Supplement

The State of Senior Hunger in America 2013: An Annual Report

Prepared for the National Foundation to End Senior Hunger

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EXECUTIVE SUMMARY

In this supplement to our report (Ziliak and Gundersen 2015) we provide an overview of the extent and distribution of food insecurity in 2013, along with trends over the past decade using national and state-level data from the December Supplements to the Current Population Survey (CPS).

Based on the full set of 18 questions in the Core Food Security Module (CFSM), the module used by the USDA to establish the official food insecurity rates of households in the United States, in Ziliak and Gundersen (2015) we concentrate on the measure of the *threat of hunger* (i.e. marginally food insecure) if a household answered affirmatively to at least one question on the CFSM. In this supplement, we examine two other measures of food insecurity: facing the *risk of hunger* (i.e. food insecure) if a household answered affirmatively to at least 3 questions and *facing hunger* (i.e. very low food secure) if a household answered affirmatively to at least 8 questions in households with children and at least 6 questions in households without children.

Based on the barometer of food insecurity, this report demonstrates that seniors continue to face increasing challenges despite the end of the Great Recession.

Specifically, in 2013 we find that

- 15.5% of seniors face the threat of hunger, 8.7% face the risk of hunger, and 3.3% are facing hunger. This translates into 9.6 million, 5.4 million, and 2.0 million seniors, respectively.
- Those living in states in the South and Southwest, those who are racial or ethnic minorities, those with lower incomes, and those who are younger (ages 60-69) are most likely to be food insecure.
- Out of those seniors who face the threat of hunger, the majority have incomes above the poverty line and are white.
- From 2001 to 2013, the fraction of seniors experiencing the threat of hunger, the risk of hunger, and hunger has increased by 45%, 66%, and 133%, respectively. The number of seniors in each group rose 106%, 136%, and 232% which also reflects the growing population of seniors. These increases are substantially higher than the full population which saw increases in food insecurity rates and very low food security rates of 30% and 67% and increases in numbers of 46% and 90%.
- Since the onset of the recession in 2007 until 2013, the number of seniors experiencing the threat of hunger, the risk of hunger, and hunger has increased by 56%, 68%, and 63%, respectively.

Despite an improving economy and financial markets, a high proportion of seniors in the United States are going without enough food due to economic constraints. Based on the findings regarding food insecurity and health in Ziliak and Gundersen (2013), this stubbornly high proporiton of food insecure seniors continues to pose a threat to the health of millions of seniors.

I. FOOD INSECURITY IN 2013

We document the state of hunger among senior Americans ages 60 and older in 2013 using data from the Current Population Survey (CPS). In December of each year, households respond to a series of 18 questions (10 questions if there are no children present) that make up the Core Food Security Module (CFSM) in the CPS. (See the Appendix for more details on the CPS and CFSM.) Each question is designed to capture some aspect of food insecurity and, for some questions, the frequency with which it manifests itself. Respondents are asked questions about their food security status in the last 30 days as well as over the past 12 months. We focus on the questions referring to the past year.

Consistent with the nomenclature and categorizations in our past reports (Ziliak and Gundersen 2014, 2013, 2012, 2009; Ziliak et al., 2008), we consider three characterizations of food insecurity: the *threat of hunger*, when a person is defined as marginally food insecure due to having answered affirmatively to one or more questions on the CFSM; the *risk of hunger*, when a person is food insecure (three or more affirmative responses to questions on the CFSM); and *facing hunger*, when a person is very low food secure (8 or more affirmative responses to questions in households with children; 6 or more affirmative responses in households without children). The threat of hunger is the broadest category of food insecurity since it encompasses those responding to at least one question on the CFSM. The next broadest category is the risk of hunger since this group encompasses those who are either low food secure or very low food secure. It follows then that the most severe category in our taxonomy is facing hunger. Box 1 summarizes the categories.

Box 1: Categories of Food Insecurity

DUX 1. Categories of Food insecurity		
	USDA Classification	Number of Affirmative Responses to
		CFSM
Fully Food Soouro	Fully Food Coope	0
Fully Food Secure	Fully Food Secure	U
Threat of Hunger	Marginally Food Insecure	1 or more
Risk of Hunger	Food Insecure	3 or more
Facing Hunger	Very Low Food Secure	8 or more (households with children)
		6 or more (households without children)

In Table 1 we present estimates of food insecurity among seniors in 2013. Overall, 15.5% faced the threat of hunger (9.6 million seniors). In the more severe food insecurity categories, we find that 8.7% faced the risk of hunger (5.4 million seniors) and 3.3% faced hunger (2.0 million seniors). The table also presents estimates of food insecurity across selected socioeconomic categories. Here we see great heterogeneity across the senior population. For example, for those with incomes below the poverty line, 49.6% face the threat of hunger, 32% face the risk, and 13.5% face hunger. In contrast, seniors with incomes greater than twice the poverty line, these numbers fall dramatically to 7.3%, 3.4%, and 1.0%. Turning to race, white seniors have food insecurity rates that are less than half the rates for African-American seniors. (The category of "other race" includes those American Indians, Asians, and Pacific Islanders.) Similarly,

Hispanics (of any racial category) have food insecurity rates which are generally twice the rates of non-Hispanics.

