

**Aid to Jobless Workers in Florida in the Face of the Great Recession:  
The Interaction of Unemployment Insurance and the  
Supplemental Nutritional Assistance Program**

Colleen M. Heflin  
Harry S. Truman School of Public Affairs  
University of Missouri – Columbia

Peter R. Mueser\*  
Department of Economics and  
Harry S. Truman School of Public Affairs  
University of Missouri – Columbia

July 30, 2013

\*Corresponding author: Peter Mueser, Department of Economics, 118 Professional Building, University of Missouri, Columbia, MO 65211, USA; email [mueserp@missouri.edu](mailto:mueserp@missouri.edu); tel. 573-882-6427.

This research was supported by the Economic Research Service of the U.S. Department of Agriculture.

## Introduction

The U.S. economy is undergoing a major restructuring. Unemployment rates persist at historic highs, and economic growth is slower than in any recovery since the Great Depression. The average duration of unemployment spells during the recession was higher than in any other post-War recession and there is evidence that a growing number of workers are becoming discouraged and leaving the labor market. As a result, in 2011 the US official poverty rate was at 15 percent, close to its maximum in over 45 years, and food insecurity rates were at a measured high of 14.9 percent, suggesting that American families are facing levels of hardship that are unprecedented in recent memory (Coleman-Jensen, et al. 2012; DeNavis-Walt, Proctor and Smith 2012).

The social safety net has become a critical source of support for low-skill workers as they try to make ends meet during these difficult times. In particular, the Supplemental Nutrition Assistance Program (SNAP)<sup>1</sup> caseload has grown to 47.7 million people in January 2013—or 15.1 percent of all Americans. Unemployment Insurance (UI) is a significant source of income for those who qualify, and caseloads more than doubled with the onset of the recession, reaching a seasonally adjusted maximum of 6.5 million recipients in June 2009 (U.S. Department of Labor 2013a). Yet, little is known about how the changing economic conditions have affected SNAP caseloads and its interaction with the UI program.

We examine state administrative data from Florida for SNAP and UI from late 2005 through early 2010. We focus on three research questions:

1. In the face of caseload growth in both programs, how has participation in UI among SNAP recipients changed?

---

<sup>1</sup> The Food Stamp Program was renamed Supplemental Nutrition Assistance Program in fall of 2008. We refer to the program as SNAP throughout the current paper. National caseload statistics are available through the U.S. Department of Agriculture (2013).

2. How has the role of UI insurance changed for SNAP participants, and in particular how have patterns of combined usage evolved during this period?
3. What roles do labor market distress and legislated changes play in explaining observed patterns?

Analyses based on Florida are ideal for addressing these research questions. Florida is the fourth largest state in the United States by population with 19.3 million residents and the 22<sup>nd</sup> largest state by total land area. Florida entered the twenty-first century with a strong economy whose performance mirrored that of the national economy. From 1996-2002, the state annual unemployment rate in Florida stayed within two-tenths of a percentage point of the national average. In 2003, however, Florida's unemployment rate began to fall sharply ahead of the also declining national unemployment rate (see Figure 1). While economists debated the consequences of having a national unemployment rate of 4.6 percent in 2006, the annual unemployment rate reached a low of 3.4 percent in 2006 in Florida. Then, as the national annual unemployment rate held steady in 2007 at the 2006 low of 4.6 percent, Florida's unemployment rate began to climb. In 2008, Florida's unemployment rate jumped to 6.2 percent while the national unemployment rate remained at 4.8 percent. As of December 2009, Florida had the sixth highest state unemployment rate in the country, 11.8 percent, a 4.2 percentage-point increase over the December 2008 level and a more than three-fold increase in under three years. In contrast to other states that witnessed their largest declines in employment in manufacturing, Florida lost over 250 thousand jobs in the construction industry between December 2006 and December 2009 (Bureau of Labor Statistics 2010).

At the national level, one of the more troubling aspects of the recent recession is the extended periods of unemployment suffered by many workers. Since 1965, the median duration of unemployment has remained below 10 weeks with only two exceptions. In both the mid-1980s and early 2000's the median duration crossed the 10 week mark but still remained below

13 weeks. In December, 2009, however, the median duration of unemployment was 20.5 weeks (Federal Reserve Bank of St. Louis 2010). This unique aspect of the recession means that not only were more people unemployed, but they remained unemployed for periods that were dramatically longer than at any time in recent history. In Florida, according to data from the fourth quarter for 2012, the average duration of UI benefits was 20.3 weeks, above the national average of 17.1 weeks. The proportion of recipients exhausting Unemployment Insurance benefits in Florida was 70.1 percent, well above the national average of 47.2 percent and the highest in the country (Department of Labor 2013b). Thus, economic conditions in Florida provide a particularly challenging economic environment, so the economic impacts are likely to be particularly clear.

