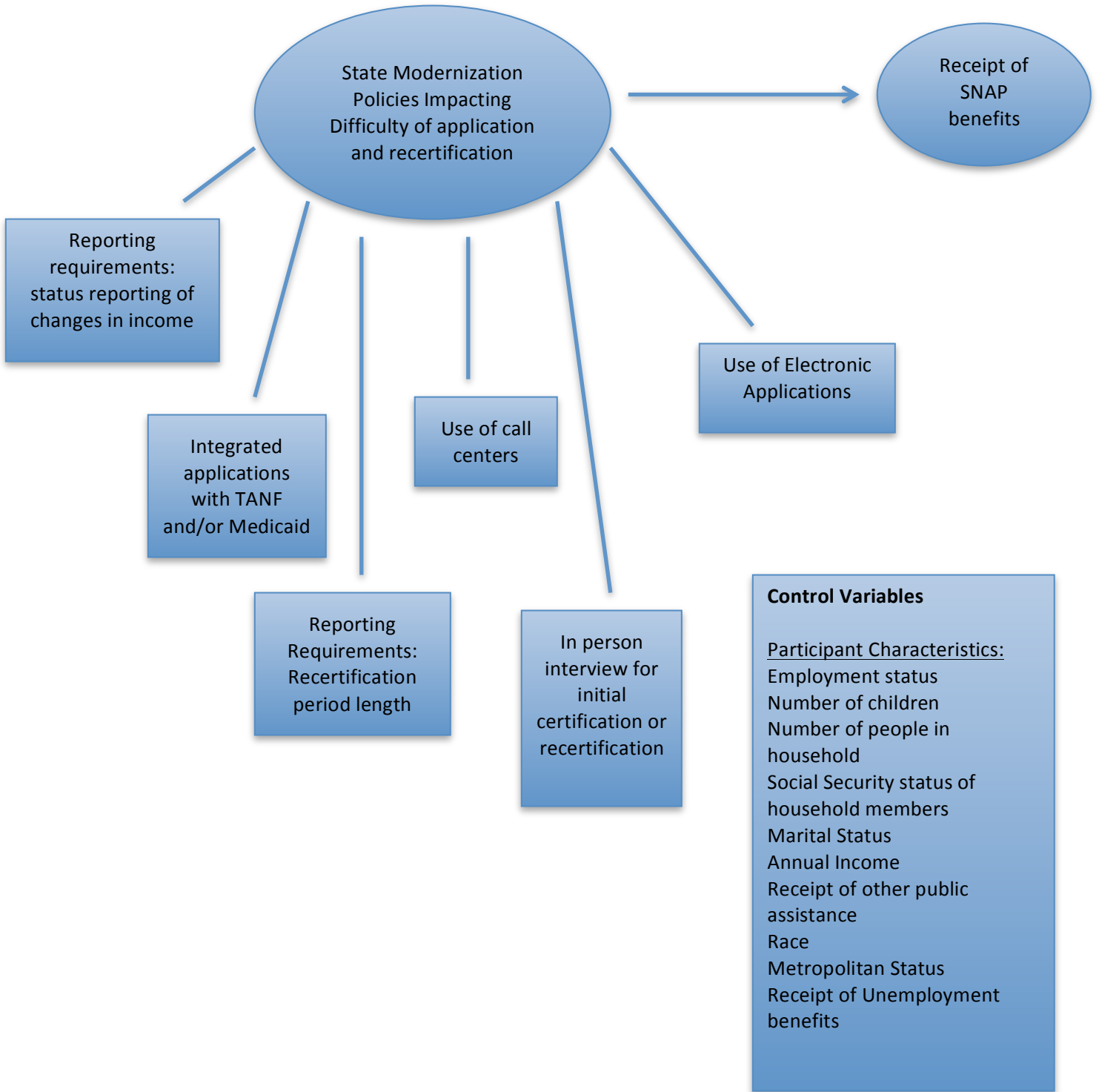
This paper analyzes the impact of state-level modernization policy regarding application and recertification to SNAP on participation rates in the program. Specifically, the analysis tests the hypothesis that policies that present barriers to initial or continued participation have a negative impact on SNAP participation. This analysis examines whether income reporting requirements, recertification periods, requirements of in-person interviews for initial certification and/or recertification, integrated applications with similar programs, use of call centers to process changes or conduct interviews, and use of electronic applications impact initial application or recertification for eligible populations (Figure 1).

This analysis tests the theory that increased requirements for initial participation and time or verification demands to remain in the program have a negative impact on SNAP participation. Ease of initial application or recertification may increase the likelihood that an eligible person will participate in the program. Ability to recertify online or to recertify without an in-person interview may encourage low-income workers to continue to participate in the program because they will be able to reapply without missing work. Additionally, states with SNAP offices opened during non-traditional work hours or states that use call centers to process changes or conduct interviews may see an increase in SNAP participation amongst eligible beneficiaries who are employed, due to increased accessibility of SNAP resources by beneficiaries. States that integrate the applications for other programs may catch people who would otherwise not have the time to dedicate to applying for or recertifying for more than one program. Further, states with longer recertification periods or more lenient reporting requirements may see more retention in the program because beneficiaries will have to

maintain less frequent correspondence with their local SNAP office in order to keep their benefits.

Ultimately, any barrier to participation may have a distinct impact on rates of participation in SNAP because individuals, especially low-income employed individuals, may perceive the requirements to apply to the programs are too burdensome to justify the level of benefits. It is anticipated that states with stricter barriers to participation have relatively less participation in SNAP because of the perception of roadblocks to keeping up with the demands of the program.

Figure 1: Conceptual Framework and Hypothesis



Data and Methods

Data:

This study uses the Survey on Income and Program Participation (SIPP) from 2008. The population covered in the survey is non-institutionalized civilians living in the United States. The 2008 SIPP started in September of 2008 and is scheduled to run through December of 2012. It is comprised of 13 Waves, seven of which are already completed and available for analysis. This study uses wave 7, which was collected between May and November of 2010. The original population was made up of 52,301 eligible household units with 42,031 successful interviews of household units in the first Wave (SIPP Users Guide, 2008). The current Source and Accuracy Statement for the SIPP indicates that during Wave six the number of eligible household units had dropped to 43,544 and the number of successfully interviewed household units was down to 34,891. This represents a 35.4% sample loss (Source and Accuracy Statement for the SIPP, U.S. Census Bureau).

SIPP is a longitudinal study and as such, interviews the same group of people throughout the entire duration of the 2008 panel (SIPP Users Guide, 2008). Only people who were interviewed in Wave one were interviewed again in subsequent Waves. Members of original households that formed new households remained in the sample and continued to be interviewed if SIPP interviewers could find them.