Table 1. The Extent of Senior Food Insecurity in 2013

	Threat of	Risk of	Facing Hunger
	hunger	Hunger	
Overall	15.48%	8.72%	3.28%
By Income			
Below the Poverty Line	49.56	31.90	13.48
Between 100% and 200% of the Poverty Line	29.52	16.19	5.99
Above 200% of the Poverty Line	7.25	3.40	1.02
Income Not Reported	10.42	5.93	2.21
By Race			
White	13.42	7.33	2.80
Black	32.87	20.77	7.27
Other	16.31	8.88	3.51
By Hispanic Status			
Non-Hispanic	14.06	7.81	3.11
Hispanic	31.44	18.98	5.17
By Marital Status			
Married	11.27	5.75	1.81
Widowed	17.79	9.46	3.11
Divorced or Separated	27.05	18.87	8.73
Never Married	24.30	13.34	6.44
By Metropolitan Location			
Non-Metro	16.60	8.53	2.98
Metro	15.22	8.77	3.35
By Age			
60-64	18.62	11.40	4.91
65-69	15.24	9.35	3.38
70-74	14.97	7.65	2.39
75-79	13.37	6.75	2.75
80 and older	12.54	5.83	1.66
By Employment Status			
Employed	10.61	5.46	1.79
Unemployed	37.36	24.55	14.81
Retired	13.33	6.95	2.44
Disabled	39.71	26.90	11.07
By Gender	22., 1	20.50	22.07
Male	14.02	8.10	3.13
Female	16.69	9.24	3.40
By Grandchild Present	10.07	y. 2 .	5.10
No Grandchild Present	14.59	8.13	3.14
Grandchildren Present	32.60	20.16	6.03

Source: Authors' calculations from 2013 December Current Population Survey. The numbers in the table show the rates of food insecurity under three measures for various groups.

Food insecurity among divorced or separated seniors is two to three times greater than married seniors (and four times larger in the most severe category of facing hunger) As age increases, food insecurity rates fall. For example, seniors between the ages of 60 and 64 have food insecurity rates that almost twice those over the age of 80. The threat and risk of hunger is 3-5 times higher among the disabled in comparison to the retired, and if a grandchild is present, food insecurity is more than twice as likely as among households with no grandchildren present.

Table 1 allows us to see the proportions of persons within any category who are food insecure and, with this information, we can make statements about who is most in danger of being food insecure. For example, those with lower incomes are substantially more likely to be food insecure in any of our food insecurity categories than those with higher incomes. Also of interest, though, is the distribution of senior hunger. In other words, out of those who are food insecure, what proportion fall into a particular category? We present these results in Table 2.

As seen in Table 2, the majority of seniors in any food insecurity category have incomes above the poverty line. For example, out of those reporting income, nearly 2 in 3 seniors at risk of hunger have incomes above the poverty line. A similar story holds for race – while African-Americans are at greater risk of hunger than whites, almost 3 in 4 food insecure seniors are white. Despite the decline in food insecurity rates among older seniors, 14.2% of seniors facing the threat of hunger are over age 80 and for the risk of hunger and facing hunger, the figures are 11.7% and 8.8%. And while the rates of food insecurity are lowest for retired persons, they make up nearly half of each category.

Table 2. The Distribution of Senior Food Insecurity in 2013

	Threat of	Risk of	Facing Hunger
-	hunger	Hunger	
By Income			
Below the Poverty Line	29.06%	33.20%	37.34%
Between 100% and 200% of the Poverty Line	29.40	28.60	28.17
Above 200% of the Poverty Line	21.26	17.79	14.16
Income Not Reported	20.28	20.50	20.33
By Race			
White	73.26	70.96	72.26
Black	20.67	23.18	21.57
Other	6.07	5.86	6.17
By Hispanic Status			
Non-Hispanic	83.39	82.21	87.10
Hispanic	16.61	17.79	12.90
By Marital Status			
Married	44.02	39.86	33.37
Widowed	23.28	21.99	19.21
Divorced or Separated	23.95	29.64	36.48
Never Married	8.75	8.51	10.94
By Metropolitan Location			

Non-Metro	20.42	18.63	17.32
Metro	79.58	81.37	82.68
By Age			
60-64	35.24	38.30	43.85
65-69	23.39	25.46	24.47
70-74	16.47	14.93	12.41
75-79	10.72	9.61	10.42
80 and older	14.19	11.70	8.84
By Employment Status			
Employed	20.00	17.33	15.12
Unemployed	3.84	4.48	7.19
Retired	52.65	48.72	45.44
Disabled	24.51	29.46	32.25
By Gender			
Male	41.04	42.06	43.24
Female	58.96	57.94	56.76
By Grandchild Present			
No Grandchild Present	89.61	88.60	90.92
Grandchildren Present	10.39	11.40	9.08

Source: Authors' calculations from 2013 December Current Population Survey. The numbers in the table sum to 100 percent within each subcategory.