### **SNAP and UI in Context**

The Supplemental Nutrition Assistance Program (SNAP) is a means tested federal program that provides households with benefits accessed through an electronic debit card that can be used for food purchases. To be eligible, households must have gross incomes that are less than 130 percent of the U.S. poverty level (approximately \$2500 per month for a family of 4) as well as meeting other asset, income, and expense requirements. Although details of eligibility and program administration differ across states, the program's basic structure and payment amounts are set at the federal level. For those with income, benefits are reduced by \$0.33 for each dollar of income. While not generous, benefits can be of importance for poor families. A family of four with no income would be eligible for a monthly payment of \$668.

The Department of Children and Families (DCF) in Florida serviced the third largest SNAP caseload in the country with 3.6 million individuals in December 2012, accounting for 7.5

percent of the national caseload of 47.8 million participants (U.S. Department of Agriculture 2013). Figure 2 lists the number of household served in Florida and the U.S. from January 2003 to January 2010. While growth in the Florida SNAP caseload followed the national trend closely from the beginning of 2003 to mid-2007, from May 2007 to the present, the rate of growth in the SNAP caseload has been substantially greater than that of the nation.<sup>2</sup>

Located in the southeast of the United States, Florida is known for its temperate climate and is a primary destination for retirees. As a consequence, a larger share of the SNAP caseload is composed of elderly adults as compared to the national average (20.2 versus 16.5 percent). Some 36.9 percent of the caseload is made up of children, 16.7 percent disabled non-elderly adults, and 15.9 percent single adults heading households with children. Approximately 24.8 percent of the caseload is classified as non-elderly, non-disabled, childless households, often referred to as “ABAWDs” in the literature.<sup>3</sup>

The Unemployment Insurance Program is a joint federal-state program that operates as social insurance for short-term periods of unemployment. In order to qualify, workers must meet both monetary eligibility guidelines, based primarily on employment and total earnings over a 15-month period, and non-monetary requirements, which are determined primarily by age, reason for work separation and availability for work. Historically, regular state UI benefits for most recipients last for 26 weeks. After exhausting regular benefits, recipients may be eligible for additional weeks of benefits funded under federal legislation, contingent on the condition of the state and national economies. Significant state variation exists in the operation of UI with regard to eligibility, payment levels, and duration of benefits.

---

<sup>2</sup> Emergency SNAP payments are omitted from Figure 2 and all analyses in our paper. Although insignificant for the nation as a whole, for Florida, emergency payments cause noticeable temporary spikes in SNAP caseloads following major hurricanes, which occur every few years.

<sup>3</sup> Based on 2012 caseloads (U.S. Department of Agriculture 2012).

Through seven legislative actions at the U.S. federal level from June 2008 to April 2010, the Unemployment Insurance program was altered to extend the maximum duration of receipt up to 99 weeks in some states. With four tiers of benefit duration tied to the state unemployment rate, states were encouraged to liberalize eligibility standards. While states fund regular unemployment insurance benefits from taxes received from state employers, the federal government fully funded extended benefits received under emergency legislation from July 2008 to May 2010. As late as 2011, the number of recipients receiving such federal extended benefits exceeded the number on regular state UI benefits at the national level.

In Florida, monetary eligibility requires employment in two of first four of the last five quarters and total minimum earnings of \$3,200 over this period. Workers must be between the ages of 18 and 65 to qualify and have separated from their employer due to layoff, compulsory retirement, in order to move with a military spouse, or because of personal illness. Florida does not provide a dependence allowance and benefits range from a minimum weekly level of \$32 to a maximum of \$275, among the lowest in the country.

A number of studies have considered the role of these two programs in the Great Recession. Federal funding for SNAP grew faster as result of the Great Recession than for any other U.S. safety net program. Aggregate expenditures increased from \$30 billion in 2007 to \$65 billion in 2010; real per capita spending also doubled from \$136 to \$287 over the same period. Although the size of the average benefit amount did increase modestly over this period, the rise in expenditures was largely driven by the rise in the number of recipients (Moffit 2013). Nationally, half of all SNAP participants are children. One in four of all American children received SNAP benefits in 2012 (Isaacs and Healy 2012).

Research on SNAP during this period shows that the program blunted the effect of the recession substantially, keeping households from experiencing deep poverty (Tiehan, Joliffe, and Gundersen 2012) and acting as a buffer against food insecurity (Nord and Prell 2011; Nord 2011; Pilkauskas, Currie and Garfinkel 2012). Research from the Fragile Families study estimates that without the availability of SNAP, the number of households experiencing food hardship would have doubled in 2008 (Pilkauskas, Currie and Garfinkel 2012).

Research on UI has focused on the effects of the availability of UI benefits on unemployment duration and job search. Although data sources and methods vary, estimates generally suggest that the extension of UI benefits beginning in 2008 has resulted in small to modest increases in the national unemployment, perhaps by as much as 2 percentage points, and an increase in unemployment durations by 2 to 5 weeks.<sup>4</sup>

The interaction of SNAP and UI has not been studied in any detail. The current paper draws from data assembled in a project bringing together researchers to consider how the Great Recession has impacted this interaction. Some preliminary tabulations for five states are provided in Anderson, Kirlin and Wiseman (2012).