The 2008 SIPP used a complex sampling design (SIPP Users Guide). The SIPP oversampled the low-income population by 44% in order to increase the accuracy for statistics regarding low-income program and participation rates (SIPP Users Guide). All sample

households are sorted into four random sub-sample, or rotation, groups that are of nearly equal size (SIPP Users Guide). One rotation group is interviewed each month and each household within the sample will be interviewed at four-month intervals over the course of 4 years. One cycle of four interview months that cover the entire sample is called a Wave. This analysis uses Wave seven because at the time of this study it was the most recent data available. Since states needed time to implement modernization policies and the impact of these policies may not have been immediate, more recent data was preferable.

In addition to using the SIPP, this study uses state-specific data on SNAP policy collected from the United States Department of Agriculture for all 50 states and the District of Columbia. This data accounts for approximately 25 state policies, listed as binary variables, indicating that the policy is either in place or not. The USDA data will be incorporated into the SIPP data using the Federal Information Processing Standard (FIPS) code variable that indicates the State of origin for the household. The USDA data was collected from the 9th edition of the Supplemental Nutrition Assistance Program State Options Report in 2010, which indicates SNAP statutes, regulations and waivers available to states and specifies which policy options are in use on the State level.

There are some limitations in the SIPP dataset. First, some under-coverage of key demographic subgroups exists, particularly among black males over the age of 15 (SIPP Users Guide). The Census Bureau compensates for this problem by using population controls to derive final SIPP weights, but little is known about the effectiveness of post-stratification adjustments in reducing bias. Second, just as in all surveys, some attrition exists. If the characteristics of the people who leave the survey are similar or connected in any way, the

resulting analysis may be biased. Next, research has indicated that people will report the same status for the previous four months within a wave, even if changes occurred during the wave period in question. Most people will indicate changes occurred in the last month of the wave, which results in an overstatement of changes during the seam months between waves. This is referred to as a “seam bias.” Finally, as with all self-reported data, there may be some people who misrepresent their participation, income or other status for questions in the survey.

Methods and Analysis Plan:

This paper analyzes the subset of the interviewed SIPP population that is eligible to participate in SNAP. This subset includes households with a maximum income of 130% of the poverty line with U.S. Citizenship status and who completed full interviews for Wave seven. This sub-population was chosen because the goal of the analysis in this paper is to establish how state-specific policy impacts program participation, thus, people who are ineligible to participate cannot be part of the analysis. The data was combined from the individual to the household level using identifying variables for the reference person in the household.

Households that were ineligible to receive SNAP benefits were coded as missing and subsequently removed from the sample. There were no other instances of missing data.

The dependent variable in this analysis, participation in SNAP, is binary and thus, this analysis uses a logit regression to analyze the relationship between state-specific modernization and recertification policy and program participation. In addition, an OLS Linear Probability Model will be used to check that results are accurate and sound. Given the dichotomous nature of the dependent variable, a logit model is appropriate.

The independent variables in the analysis are all binary variables collected from the USDA State Options report regarding state specific policy. Each of these variables is included because they affect the level of difficulty in application or recertification into SNAP and thus, are indicators of the impact that state-level policy may have on program participation (USDA State Options Report- 9th Edition, 2010). They include the following:

- **Simplified Reporting- Certification Length and Income Change Reporting:** States were given the option to use simplified reporting, which is a change from the previous methods of change reporting. In change reporting, SNAP recipients are required to report any changes in income within a specific time period, typically 10 days. In a simplified reporting system SNAP recipients only report changes in income levels when the increase in income would put their total income about 130% of the poverty line.
 - **Simplified Reporting- Certification Length:** States may choose how often SNAP beneficiaries must recertify their benefits. Most states have recertification periods that vary depending on the make-up of the household. Households that have recertification periods longer than 6 months are subject to reporting on income status not less often than once every 6 months. Some State agencies have opted to certify simplified reporting households for 12 months with an interim report at 6 months. Other states require recertification every 6 months. Households in which all members are elderly or disabled with no earned income may be given 12 month certification periods with no interim report or 24 month certification periods with 12 month interim reports.

- **Simplified Reporting- Income Change Reporting:** Households are subject to report changes in income of \$100 or more. States vary on requirements for changes in earned income, unearned income, or both earned and unearned income. Some states require updating only when a recipient changes jobs or work status.
- **Electronic Application Filing:** States can provide the option for applicants to apply for benefits and recertify benefits online or via fax.
- **Waiver of Face-to-Face Interview:** States may request a waiver to the requirement that all applying households must receive a face-to-face interview either at initial certification or at recertification. States with waivers may conduct interviews over the phone and reserve the right to require a face-to-face interview on a case-by-case basis or if the applicant requests one. Interviewers gather the same information during a telephone interview as they would during a face-to-face interview.
- **Availability of Call Centers:** Call centers can be used exclusively to process reported changes but in some States they are also used to handle participant phone calls, conduct call backs, provide customer service and perform certification and recertification interviews.
- **Program Integration:** States have the option to integrate eligibility and intake processes for SNAP with TANF and Medicaid. Fully integrated programs are those that allow applicants to file a single application and attend a single interview for multiple programs. Partially integrated programs combine TANF and SNAP but Medicaid is administered separately.

The control variables in the model can be broken down into 3 categories: benefit factors, participant characteristics and SIPP identifying variables.

Benefit factor variables measure elements of SNAP that may impact application or continued participation in the program but that are not directly related to state modernization efforts. These variables include total benefits received, length of time on SNAP, length of time the state has used Electronic Benefit Transfer (EBT) cards and the number of SNAP offices in the states. Total SNAP benefits and length of time on SNAP may impact receipt of SNAP benefits because people may be more likely to participate in the program if the benefits are higher or if they have been on the program for a long time and have established how to navigate the recertification process. Length of time that the state has used an EBT system or the number of SNAP offices in the state may impact participation because they are systems that may reduce stigma or potentially make participation easier for beneficiaries. Total benefits received and length of time on SNAP are continuous variables collected as part of SIPP. The length of time a state has used EBT and number of SNAP offices in a state is collected through the USDA State Options Report and was merged into household records using the state FIPS code. Eligible households that do not participate in SNAP have legitimately skipped the questions regarding length of time on SNAP and amount of benefits received. These numbers are recoded as zeros in the dataset.

Participant Characteristics include variables that indicate reasons other than policy changes for someone to start or stop receiving SNAP. These variables include employment status, number of children, number of people living in a household, receipt of other public assistance, receipt of Social Security, marital status, earned income, metropolitan status, and race. Number of children and number of people living in a household are continuous variables

(SIPP Questionnaire, 2008). Number of children has a minimum of 0 and a maximum of 13 in this survey. Number of people living in a household has a minimum of 1 and a maximum of 15.

Employment status is a binary variable- respondents are asked whether they had a job in the previous reference month. Additional employment information is collected by asking if respondents worked for less than 35 hours per week or if they spent time looking for work during the reference period. The survey also collects data on unemployment insurance, with a flag variable indicating whether the respondent received unemployment benefits and a secondary continuous variable indicating how much they received, if they received benefits.

Receipt of other public assistance is a variable compiled from other variables regarding receipt of TANF, Medicaid, General Assistance, Public Housing Assistance, WIC, or Free or Reduced Price Lunch. These variables are flagged recoded variables and are binary. The resulting compiled variable is also binary and serves to indicate whether a respondent would have been receiving any other public assistance at the time. This is particularly important in looking at the impact of partially and fully integrated systems that combine the application process for multiple programs. Receipt of Social Security benefits is also a recoded flagged variable but is included separately from the public assistance variable because of the age requirement that accompanies Social Security benefits. Receipt of social security benefits gives insight into the composition of the household, which could have impacted other aspects of SNAP application and recertification.

Earned income was recorded on a monthly level because the information in the survey was collected on a monthly basis. This variable was particularly important when establishing eligibility for SNAP and removing people from the sample who would have been ineligible for

the program due to income restraints. The maximum monthly income in the sample is \$4,783 for eligible families who were not participating in SNAP and \$5,882 for families receiving SNAP benefits. Monthly income may have impacted SNAP receipt because eligible households may not have seen a need for the benefit or may have had less trouble purchasing adequate food for the household depending on how much they are earning.

The final participant characteristics were race, metropolitan status and marital status. These variables were included in order to note any differences in specific types of households receiving or not receiving SNAP benefits. Metropolitan status, in particular, was an important variable to look at when evaluating the impact of electronic applications since there are separate issues with internet access in both urban and rural areas that may have affected the impact of applying for SNAP online. It is important to note that race indicates the race for the household head only and may not be accurate for the entire household.

Empirical Equation and Hypothesized Effects

The analysis was done using the following empirical equation:

$$\text{Receipt of SNAP} = \beta_0 + \beta_1 \text{recertification length} + \beta_2 \text{income reporting} + \beta_3 \text{Electronic App} + \beta_4 \text{ESig} + \beta_5 \text{Fully Integrated} + \beta_6 \text{Partially Integrated} + \beta_7 \text{Waiver Initial Interview} + \beta_8 \text{Waiver Recert Interview} + \beta_9 \text{Call Center Changes} + \beta_{10} \text{Call Center Interviews} + \beta_{11} \text{Participant Characteristics} + \beta_{12} \text{Other Controls} + \mu$$

The hypothesized effect of each modernization policy on SNAP participation is laid out in Table 1 below. Hypothesized effects can be broken down into five categories: recertification rates and reporting requirements, electronic applications and electronic signature, integrated applications, interview waivers and use of call centers.

It is hypothesized that shorter recertification rates, identified as six months or less, will have a negative effect on SNAP participation because bi-annual recertification may appear to be too much of a burden for eligible households. Previous research affirms this hypothesis, indicating that households with shorter recertification rates have decreased participation in SNAP (Kabbani, 2004). Recertification rates of 12 or 24 months will have a positive effect on recertification rates- partially because households with 24 month recertification rate are primarily made up of elderly households that do not have earnings to rely on and typically maintain benefits for longer periods of time (State Options Report). The effect of various recertification rates is unknown because the state uses factors regarding the make-up of the household to decide how often that household is required to recertify. Depending on the types of households that are using SNAP, the recertification rate could have different effects. Finally, reporting requirements for changes in income have a hypothesized negative effect on SNAP participation because increased reporting and other requirements to maintain benefits may disincentivize participation in the program. This assumption is supported in a USDA report that notes that one of the reasons participants left the program was that they could not keep up with required reporting while receiving benefits (GAO-07-573).

Electronic applications and electronic signatures are both hypothesized to have a positive effect on SNAP participation. These policies are hypothesized to have a particularly strong effect for adults working more than 35 hours per week since SNAP offices are generally opened during normal business hours and if people can apply without taking off work they may be more likely to participate in SNAP. One area where the impact of electronic applications will be interesting to observe is in the case of rural households. On the one hand, these households

are probably further away from SNAP offices and traveling to a SNAP office to apply or re-certify benefits may be an additional burden to application. However, rural areas also have lower rates of broadband internet access and it may be difficult for these households to access online applications.

Partially and Fully integrated applications are hypothesized to have a positive effect on SNAP participation. This policy will only impact households that are eligible for Medicaid and/or TANF, since having a single application for two or three policies will have no bearing on participation for households that are not eligible for multiple programs.

Waivers for face-to-face interviews for initial certification and recertification are anticipated to have a positive effect on SNAP participation. Much like the hypothesized effect of other policies that would limit the amount of time an applicant would have to spend in a SNAP office, waiving the need for interviews will likely allow people to apply who would otherwise have trouble keeping up with the in-person requirements of receiving benefits.

Finally, use of call centers in the state SNAP system has a hypothesized positive effect on participation. A centralized system for beneficiaries to go to either report changes and/or participate in interviews will make application and recertification easier and likely increase the number of people participating in the program.

Table 1: Description of SNAP Related Policies

Policy Variable	Description	Hypothesized Effect on SNAP Receipt
<u>Recertification Periods and Reporting Requirements</u>		
<i>6 month recertification rates</i>	percentage of states with requirements for 6 month recertification rates	(-)
<i>12 month recertification rates</i>	percentage of states with requirements for 12 month recertification rates	(+)
<i>24 month recertification rates</i>	percentage of states with requirements for 24 month recertification rates, with interim reporting at 12 months	(+)
<i>Recertification rates vary</i>	percentage of states with varying requirements depending on the make up of the household	(-/+)
<i>Reporting requirements for increases in income</i>	percentage of states requiring reports of \$100 increases in earned income, \$100 increases in unearned income or reports of both earned an unearned income increases	(-)
<u>Electronic Applications</u>		
<i>Electronic Application</i>	percentage of states using electronic applications for SNAP	(+)
<u>Integrated Applications</u>		
<i>Fully Integrated</i>	percentage of states using one application for SNAP, TANF and Medicaid	(+)
<i>Partially Integrated</i>	percentage of states using one application for SNAP and TANF only	(+)
<u>Waiver of Face-to-Face Interview</u>		
<i>Initial Certification</i>	percentage of states with waivers for in person interviews for initial certification	(+)
<i>Recertification</i>	percentage of states with waivers for in person interviews for recertification	(+)
<u>Use of Call Centers</u>		
<i>Process Changes</i>	percentage of states that use Call Centers to process changes for SNAP beneficiaries (income increases, change of address, employment updates, etc.)	(+)
<i>Conduct Interviews</i>	percentage of states that use Call Centers to conduct interviews for initial certification or recertification	(+)