## **Data**

Monthly data on participants in regular SNAP for January 2006-February 2010 come from administrative case records maintained by the Florida Department of Children and Families (DCF) in computer readable form. The information in these records includes monthly benefit amounts, reported income amounts, as well as demographic and geographic characteristics of eligible individuals and their households.<sup>5</sup> Data on employment and earnings come from quarterly earnings records maintained by the Florida Unemployment Insurance system. We also

<sup>4</sup> For consensus results, see Farber and Valletta (2013), Mazumder (2011), and Elsby, Hobijn and Sahin (2010). Rothstein (2011) argues effects are substantially smaller, whereas Barro (2010) argues for larger effects.

utilize weekly data on Unemployment Insurance Program participation obtained from the Florida Agency for Workforce Innovation.

Our analysis dataset is obtained by merging UI benefit data to files containing the universe of SNAP recipients. The unit throughout our analysis is an individual, and UI benefit receipts and earnings are those accruing to the individual. Reported SNAP receipts apply to the household in which the individual is a SNAP-eligible member. Although we are unable to speak generally about the universe of UI recipients, we can identify how SNAP recipients with UI program participation are different from those without UI, and we can identify the dynamics of joint participation in these programs. Given the central importance of these two social programs in buffering disadvantaged workers during the Great Recession, our findings are of critical interest.

The analyses that follow are limited to SNAP recipients age at least 18 and less than 65. Unemployment Insurance receipt outside that age range is very low, in large part because of the structure of program rules. This means that SNAP “child only” cases are omitted, since any adults in the household are not considered SNAP recipients. Those households that have more than one adult who is listed as a SNAP recipient in this age range can contribute more than one individual to the analysis.

---

5 We undertook basic editing of the data files used in the analysis. Any month coded on the original file as nonreceipt in which SNAP was received in both the immediately prior and succeeding month was coded as SNAP receipt, reflecting the view that such months reflected administrative churn rather than meaningful nonreceipt. Aggregate caseload information is available at Florida Department of Children and Families (2013).



## **Joint Receipt in UI and SNAP**

Traditionally, the Unemployment Insurance program and SNAP were targeted towards and served different populations. Joint participation in the UI program and SNAP was relatively rare, with only 1-2 percent of the SNAP population receiving UI until mid-2008. Figure 3 shows that in 2008, shortly after the onset of the recession, this proportion jumped dramatically, growing to over 10 percent by 2010. The proportion of new SNAP recipients receiving UI is appreciably higher, reflecting the fact that UI benefits are likely to be exhausted prior to departure from SNAP. Prior to the recession, this number was trending up from about 3 percent in 2006 to 6 percent by the end of 2007. In 2008, the proportion of new SNAP recipients receiving UI exhibited a dramatic jump, with the proportion growing to 12-14 percent by the end of 2008.

The growth in joint participation is related to both the high level of state unemployment and the change in federal UI benefit policies. Spikes are visible in the level of joint participation with implementation of the federal Emergency Unemployment Compensation (EUC) program in summer 2008 as well as each time that the EUC program was extended, in both November 2008 and November 2009. Thus, the population who are eligible to jointly participate in UI and SNAP has greatly expanded over the time period.

Figure 4 shows that movements off of UI for SNAP recipient fell dramatically with the recession. Until mid-2008, when the maximum UI eligibility period was capped at 26 weeks for most recipients, 25 percent of UI participants discontinued receipt each month. However, by 2009, monthly discontinuations had declined to 5-10 percent. Declining exits are the result of

both more difficult economic conditions that make it harder to find employment, as well as the ability to remain on the UI program for longer periods than ever before.<sup>6</sup>

We undertook analyses of UI receipt among SNAP recipients focusing on different demographic groups, and the most notable observation was that patterns were very similar for all of them. Figure 5 shows UI-SNAP joint receipt by gender. For both men and women, UI participation increases dramatically after onset of the recession, with men's participation increasing to about 12 percent and women's to just under 10 percent, both from an initial base level just under 2 percent. The higher rate for men undoubtedly reflects the greater growth in unemployment among men occurring during the recession (Michaelides and Mueser 2013).

The tabulation of joint UI-SNAP receipt by race is presented in Figure 6.<sup>7</sup> While nonwhites are observed to have slightly higher levels of joint receipt prior to the Great Recession than Hispanics or whites, with the onset of the recession, the difference between nonwhites and Hispanics diminishes to the point of being negligible. Whites have a lower level of joint receipt than either nonwhites or Hispanics after the Great Recession, consistent with expectations informed by racial differences in levels of unemployment. But again, it is the similarity in patterns across the racial groups that is most striking.

We looked at differences by settlement (comparing urban and rural SNAP recipients), household composition (households with children, with elderly, with neither children nor elderly), and in each case patterns were quite similar. Each group sharply increased their level of joint participation after the Great Recession and particularly after the EUC program was

---

<sup>6</sup> Figure 4 presents the proportion of recipients receiving UI benefits in a given month who are not receiving UI benefits in the following month, contingent on receiving SNAP in both months. The proportion is essentially unchanged if the proportion is calculated including those receiving SNAP only in the first month.

<sup>7</sup> These racial categories are exclusive, reflecting the fact that the Florida administrative data coded Hispanic as a racial category. Racial categories used in our analysis are whites, nonwhites (African American and other racial groups), and Hispanics. Approximately 90 percent of nonwhites are African American.

introduced in July 2008. In general, where group differences in participation rates had been present previously, these differences grew in absolute value after the Great Recession although ratios did not change much.

### **Sources of Income for SNAP Recipients**

The growth in the importance of UI is associated with changes in the income sources for new SNAP recipients, which is in part a reflection of a new kind of recipient being drawn into the program. Although SNAP recipients have low income and limited savings because of the program's eligibility requirements, with the recession, the eligible population has expanded to include those with previously substantial incomes who have faced serious employment setbacks.

Table 1 provides information on income sources for new SNAP recipients for periods prior to the recession, as well as the period after onset of the recession, including the extended period of labor market distress that followed. Since data on earnings are available on a quarterly basis, this analysis provides information on the quarter prior to SNAP entry and on the quarter following SNAP entry.<sup>8</sup>

A comparison between periods confirms that UI participation for new SNAP recipients has increased dramatically. In the quarter prior to entry, during the earlier period, 2.7 percent of recipients received UI benefits, whereas in the later period, the number had increased to 7.1 percent. Earnings and employment provide a slightly more complex pattern. During the earlier period, some 43 percent of recipients had income in the quarter prior to SNAP entry, whereas that number had declined to 40 percent in the second period. Yet, for those who had income, earnings were nearly 20 percent *higher* in the second period. This implies that, among the employed, there is a larger share with higher prior earnings in the second period, confirming the

---

<sup>8</sup> Columns 1 and 2 focus on those who begin receiving SNAP at least six months prior to the recession in order to assure that our measures of income following program entry occur before the recession.

stories of middle class families turning to SNAP in the face of job loss. Of particular interest, we note that the proportion employed after beginning SNAP is much lower in the later period. In the quarter after entry, whereas 41 percent of recipients were employed in the period prior to the recession, the number was only 33 percent after the onset of the recession.

In both periods, we see that, for those receiving UI, these benefits are substantially greater than the SNAP payments received by the UI recipients' households. During the earlier period, the average recipient is in a household receiving SNAP benefits of \$700 in the quarter following SNAP entry, whereas, for the subset of individuals who receive UI benefits, the average UI benefit is \$1,722. Both SNAP and UI payments are higher after the recession, but UI remains much more important (\$2,139 versus \$858).

What happens to those who leave the SNAP caseload? Given extensions in the availability of UI benefits following the recession, we expect that an increasing number of those who discontinue receipt of SNAP continued to receive UI benefits. Table 2 allows us to examine the importance of UI benefits as well as the role of earnings following departure from the SNAP caseload. Since outcomes differ by length of spell, the table presents separate statistics by whether a SNAP spell lasts 10 or more months.

In the first period, 40-50 percent of those leaving SNAP had earnings in the subsequent quarter, whereas the proportion fell by more than 10 percentage points after the recession. The proportion with earnings for those ending longer SNAP spells is smaller, and the gap between periods is somewhat greater: After the recession, only about a quarter of those with spells of ten months or more have employment in the quarter after SNAP ends.

Perhaps surprisingly, however, for those with earnings, the average earnings are about 10 percent higher in the second period for both spell lengths. It is important to recognize that a

smaller proportion of recipients leave the rolls in the second period, so the higher earnings may partly reflect selection. Nonetheless, these results support the view, suggested by the higher prior earnings after the recession for employed new recipients (Table 1), that the recession may have forced additional individuals who differ from prior recipients to seek SNAP assistance.

As expected, the impact of the recession on UI benefit receipt for the quarter following departure from SNAP is particularly dramatic. Only about 2 percent of those leaving SNAP in the earlier period have UI benefits, whereas the number exceeds 10 percent for short-term SNAP recipients and 5 percent for longer-term recipients. In addition, not only are more of those leaving SNAP receiving UI benefits, but the total UI benefit payment, contingent on receiving benefits, is about 50 percent greater in the later period.

We also looked at differences in income sources by gender, race, settlement density, and household structure. As might be expected, contingent on working, earnings of women are somewhat below those of men (Table 3). Perhaps surprisingly, women are more likely to be working than men at all points, that is, prior to beginning SNAP, in the first quarter of SNAP receipt, and following the end of a spell. Changes that occur with the onset of the recession, and in particular the increased reliance on UI benefits, are essentially the same for men and women.