Descriptive Statistics and Preliminary Results

Since states have the option to decide how they want to administer SNAP, the decision to implement specific modernization policies is made on the state-level (Table 2). Regarding recertification rates, a majority of states—62%—have recertification rates that vary depending on the make-up of the household. Twenty-two percent of states have 6-month recertification rates, while 16% have 12-month recertification rates. While all states are required to have a recertification length, required reporting of changes in income is a far less common policy. Only 33% of states require SNAP participants to report change in earned income of over \$100.

Electronic applications are becoming a more common practice in state SNAP systems and almost 57% of states have started using electronic applications. With integrated applications systems, most states—78%—have fully integrated systems that provide one application and certification process for SNAP, TANF and Medicaid. Alternately, 10% of states have partially integrated systems that have a common application for SNAP and TANF only and 12% of states have un-integrated systems for these programs¹.

Applications for waivers of face-to-face interviews are another of the more common modernization policies in practice. Currently, 76% of states have waivers for initial certification face-to-face interviews while 90% of states have waivers for recertification interviews. Only 10% of states still require face-to-face interviews for both initial certification and recertification.

Call centers are used for two primary purposes: conducting interviews and processing changes in SNAP caseloads. Approximately 39% of states use call centers to process changes

¹ It is important to note that for several of the modernization policies studied in this analysis, the percentages of states implementing a policy will not add up to 100 because most of the policies are not requirements and policies that are grouped together thematically are not mutually exclusive.

while 27% use call centers to conduct interviews. Finally, 27% of states use call centers to complete both of these actions, while 41% of states do not have call centers at all.

Table 2: Number of States with SNAP Policy

	Frequency	Percentage
<u>Recertification Periods and Reporting Requirements</u>		
<i>Recertification Periods</i>		
<i>6 months or less recertification rates</i>	11	21.57
<i>12 month recertification rates</i>	8	15.69
<i>Recertification rates vary</i>	32	62.75
<i>Reporting requirements for increases in income</i>		
<i>\$100 Earned Income</i>	17	33.33
<i>\$100 Unearned Income</i>	1	1.96
<i>Both Earned and Unearned income increases of \$100 or more</i>	3	5.88
<u>Electronic Applications and Electronic Signatures</u>		
<i>Electronic Application</i>	29	56.86
<u>Integrated Applications</u>		
<i>Fully Integrated</i>	40	78.43
<i>Partially Integrated</i>	5	9.80
<i>Neither</i>	6	11.76
<u>Waiver of Face-to-Face Interview</u>		
<i>Initial Certification</i>	39	76.47
<i>Recertification</i>	46	90.20
<i>Both Initial Certification and Recertification</i>	39	76.47
<i>Neither</i>	5	9.80
<u>Use of Call Centers</u>		
<i>Process Changes</i>	20	39.22
<i>Conduct Interviews</i>	14	27.45
<i>Both Processing Changes and Conducting Interviews</i>	14	27.45
<i>Neither</i>	21	41.18

² Some sections may not sum to exactly 51 because different policies apply to multiple states

Race, metropolitan status, employment status, marital status and number of children all could have an impact on whether a household applies for or receives benefits (Table 3). Among households receiving SNAP benefits, the primary reference person in approximately 62% are White while almost 29% are Black and less than 2% are Asian. Of eligible non-participating households, the primary respondent in approximately 77% are White, about 15% are Black and only 3% are Asian³.

Households may face regional and geographical barriers to entry into the program. For example, households in rural areas may have trouble getting to a SNAP office to apply for benefits and therefore could benefit from electronic applications. Thus, metropolitan status could have an impact on the types of households that apply for SNAP benefits. Approximately 70% of households participating in SNAP live in areas classified as metropolitan. Conversely, around 25% of SNAP households live in rural areas while just under 5% of the sample receiving SNAP did not answer questions regarding metropolitan status. Among eligible non-participating households around 71% of the sample live in metropolitan areas while approximately 25% live in rural areas and 3% did not specify their metropolitan status.

Since earnings are the biggest contributor to income and eligibility for SNAP is based on income, employment status is an important factor in establishing if a household will apply for SNAP benefits. Additionally, some populations, specifically Able Bodied Adults Without Dependents (ABAWD) are subject to time limits for SNAP benefits depending on their employment situation. Among participating households in the sample, around 33% have a reference person that was employed during the reference period. Alternately, approximately

³ It is important to note here that the race of a household only applies to the reference person in the household and may not be accurate to the entire household

67% of SNAP households contain a reference person who was unemployed during the reference period. Additionally, approximately 15% of SNAP households have a reference person who was looking for work during the reference period while just under 20% of SNAP households contain a reference person who worked less than 35 hours per week. Around 41% of eligible non-participating households contained a reference person who was employed during the reference period while just shy of 60% of these households had an unemployed reference person during the reference period. Finally, approximately 11% of eligible non-participating households contained a reference person that was looking for work during the reference period while around 19% of these households contained a reference person who was working fewer than 35 hours per week during the reference period.

Single headed households are more likely to use SNAP benefits because they have fewer incomes to rely on and are more likely to meet the income eligibility requirements. In SNAP households, around 24% of the sample is married while 75% of these households were either never married, widowed, divorced or separated. In eligible non-participating households 29% of household reference people were married while approximately 71% of household reference people were never married, widowed, divorced or separated.

Children are an important component of SNAP participation because they can have a negative effect on work and thus a positive effect on SNAP participation. Children also increase the number of people in a household and as a result, increase the total SNAP benefit a household can receive. Among SNAP households, approximately 55% have children while 45% do not have children. In eligible non-participating households, approximately 26% have children while 74% are childless.

Table 3: Descriptive Statistics for Race, Metropolitan, Employment, Marital and Parental Status ¹

	SNAP Households		Non-SNAP Households		Total
	Frequency	Percentage	Frequency	Percentage	
Race					
<i>White</i>	1,999	63.10	3,552	77.86	5,551
<i>Black</i>	899	28.38	689	15.10	1,588
<i>Asian</i>	62	1.96	143	3.13	205
<i>Other</i>	208	6.57	178	3.90	386
Metropolitan Status					
<i>Metro</i>	2,236	70.58	3,278	71.85	5,514
<i>Non-Metro</i>	790	24.94	1,142	25.03	1,932
<i>Not Identified</i>	142	4.48	142	3.11	284
Employment Status					
<i>Employed</i>	1,124	35.48	2,504	54.89	3,628
<i>Unemployed</i>	2,044	71.07	2,058	45.11	4,102
<i>Spent Time Looking for Work</i>	509	16.07	532	11.66	1,041
<i>Worked Less than 35 hrs/wk</i>	653	20.61	925	20.28	1,578
Marital					
<i>Married- Spouse Present</i>	716	22.60	1,257	27.55	1,973
<i>Married- Spouse Absent</i>	72	2.27	116	2.54	188
<i>Widowed</i>	313	9.88	833	18.26	1,146
<i>Divorced</i>	748	23.61	966	21.17	1,714
<i>Separated</i>	236	7.45	170	3.73	406
<i>Never Married</i>	1,083	34.19	1,220	26.74	2,303
Children					
<i>Yes</i>	1,779	56.16	1,243	27.25	3,022
<i>No</i>	1,389	43.84	3,319	72.75	4,708

¹Frequencies and percentages represent the main reference person in the household and may not be representative of entire household make-up.

An important component of evaluating the impact of particular modernization policies is knowing how many of these policies impact households that are participating in SNAP. Across

the board, SNAP households and eligible non-participating households experience the availability of modernization policies at about the same rate (Table 4).

Approximately 25% of SNAP households and 26% of non-SNAP households have 6-month recertification rates. SNAP households and eligible non-participating households both experience 12-month recertification rates at around a rate of 10%. Additionally, around 64% of SNAP households and 64% of eligible non-participating households experience various recertification rates. Around 28% of SNAP households are required to report increases of 100 or more under a simplified reporting system while approximately 31% of eligible non-participating households are eligible for the same policy. Finally, approximately 58% of SNAP households and 57% of eligible non-participating households are not required to report increases in income under a simplified reporting system.

As stated above, electronic applications are becoming a more common policy in State SNAP systems. The ability to apply for benefits online may increase access because eligible participants are able to apply on their own time or from their own homes. Approximately 79% of SNAP households are in states that have electronic applications while 76% of eligible non-participating households have that same option.

A very large proportion of the households in this sample are in states with either fully or partially integrated application systems. Nearly 81% of SNAP households and 81% of eligible non-participating households live in states with fully integrated systems. Further, around 11% of SNAP households and 10% of non-participating households live in states with partially integrated systems. Finally, only around 8% of SNAP households and 9% of eligible non-participating households live in states with non-integrated systems.

Waivers for face-to-face interviews are another increasingly popular modernization policy being implemented on the state level. Roughly 83% of SNAP households and 83% of non-participating households are in states with waivers for the face-to-face interview for initial certification. Additionally, around 94% of SNAP households and 94% of non-participating households live in states with waivers for the face-to-face interview for recertification. Approximately 6% of SNAP households and 6% of non-participating households are in states that do not have waivers for either type of face-to-face interview.

Among the modernization policies analyzed in this study call centers are the least prevalent effort being put into place on the state level. Nearly 70% of SNAP households and 69% of eligible non-participating households live in states that use call centers to process changes. Alternatively, around 33% of SNAP households and 34% of eligible non-SNAP households live in states that use call centers to conduct interviews. Lastly, approximately 30% of SNAP households and 31% of non-participating households live in states that do not use call centers.

Table 4: Frequency and Percentages for SNAP Modernization Variables

	SNAP Households		Eligible Non-SNAP Households		Total
	Frequency	Percentage	Frequency	Percentage	
<u>Recertification Periods and Reporting Requirements</u>					
<i>Recertification Periods</i>					
6 month recertification rates	819	25.85	1,199	26.28	2,018
12 month recertification rates	319	10.07	474	10.39	793
Recertification rates vary	2,031	64.11	2,890	63.35	4,921
<i>Reporting requirements for increases in income</i>					
\$100 Earned Income	899	28.38	1,445	31.67	2,344
\$100 Unearned Income	86	2.71	138	3.02	224
Both Earned and Unearned income increases of \$100 or more	326	10.29	380	8.33	706
None of the above	1,858	58.65	2,600	56.99	4,458
<u>Electronic Application</u>					
Electronic Application	2,495	78.76	3,479	76.26	5,974
<u>Integrated Applications</u>					
Fully Integrated	2,566	81.00	3,700	81.10	6,266
Partially Integrated	353	11.14	463	10.15	816
Neither	250	7.89	399	8.75	649
<u>Waiver of Face-to-Face Interview</u>					
Initial Certification	2,630	83.02	3,775	82.75	6,405
Recertification	2,984	94.19	4,300	94.26	7,284
Both	2,630	83.02	3,775	82.75	6,405
Neither	184	5.81	262	5.74	446
<u>Use of Call Centers</u>					
Process Changes	2,223	70.17	3,132	68.65	5,355
Conduct Interviews	1,066	33.65	1,546	33.89	2,612
Both	1,066	33.65	1,546	33.89	2,612
Neither	945	29.83	1,430	31.35	2,375

¹Percents may not sum to 100 because policies are not mutually exclusive and some states have multiple policies in place.

Table 5 outlines some of the differences between income and benefit amounts for SNAP households and non-participating SNAP eligible households. SNAP households have an average monthly income of \$1002.54 while non-participating SNAP eligible households have an average monthly income of \$886.96. SNAP households receive an average yearly benefit amount of \$319.83. On average, SNAP households have 2.82 people in them, while non-participating SNAP eligible households have approximately 2.01 people.

Table 5: Descriptive Statistics for Income Levels and Benefit Amounts						
	<u>Mean</u>	<u>Std. Deviation</u>	<u>Min</u>	<u>Max</u>	<u>Obvs</u>	<u>Average Number of People in Household</u>
Average Amount Received in Yearly SNAP Benefits	319.83	252.57	6	2,134	3,168	2.82
Average Household Monthly Earnings for SNAP Households	1002.54	693.78	0	5,882	3,168	2.82
Average Total Household Monthly Earnings for non-SNAP Households	886.96	674.35	0	4,827	4,562	2.01

Results

Table 6 presents the Logit results estimating the impact of modernization policies on SNAP participation. The model includes the dependent variable, Participation in SNAP, and the independent variables controlling for race and metropolitan status employment status, marital status, number of children, number of people in the household, receipt of other public assistance, receipt of Social Security and total family income.