Comparing across racial groups (Table 4), we see that prior to and during SNAP spells, nonwhites are appreciably more likely to be employed than whites, and they are slightly more likely to receive UI benefits, although, in both cases, the average amount received by nonwhites, contingent on receipt, is lower. For nonwhites, the pattern of growth in UI with the recession is similar to that for the population as a whole, although the increase is somewhat less dramatic. Hispanics have lower levels of employment prior to SNAP receipt than either whites or nonwhites, and their reliance on UI benefits is lower than either group. Reliance on benefits

does increase with the recession, but, in contrast to the other groups, those entering SNAP after the recession are *more* likely than in the earlier period to be working. This implies that, among Hispanics, the recession brought onto SNAP more of those who had prior employment, making the new Hispanic SNAP entrants more like the other racial groups.

Other analyses (not reported) showed that the impact of the recession was similar across various subgroups. Our analysis of urban and rural counties confirmed that differences were small and shifts in patterns of use essentially the same. As expected, reliance on employment and UI benefits was higher for those in households with children and lower for those in households with elderly. One of the only cases where patterns differed by household structure was among SNAP recipients in households with elderly members: In that case, a slightly larger proportion of individuals had prior earnings after the recession than before, the reverse of the shift observed for other groups.

### **Patterns of SNAP and UI Receipt**

One of the most important changes in the UI program following the onset of the recession was the length of maximum receipt eligibility, which increased from six months to nearly two years. This shift is reflected in the experience of recipients. Figure 7 presents the distribution of UI spell duration for concurrent or recent SNAP recipients, comparing spells prior to and following onset of the recession.<sup>9</sup> For the first period, almost all UI spells end within seven months, reflecting the 26-week maximum receipt limit in place at that time. In contrast, in the second period, although half of all UI spells last seven months or less, about a third of all spells last for 12 months or more.

---

<sup>9</sup> This analysis considers UI spells beginning while the individual was receiving SNAP or in the 12 months prior to receipt of SNAP.

In order to examine the dynamics of SNAP and UI receipt, we have constructed spells for each individual that identify the period of time during which SNAP, or SNAP and UI benefits were paid. Although the focus is on continuous periods of receipt (i.e., successive months in which benefits were received), we have expanded our definition of spells to include intervening periods of up to six months in which no benefits were received. Hence, an individual who receives UI compensation for three months, receives no benefits in the next four months, and then begins receiving SNAP, contributes a single spell. The value of this approach is that we are able to identify participants who cycle quickly on and off a particular program, as well as those who move from one program to another even when there are intervening periods in which they are without benefits. In the latter category, for example, are individuals who exhaust unemployment benefits and then turn to SNAP after several months when savings are depleted. Since our interest is in joint receipt of SNAP and UI, only UI spells involving some SNAP receipt are included. This means that UI benefits that are observed within six months of SNAP receipt are included in a spell, whereas other UI spells (separated by more than six months from SNAP receipt) are omitted.<sup>10</sup>

Table 5 provides a count of the number of spells for the two periods we will be considering, the 26-month period up through December 2007, the official start of the recession, and the 26-month period starting in January 2008. In order to account for the experience of all SNAP recipients, we include spells that begin or end outside the period in question, but we limit our analysis to patterns observed within the period. Since the statistics we present will be influenced by the length of the period, in order for comparisons to be meaningful, it is critical that the two periods be of equal length.

---

<sup>10</sup> Since our data include information only on individuals who received SNAP during the period of our study, we are not able to consider others who receive UI benefits.

In the first period, we see there are approximately 1.4 million spells, increasing to over 2.2 million spells in the second period. This reflects the dramatic growth in the SNAP population. In both periods, we see that the average number of spells per person is 1.07 or 1.08, meaning that over 90 percent of individuals contribute a single spell. Spells in both periods average 11-12 months in duration. These mean lengths includes only months within each 26-month period, so that our mean—like any mean based on spells observed for a particular period—is a downwardly biased measure of the actual length of time individuals received SNAP or UI.

We have coded spells to reflect the type of benefits and the order in which they were received, with S identifying receipt of SNAP only in a month, U unemployment benefits, B receipt of both types of benefits in a month, and N an intervening period of up to six months with no benefits. A spell that began prior to the period begins with the code C, and a spell completed after the period ends with a code of C.<sup>11</sup> Hence, UBC identifies a spell beginning with one or more months of UI benefits, followed by a period in which both UI and SNAP are received, with the spell extending beyond the end of the period. Table 6 specifies the coding system, Table 7 gives the distribution of SNAP-only spells, and Table 8 gives the distribution of the most common spells with both UI and SNAP.

Table 7 shows, as expected, that the proportion of SNAP-only spells declines between the periods: 93 percent of spells involve only SNAP in the first period, but that declines to 85 percent in the second period. In both periods, about 30 percent of all spells are SNAP spells that begin and end within the period (coded S), 40 percent are SNAP spells that are either left or right censored, and slightly under 10 percent are spells that span the full 26 months. Fewer than 12 percent of SNAP-only spells involve any period of nonreceipt.

---

<sup>11</sup> Spells with nonreceipt in the month immediately prior to the beginning of the period or immediately after the end of the period are not counted as censored spells but are coded as starting or ending within the period, whether or not receipt occurs within six months outside the period.



Table 8 lists the frequency distribution of particular spell types containing UI during each period. The distribution of such spells changed dramatically with the onset of the recession. As an example, consider the spell UBC, which begins with one or more month of UI benefit receipt, followed by a period in which both SNAP and UI benefits are received, which is then censored at the end of the period. Whereas in the earlier period, only 0.3 percent of spells followed this pattern, the number had increased to 1.8 percent for the later period.

Also listed is the ranking of each spell type in terms of frequency (among spells with UI receipt) in each period. Focusing on the ranking adjusts for the fact that many more spells included UI in the second period than in the first. Shifts in ranking over time are particularly notable. As an example, consider those cases that begin with UI benefit receipt, followed by a period of combined receipt, and then followed by a period of UI benefits only (UBUC and UBU), both highly unlikely in the earlier period, but among the top ten patterns at a later point.

Several comparisons may be of interest. The codes UBS, UBSC, UNS, UNSC and US indicate those patterns where initial UI receipt is transformed into exclusive SNAP use. There is little change in the importance of such spell types between the two periods. In contrast are those spells that end with UI receipt (possibly joint with SNAP receipt). For example, the UBC pattern described above accounts for only 0.3 percent of all spells in the earlier period, but accounts for 1.8 percent in the later period.

The inferences one can obtain from Table 8 are limited since only about half of observed spells fit the detailed patterns that are listed. Table 9 reports the distribution of spells in four broad categories that comprise all spells (the classification is provided in Table 6). These tabulations confirm that conclusions based on spells in Table 8 are also reflected in more complex spells. Focusing on the columns under the “Observed” heading, we see that the greatest

change between periods occurs where UI is the dominant type of receipt, that is, in which SNAP occurs in a spell that begins and ends with UI or with joint receipt of SNAP and UI (line 2 on Table 9). Whereas only 1.1 percent of all spells are in this category in the earlier period, 6.3 percent of the second-period spells are in this category. As a proportion of spells with UI, these spells grow from one-sixth to over two-fifths (columns 2 and 4).

In contrast, those spells indicating that individuals turn to SNAP after a period of UI receipt have become relatively less important after the recession. Perhaps the prototype for combining UI and SNAP is the case of an individual who receives UI for some period and then, around the time those benefits are exhausted, begins receiving SNAP (line 5). Fully two-fifths of the spells that combine UI and SNAP beginning in the first period fitted this description, in contrast to only about a quarter in the second period.

Those spells in which an individual is originally receiving SNAP, and at some point receives UI benefits, and then returns to sole reliance on SNAP accounted for about one in five SNAP-UI spells in the earlier period (line 4). By the later period, such cases accounted for only one in ten. Finally, those spells that begin with SNAP receipt and end in UI receipt increased substantially, from 1.2 percent to 3.2 percent of all spells (line 3), but their share of joint SNAP-UI spells remained about the same.

The lower panel of Table 9 shows that the proportion of SNAP-UI spells that are censored increased dramatically between periods. This shift is due largely to the growth in the number of spells that begin in the second period and extend beyond the end (see line 8). More generally, however, spells are more likely to be censored because of an increase in SNAP-UI spell length, which is reported in Table 10. The average spell classified as UI with embedded SNAP is about six month in length in the earlier period but increases to 13.4 months in the later

period. We can see that this growth is primarily due to an increase in the number of months of UI receipt. In the average spell during the earlier period, individuals received UI benefits for approximately five months, whereas that figure was nearly 12 months in the second period. As noted above, this reflects changes in the UI rules allowing for extended periods of UI receipt. It is clear that whereas, prior to the recession, UI was seldom of dominant importance in a combined SNAP-UI spell, after the recession, not only did the number of cases with UI increase, but so did the relative reliance on UI.

Those spells where SNAP was the dominant form of receipt, and where UI receipt is interior to SNAP, are generally long spells, averaging about 20 months. It is notable that for this category, which did not increase in importance between the two periods, the spell length increased very little. However, the relative importance of UI increased, with the average number of months receiving UI increasing from about four in the earlier period to nearly six in the later period.

As noted above, the changes in spell structure between the two periods reflect both the dramatic deterioration of labor market opportunities and legislation extending the length of the period that benefits could be received. In order to gauge the relative importance of these two factors, we simulated UI benefit receipt in the second period as it would have occurred under the earlier UI regime. Since, prior to 2008, UI benefits in Florida could be received for no more than 26 consecutive weeks in most cases, the procedure involved truncating spells of UI receipt at 26 weeks. In addition, any UI benefits received so soon after a prior spell of benefits that it would

likely have been prohibited in the earlier period were also omitted.<sup>12</sup> Simulated spells are tabulated in the rightmost columns of Tables 9 and 10.