To ensure that none of the logit results were inaccurate, an OLS regression was run to see if the same variables presented significant results. The results are not presented, however, among the independent variables, all of the variables that are statistically significant in the OLS model are also statistically significant in the logit model.

Of the six categories of independent variables, five are statistically significant. Specifically, six month recertification periods (OR=0.582, $p<0.001$), call centers conducting interviews (OR=0.770, $p<0.001$), reporting \$100 in earned income (OR=.822, $p<0.005$), reporting \$100 in earned and unearned income (OR=1.334, $p<0.005$) and electronic applications (OR=1.276, $p<0.005$) are all significantly related to SNAP participation.

Controlling for other factors, households that are eligible for SNAP and facing a six-month recertification period are about 42% less likely than households with twelve-month recertification periods to participate in SNAP. The coefficient on varying recertification rates is not statistically significant. States with varying recertification periods tend to have longer periods for particular households, specifically the elderly and disabled, and as such, it was expected that this policy would result in higher participation in SNAP. Implications are presented in the discussion section.

Households that are required to report increases of \$100 or more in earned income between certification periods are 17% less likely to participate in the program than households with no such reporting requirement. Conversely, households that are required to report \$100 of earned or unearned income are more likely to participate in SNAP. The initial hypothesis regarding reporting requirements for earned and unearned income suggested that this policy would have a negative effect.

The odds ratio for electronic applications is statistically significant and has a large magnitude. Potential applicants with access to electronic applications are 27% more likely to participate in SNAP than those who are required to apply using another method. Finally, households in states with call centers that conduct interviews are 23% less likely to participate in SNAP. This result is unexpected because initially it seemed that having a call center conduct interviews would make it easier to apply for SNAP.

Some of the results are surprising either in that they are insignificant or that they have an unexpected sign. A particularly surprising result was that waivers for initial certification and recertification were statistically insignificant. These variables had an expected positive outcome because waivers for interviews would reduce the amount of time required to apply for SNAP benefits.

A final surprising result among the independent variables was that program integration, for both fully and partially integrated states did not yield significant results. The initial expectation was that program integration would have a positive effect on SNAP participation because potential applicants of multiple programs would be able to shorten their application process by using one method for two or three programs.

Some of the control variables had interesting or surprising results as well. Two particularly surprising results were in metropolitan status and children in the household. Given that modernization policies could conceivably make it easier for people in rural areas, who live further from SNAP offices, to apply for the program it is surprising that the odds ratio on rural (OR=1.087, $p=0.231$) areas is insignificant. Additionally, since more SNAP households had children than eligible non-SNAP households, it is unexpected that the effect of having children in the household is insignificant (OR=1.146, $p=0.226$).

Unsurprisingly, race and employment status were significant in predicting whether an eligible household would participate in the program. Black and 'other' families are more likely to participate than White families. Specifically, Black families are 59% more likely to participate in SNAP than white families. Further, employed people are 61% less likely to participate than unemployed people, while people who work less than 35 hours per week are more likely to participate in the program. Finally, people who were receiving other public assistance, which includes free lunch, Supplemental Income for Women, Infants and Children (WIC), TANF, Medicaid and housing assistance, were significantly more likely to participate in SNAP than those who were not receiving this assistance.

Table 6: OLS and Logit Results Estimating the Impact of Modernization Policy on SNAP Participation

VARIABLES	Logit			
	Coefficient	Standard Error	Odds Ratio	Standard Error
Six Month Recertification	-0.542***	(0.147)	0.582***	(0.0853)
Various Recertification Periods	-0.174	(0.135)	0.840	(0.113)
Report \$100 Earned Income	-0.196**	(0.0771)	0.822**	(0.0634)
Report \$100 Unearned Income	-0.247	(0.208)	0.782	(0.163)
Report Earned and Unearned	0.288**	(0.117)	1.334**	(0.157)
Electronic Applications	0.243**	(0.100)	1.276**	(0.128)
Waiver for Initial Certification Interview	-0.0952	(0.117)	0.909	(0.106)
Waiver for Recertification Interview	-0.113	(0.180)	0.894	(0.161)
Call Centers Process Changes	0.110	(0.0892)	1.116	(0.0995)
Call Centers Conduct Interviews	-0.261***	(0.0809)	0.770***	(0.0623)
Fully Integrated Applications	0.116	(0.132)	1.123	(0.148)
Partially Integrated Applications	0.203	(0.185)	1.226	(0.227)
Race				
Black	0.466***	(0.0739)	1.594***	(0.118)
Asian	-0.124	(0.182)	0.884	(0.161)
Other	0.413***	(0.129)	1.512***	(0.195)
Hispanic	-0.556***	(0.0935)	0.573***	(0.0536)
Metropolitan Status				
Rural	0.0830	(0.0693)	1.087	(0.0753)
Other	0.596***	(0.181)	1.814***	(0.329)
Employment Status				
Employed	-0.930***	(0.0862)	0.394***	(0.0340)
Looked for work	0.0119	(0.0848)	1.012	(0.0858)
Worked less than 35 hrs/week	0.749***	(0.0935)	2.114***	(0.198)
Marital Status				
Married- Spouse Absent	0.612***	(0.197)	1.844***	(0.364)
Widowed	0.495***	(0.116)	1.641***	(0.191)
Divorced	1.019***	(0.100)	2.771***	(0.278)
Separated	1.147***	(0.142)	3.150***	(0.447)
Never Married	1.077***	(0.0989)	2.935***	(0.290)
Kids	0.136	(0.112)	1.146	(0.129)
Number of Household Members				
Two	0.704***	(0.0995)	2.023***	(0.201)
Three	1.051***	(0.135)	2.860***	(0.387)
Four	1.227***	(0.162)	3.410***	(0.553)
Five	1.648***	(0.190)	5.199***	(0.989)
Six	1.631***	(0.230)	5.110***	(1.176)
Seven	1.757***	(0.302)	5.795***	(1.748)
Eight	2.796***	(0.510)	16.39***	(8.360)

Table 6: OLS and Logit Results Estimating the Impact of Modernization Policy on SNAP Participation, continued

	<u>Logit</u>			
	Coefficient	Standard Error	Odds Ratio	Standard Error
VARIABLES				
Nine	2.231***	(0.619)	9.311***	(5.764)
Ten	1.531**	(0.755)	4.623**	(3.489)
Eleven	2.560**	(1.296)	12.94**	(16.76)
Receipt of Other Public Assistance	1.923***	(0.0624)	6.840***	(0.427)
Receipt of Social Security	0.0895	(0.0566)	1.094	(0.0619)
Total Family Income	0.000164***	(5.55e-05)	1.000***	(5.55e-05)
Constant	-2.148***	(0.247)	0.117***	(0.0288)
Observations	7,726			
Pseudo R-Squared	0.2632			
Log Likelihood	-3,852.37			

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Discussion and Conclusions

Overview and Findings:

This paper sought to analyze the impact that modernization efforts have on participation in the SNAP program. Using Wave 7 of the Survey on Income and Program Participation (SIPP), the data in this analysis spans from May to November of 2010. This analysis used a Logit regression on households in the sample that were eligible for SNAP to establish whether six different modernization policies had an impact on whether a household would choose to participate in the program.

Six modernization policies were examined in this analysis: recertification periods, income reporting requirements, use of electronic applications, waivers of face-to-face interviews for either the initial certification interview or the recertification interview, use of call centers to process changes or conduct interviews and integrated applications between social programs. Of these six policies, only four were shown to have an impact on participation of eligible households in SNAP in some respect.

Findings in this study indicate that six-month recertification periods have a negative impact on SNAP participation when compared to states that have twelve-month recertification rates. While only 15 percent of states in this study have the shorter, six-month, SNAP recertification periods, the finding that SNAP-eligible households are less likely to participate in SNAP in states with six-month SNAP recertification periods, as compared to twelve-month recertification periods, is consistent with past research. For example, Ratcliffe, McKernan and Feingold (2007) as well as Kabbani (2003) found that longer recertification periods have a positive impact on participation in the program.

In some states, SNAP recipients are required to report changes in earned or unearned income between recertification periods. This study found that having to report a change of \$100 in earned income resulted in applicants being 17% less likely to participate in SNAP. Conversely, reporting requirements for a change in both earned and unearned income increased the likelihood of participation in SNAP by 33%. These findings are contrary to one another and the opposing sign of these variables somewhat surprising. The increase in participation for applicants that must report an increase in both earned and unearned income could have to do with the fact that people who are collecting other unearned income (e.g., TANF, WIC etc) are more likely to participate in SNAP altogether. Alternatively, recipients who are only receiving SNAP and are not participating in other programs may be discouraged to apply for or continue SNAP benefits if they have to report fluctuating income amounts. The reporting requirement for changes in unearned income of \$100 or more was not significant, likely because of the lack of variation in this variable since only one state uses this option.

The use of electronic applications is positively associated with SNAP participation. Eligible applicants in states with electronic applications are almost 28% more likely to participate in SNAP than potential applicants who do not have access to electronic applications. This result is unsurprising since more business is done online now and availability of electronic applications would decrease the time commitment required for applicants to spend in a local SNAP office.

The final modernization policy that had significant results was the use of call centers to conduct interviews, which was associated with a negative effect on SNAP participation. States with call centers that conduct interviews were likely to see a 23% decrease in SNAP

participation. This result is quite surprising, since the initial hypothesis was that states with call centers that conduct interviews would make it easier for eligible households to apply for SNAP since this would be one less time or transportation commitment. It is not entirely clear why there would be lower SNAP participation among eligible households in states with call centers compared to those without. One explanation for this negative effect could be due to the fact that so many states have waivers to conduct interviews, therefore accessing a call center to conduct interviews does not actually positively impact participation in the program.

Additionally, very little information exists on how call centers are actually implemented into the SNAP application process. States could be relying on potential participants to call in at a designated time, which may be hard to abide by, or call center workers could be calling applicants which leads to issues with wrong phone numbers or missed calls. Even though phone interviews reduce the amount of time spent in a SNAP office, phone interviews may take place at equally inconvenient times, even if appointments are established. Finally, if all applicants must call in for an interview and most people call in at peak times, it could take a long time to actually complete the interview, further discouraging a potential applicant from applying for the benefit.

Waivers for face-to-face interviews for both the initial certification period and recertification periods did not have a significant impact on participation in SNAP in this study. Both of these policies were expected to have a positive impact on SNAP participation. One possible explanation for the lack of an effect for recertification periods is that so many states have waivers for recertification interviews. Over 90% of states- which includes about 94% of all eligible and participating SNAP households- have waivers that exempt them from conducting

face-to-face interviews to recertify SNAP benefits. It is possible that prospective applicants make the decision to apply for SNAP separate from the knowledge that they will not be subject to a face-to-face interview. Alternatively, whether an applicant is granted a waiver is entirely up to the discretion of the state. It could be that states with waivers to face-to-face interviews have not yet started granting waivers to enough applicants or that granting the waiver is so variable that benefits just could not be detected in this study. More in-depth exploration of the application of the policy in each state would be needed to determine whether waivers persuade eligible households to seek or maintain SNAP benefits.

There is noteworthy research indicating that the 2002 Farm Bill, which increased leniency on program administration for states, was partially responsible for an increase in SNAP participation in the following years (Zedlewski and Radar, 2005). Several of these policies, including the use of call centers or waivers for face-to-face interviews, were suggested to have a positive impact on participation, particularly for rural and eligible working populations because of the increased access to resources necessary to apply for the program (McKernan and Ratcliffe, 2003 and Currie and Grogger, 2001). The results from this study are contrary to the assertions made in the previous literature, since neither waivers nor call centers had a positive impact on participation in SNAP among eligible households.

The final modernization policy that this analysis examined was the impact of integrated applications for SNAP, TANF and Medicaid. It was expected that eligible applicants would be more likely to participate in SNAP if the application process were integrated with the application process for other programs. However, neither fully integrated or partially integrated application policies had an impact on SNAP participation in this study. Without state-

level knowledge of how SNAP outreach is done, it is unknown if potential SNAP applicants are aware of the integrated application process, which may explain why there was no effect in this analysis.

Interestingly, the receipt of other public assistance not including SNAP is very positively associated with participation in the SNAP program. Households that participate in other programs, such as WIC or TANF, are more likely to participate in SNAP than households that do not participate in other public assistance programs. In order to rule out the possibility that receiving other public assistance may have mediated the relation of full or partially integrated applications to SNAP participation, the correlation between receipt of other public assistance and integrated application was examined (Baron and Kenny, 1986). However, receipt of other public assistance and both fully and partially integrated applications were unrelated, thus the mediational model could not explain this result.

Past research indicates that difficult recertification processes, confusion about the recertification process, missing work, too much monthly reporting and difficulty getting to a SNAP office are among reasons that people do not reapply for benefits (GAO-07-573). This finding is somewhat contrary to the findings of this paper, since several of the policies that would have streamlined the application process or reduced the time constraint on potential applicants were shown to have no effect on whether or not eligible households participated in the program.