Of all SNAP and SNAP-UI spells in the simulation, 14.4 percent combined UI and SNAP, as compared with 15.0 percent of spells based on observed data. As might be expected, longer spells are less common in the simulations. For example, the spell UBC, which identifies spells where SNAP and UI are received in each month to the end of the period, is two-thirds less likely. In contrast, those spells that begin with UI receipt and end in SNAP (e.g., UBSC, UBS, UNSC) are more common.

The importance of legislation is particularly clear when we compare spells using the classification system. Comparing the middle and rightmost columns in Table 9, it is clear that the proportion of spells that are classified as UI with embedded SNAP declines by about half in the simulation (line 2), whereas the spells that identify initial UI that leads into SNAP receipt doubles (line 5). In fact, the distribution of spells, normalized by the number of spells that combine SNAP and UI, looks quite similar for the simulated spells and those spells prior to the recession (compare columns 2 and 5). Also, as might be expected, the simulated spells in the categories where UI dominates have fewer months of UI receipt (see Table 10).

Our conclusion is that increases in the *number* of SNAP spells involving UI receipt is almost entirely driven by the recession. However, *contingent on a spell involving both SNAP and UI*, the growth in the *importance* of UI is primarily a result of legislation that extends UI benefits. In the absence of such legislation, two-thirds of those spells combining SNAP and UI would have involved UI benefits running out followed by SNAP receipt (line 5) or cases where

---

<sup>12</sup> Our simulated UI spells omit any week of UI benefits for an individual who had received benefits for 26 weeks or more over the prior year. This approach is an approximation of the rules in effect in the earlier period, which limited UI compensation to 26 weeks in the year following the filing of a claim, and only covered those with earnings above a minimum in the preceding five quarters.

SNAP receipt was of primary importance (line 4). In our observed data, these classes of spells make up only about a third of SNAP-UI spells.

In the earlier section, we discussed how the joint use of SNAP and UI shifted for different groups. We undertook similar analyses by group for spells. The basic shifts resulting from the recession were reflected in all the groups. Nonwhites were somewhat more likely to maintain “traditional” patterns of joint use than were whites or Hispanics, but differences were small.

## **Conclusion**

In the wake of the Great Recession, the conceptualization of how the American social safety net supports disadvantaged families will require revision. The current paper provides results from an analysis that examines the interaction of two of the largest programs aiding disadvantaged populations in the United States, with a focus on changes occurring with the onset of the most serious economic downturn in many decades. The results make clear that the recession induced important changes in patterns of receipt. The number of people receiving SNAP grew dramatically. For a growing *share* of SNAP recipients, UI and SNAP were combined, and reliance on SNAP became secondary for many of these. Among recipient spells that combined SNAP and UI, prior to the recession, UI was of primary importance in about a third, whereas, after the recession, that number had increased to two-thirds. Our simulations show that although the growth in extended periods of UI is primarily a function of federal legislation, the increased likelihood that a household receives both UI and SNAP is due primarily to labor market weakness.

It may be useful to consider the expansion of UI use in terms of the overall growth in the SNAP caseload associated with the Great Recession. Because UI eligibility rests on work

history and employment separation status, many disadvantaged workers are not eligible for benefits. Other disadvantaged workers who may be eligible fail to apply for UI (Shaefer and Wu 2011; Gould-Werth and Shaefer 2012). Our data on SNAP spells illustrate the extent of hardship faced by disadvantaged workers with the onset of recession: The number of SNAP and SNAP-UI spells we tabulated was 57 percent higher in the period following the recession than in the period before, and the number of individuals in our sample receiving SNAP increased by nearly three-quarters of a million (Table 5), or about one out of every 15 Florida residents aged at least 18 but less than 65. The growth in spells involving UI amounts to about 30 percent of the increase in all SNAP spells. This increase suggests that UI was of substantial benefit to many of those who began to receive SNAP benefits with the onset of the recession. On the other hand, that the net growth in SNAP was over three times as great as the growth in the number of joint SNAP-UI recipients makes clear that there are important limits to the cushion provided by UI to disadvantaged individuals when the economy is in distress.