The initial overall hypothesis in this paper tested the idea that increased barriers to the program would have a negative impact on participation while policies that sought to ease access barriers, particularly those that had been previously proven to stifle participation, would

increase the likelihood that an eligible person would participate in SNAP. The hypothesis was in part correct, although only some of the policies that were thought to increase participation actually had this effect. Two of the policies had impacts that were in a surprising direction and this may have to do with circumstances surrounding the application process, such as the methods used by the local SNAP office, that were not accounted for in the survey.

A majority of the research on SNAP participation is dedicated to the impact of 1996 welfare reform on SNAP caseloads and the impact of the economy and unemployment on SNAP participation. The lack of research on modernization and streamlined efforts in the administration of the SNAP program is in part due to the fact that many of these policies are newer and comprehensive data is still being collected to ascertain their effects. This study contributes to a future body of research that will likely start to develop as states continue to modernize their SNAP administration and as enough data can be collected to successfully identify any impacts of these policies on program participation. The results of this study are a first look at how initial changes in program policies had in 2010 in the aftermath of the 2002 and 2008 Farm Bills.

Policy Implications:

This research has several potential implications for future policy that were discussed earlier in this paper. In particular, studying modernization policies in SNAP may have an impact in helping to establish which efforts will help states reduce access barriers and increase participation among eligible households.

Although the findings on recertification rates and reporting requirements are thought-provoking, likely the most interesting and important result from this study shows that use of electronic applications has a positive impact on program participation. This effect indicates that policies that focus on the use of the internet and that allow for eligible participants to apply for benefits on a timeframe that suits their potentially restricted schedule will reduce application barriers to this population. Additionally, electronic applications can benefit applicants of varying metropolitan status and are of notable help to applicants that are currently employed. Rural applicants may find electronic applications especially useful because it could cut down on time that they have to spend applying for or recertifying benefits in a SNAP office. Specifically when coupled with statewide efforts to expand broadband internet access to rural areas, policies that increase the ability of applicants to utilize the internet may have a future impact on participation that is considerable.

Reducing the time it takes to apply for benefits through electronic applications could be a major factor in reducing barriers to access. Further, low income employed individuals may find that electronic applications allow them to apply for benefits around their work schedules and around traditional office hours when SNAP offices may be opened. Although applicants may still have to make a trip to a SNAP office at some point, using electronic applications can cut down on one of the many visits that research has traditionally found are required to receive benefits.

Another finding that may have policy implications of note is the negative effect of call centers that conduct interviews on SNAP participation. Although explanations for this effect were noted above, policy makers may want to acknowledge that while call centers can be

useful, if states are cutting back on face-to-face interviews, the workload of call centers could be dramatically increased. Additionally, the manner in which phone interviews are conducted could have an impact on the effectiveness of call centers to conduct interviews. Finally, if states are cutting out interviews entirely, the use of call centers for interviews would be limited at best.

Although the initial hypothesis was that call centers would increase participation in SNAP due to the added ease of interviewing over the phone instead of making another trip to a SNAP office, it is possible that transitioning to call centers does not align with the other modernization efforts state SNAP policy is experiencing. In order for the use of call centers to conduct interviews to be an effective policy, states need to evaluate how their interview volume will change and whether their call centers are overburdened from the potential increase in interviews that will take place over the phone in place of face-to-face interviews. Additionally, states will need to establish practices that put the call centers to best use through scheduling and interview practices that do not impart the same barriers on potential applicants that face-to-face interviews had in the past.

Limitations:

Several limitations existed with using the 2008 panel of the Survey on Income and Program Participation. First, the completed 2008 panel will run through 2013, comprised of 13 panels total. Currently, the publicly available data only runs through November of 2010, meaning that policies that were implemented as a result of the 2008 Farm Bill may not be

accurately reflected in data collected in 2010. Second, several variables listed in the codebook have incredibly low answer rates, making any analysis stemming from these variables fairly useless. For example, the survey asks several questions regarding reasons for applying for SNAP benefits or reasons for stopping benefits, however, the response rates for these questions are low. This information could allow for more extensive analysis regarding how motivation to apply for benefits may be impacted by easing the application process, however, given the low answer rate, these questions were not useful for any considerable analysis. Third, although most SNAP participation is gauged at the Federal level on a household basis, the SIPP uses a complex survey method that interviews people as households and then breaks down households into individuals. Public-use SIPP data is on the individual level and efforts to compress data back into households was thorough, but it is possible that some observations were mislabeled or lost in the shuffle.

Beyond limitations that exist with the SIPP dataset, there were further limitations from the methodology used in this analysis stemming from the operationalization of several variables regarding SNAP eligibility. In particular, states can use varying measures of income, assets and poverty level to establish eligibility but these things are incredibly hard to parcel out when using SIPP data. Most previous research on SNAP chooses a standardized income level, usually 130% of the poverty level- as in this study, and assumes that while some states may have higher income eligibility rates, others may not and the sample size will balance out as a result. Asset tests and automatic eligibility only further complicate the State influence that exists when establishing SNAP participation. Some states have eliminated asset tests altogether while others still use fairly strict asset requirements. The asset data in SIPP

differentiates between particular kinds of assets, but the eligibility requirements on assets may or may not do the same. In future research, creating a sample based on individual state eligibility rules may be possible, but given the time constraints of this analysis, it was not an option.

Going Forward:

As states continue on the path to SNAP modernization, this research has the potential to help establish the impact of newly implemented policies should it be continued. Efforts to continue and improve upon the research presented in this paper would take a more specific look at how modernization policies may impact particular sub-groups. Since different rules apply for different household types, there is an important distinction in how each policy may shape decisions for particular types of beneficiaries. For example, elderly households are generally exempt from all face-to-face interviews and usually face longer recertification periods. They are also generally exempt from any sort of asset test. Conversely, Able Bodied Adults Without Dependents (ABAWDs) face very strict work requirements and have time limits for how long they may receive benefits without being employed. Taking these sub-population differences in eligibility rules into account would make for a richer analysis and provide for more thorough research into what works impacting participation in SNAP. For future research to be accurate and helpful in making policy recommendations, it is important to measure the differences in sub-populations within the sample population.

In order for changes in administrative SNAP policy to be effective further research needs to be done. Some attempts to streamline application processes or reduce barriers to the

program may be more effective than others and comprehensive analysis is necessary in order to measure the impact of each modernization policy. Particularly as participation in SNAP continues to grow, quality data collection and research analysis will serve program participants and encourage a more efficient use of time and resources on behalf of state SNAP agencies.

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