## References

- Anderson, T.; Kirlin, J. A. and Wiseman, M. (2012). "Pulling Together: Linking Unemployment Insurance and Supplemental Nutrition Assistance Program Administrative Data to Study Effects of the Great Recession." USDA Agricultural Research Service, Lincoln, Nebraska. Available at: <http://digitalcommons.unl.edu/usdaarsfacpub/943/>.
- Barro, Robert J. (2010). "The Folly of Subsidizing Unemployment," *Wall Street Journal*, August 30, 2010.
- Bureau of Labor Statistics. (2010). "Non-Farm Wage and Salary Employment." Available at: <http://www.bls.gov/eag/eag.fl.htm>.
- Coleman-Jensen, Alisha; Nord, Mark; Andrews, Margaret and Steven Carlson. (2012). "Household Food Security in the United States in 2011." USDA Economic Research Service Report #141. Available at: <http://www.ers.usda.gov/publications/err-economic-research-report/err141.aspx>.
- DeNavas-Walt, Carmen; Proctor, Bernadette D., and Smith, Jessica C. (2012). "Income, Poverty, and Health Insurance Coverage in the United States: 2011," *Current Population Reports*, P60-243 (September). Washington, D.C.: U.S. Government Printing Office.
- Elsby, M. W.; Hobijn, B., and Sahin, A. (2010). "The Labor Market in the Great Recession," NBER Working Paper 15979, National Bureau of Economic Research, Cambridge, MA.
- Farber, H. S. and Valletta, R. G. (2013). "Do Extended Unemployment Benefits Lengthen Unemployment Spells? Evidence from Recent Cycles in the US Labor Market," Working Paper #573, Princeton University, Industrial Relations Section. Available at: <http://arks.princeton.edu/ark:/88435/dsp01th83kz40p>.
- Federal Reserve Bank of St Louis. (2010). "Median Duration of Unemployment." ([http://research.stlouisfed.org/fred2/graph/?s\[1\]\[id\]=UEMPMED](http://research.stlouisfed.org/fred2/graph/?s[1][id]=UEMPMED)) Accessed February 14, 2010.
- Florida Department of Children and Families (DCF). (2013). "Access Florida Food, Medical Assistance and Cash." (<http://www.dcf.state.fl.us/programs/access/StandardDataReports.asp>) Accessed March 2013.
- Gould-Werth, A., and Shaefer, H. L. (2012). "Participation in Unemployment Insurance: Unemployment Insurance Participation by Education and by Race and Ethnicity." *Monthly Labor Review*, October: 28-41.
- Isaacs, J. and Healy, L. (2012). "The Recession's Ongoing Impact on Children, 2012: Indicators of Children's Economic Well-Being," Urban Institute, Washington, D.C. Available at:

<http://www.urban.org/UploadedPDF/412713-The-Recessions-Ongoing-Impact-on-Children-2012.pdf>

- Mazumder, B. (2011). "How Did Unemployment Insurance Extensions Affect the Unemployment Rate in 2008–10?" *Chicago Fed Letter*: 285.
- Michaelides, Marios and Mueser, Peter R. (2013). "The Role of Industry and Occupation in Recent US Unemployment Differentials by Gender, Race, and Ethnicity," *Eastern Economic Journal* 39(3) (Summer): 358-386.
- Moffitt, R. A. (2013). "The Great Recession and the Social Safety Net," Russell Sage Foundation Working Paper. Available at: <https://www.russellsage.org/research/reports/great-recession-social-safety-net>.
- Nord, Mark. (2011). "How Much Does the Supplemental Nutrition Assistance Program Alleviate Food Insecurity? Evidence from Recent Programme Leavers," *Public Health Nutrition*, 15(5): 811-817.
- Nord, Mark, and Prell, Mark. (2011). *Food Security Improved Following the 2009 ARRA Increase in SNAP Benefits*, ERR-116, U.S. Department of Agriculture, Economic Research Service, April.
- Pilkauskas, N. V.; Currie, J. M., and Garfinkel, I. (2012). "The Great Recession, Public Transfers, and Material Hardship," *Social Service Review*, 86(3): 401-427.
- Rothstein, J. (2011). "Unemployment Insurance and Job Search in the Great Recession," NBER Working Paper 17534, National Bureau of Economic Research, Cambridge, MA.
- Shaefer, H. L. and Wu, L. (2011). "Unemployment Insurance and Low-Educated Single Working Mothers before and after Welfare Reform." *Social Service Review*, 85(2): 205-228.
- Tiehen, Laura; Jolliffe, Dean, and Gundersen, Craig. (2012). "Alleviating Poverty in the United States: The Critical Role of SNAP Benefits." Washington, DC: Economic Research Service, USDA.
- U.S. Department of Agriculture (USDA). (2012, 2013). "Supplemental Nutrition Assistance Program: Number of Persons Participation," Updated March 8, 2013. Accessed December 2012 and March 2013: <http://www.fns.usda.gov/pd/snapmain.htm>.
- U.S. Department of Labor (DOL). (2013a). "Unemployment Insurance Chartbook," Accessed July 2013: <http://workforcesecurity.doleta.gov/unemploy/chartbook.asp>.
- U.S. Department of Labor. (2013b). "Unemployment Insurance Database," Available at: [http://workforcesecurity.doleta.gov/unemploy/content/data\\_stats/datasum12/DataSum\\_2012\\_4.pdf](http://workforcesecurity.doleta.gov/unemploy/content/data_stats/datasum12/DataSum_2012_4.pdf).