In Table 3 we present state level estimates of senior food insecurity for 2013. The range for the threat of hunger spans from 8.3% in Minnesota to 26.1% in Arkansas; the risk of hunger spans from 3.7% in New Mexico to 16.8% in Mississippi; and the rate of those facing hunger spans from 0.5% in North Dakota to nearly 6.5% in Arkansas.

Table 3. State-Level Estimates of Senior Food insecurity in 2013

Risk of Hunger 10.34	Facing Hunger 4.31	MT	Threat of Hunger	Risk of Hunger	Facing Hunger
10.34		MT	Hunger	Hunger	Hunger
	4 31	MT			8
	1.51	MT	11.62	6.37	3.69
5.95	1.89	NE	15.33	8.20	4.02
9.57	4.09	NV	14.75	8.53	3.36
15.10	6.54	NH	10.30	5.19	1.92
9.13	3.95	NJ	11.82	5.90	2.24
8.67	3.72	NM	9.54	3.65	1.19
10.32	4.13	NY	16.33	8.25	2.52
6.87	3.30	NC	18.40	11.93	3.68
12.28	5.33	ND	11.98	4.69	0.54
8.19	3.38	OH	16.32	8.68	3.88
8.39	3.55	OK	17.10	9.31	4.46
8.24	2.50	OR	14.85	9.07	3.15
	15.10 9.13 8.67 10.32 6.87 12.28 8.19 8.39	9.574.0915.106.549.133.958.673.7210.324.136.873.3012.285.338.193.388.393.55	9.57 4.09 NV 15.10 6.54 NH 9.13 3.95 NJ 8.67 3.72 NM 10.32 4.13 NY 6.87 3.30 NC 12.28 5.33 ND 8.19 3.38 OH 8.39 3.55 OK	9.57 4.09 NV 14.75 15.10 6.54 NH 10.30 9.13 3.95 NJ 11.82 8.67 3.72 NM 9.54 10.32 4.13 NY 16.33 6.87 3.30 NC 18.40 12.28 5.33 ND 11.98 8.19 3.38 OH 16.32 8.39 3.55 OK 17.10	9.57

ID	10.41	7.11	3.26	PA	11.77	5.10	1.64
IL	13.58	7.82	3.30	RI	12.59	7.46	2.16
IN	11.74	6.60	3.01	SC	18.77	10.66	3.77
IA	11.51	6.41	2.25	SD	14.02	6.97	3.33
KS	15.63	7.34	2.54	TN	19.67	11.04	3.43
KY	15.82	7.12	2.60	TX	20.26	13.05	4.43
LA	24.39	13.66	4.93	UT	13.36	6.85	2.54
ME	15.51	8.34	3.70	VT	15.27	8.31	3.48
MD	13.60	8.11	3.19	VA	13.93	7.58	3.46
MA	10.98	5.35	1.60	WA	11.93	8.35	3.65
MI	15.28	9.24	3.22	WV	12.08	6.81	2.54
MN	8.30	4.21	1.28	WI	11.00	5.15	2.19
MS	24.34	16.79	5.24	WY	15.59	9.00	3.28
MO	19.06	11.48	5.60				

Source: Authors' calculations. The numbers are two-year averages found by summing the number of food insecure seniors in each category by state across the 2011-2013 December Current Population Surveys and dividing by the corresponding total number of seniors in each state across the two years.

In Table 4 we highlight the ten states with the highest rates of senior hunger in 2013. In each category, almost all of the states are located in the South and Southwest, and on average the rates are higher than in prior years. There are some differences across categories, though. For example, Arkansas has the highest level for the threat of hunger and of those facing hunger, and Mississippi has the highest for the risk of hunger. There are some commonalities insofar as Alabama, Arkansas, District of Columbia, Louisiana, Mississippi, Missouri, and Texas each show up in the top 10 for all three categories.

Table 4. Top Ten States in Terms of Senior Food Insecurity in 2013

Threat o	of Hunger	Risk of	Hunger	Facing	Hunger
AR	26.10	MS	16.79	AR	6.54
LA	24.39	AR	15.10	MO	5.60
MS	24.34	LA	13.66	DC	5.33
DC	20.27	TX	13.05	MS	5.24
TX	20.26	DC	12.28	LA	4.93
TN	19.67	NC	11.93	OK	4.46
MO	19.06	MO	11.48	TX	4.43

SC	18.77	TN	11.04	AL	4.31
NC	18.40	SC	10.66	CT	4.13
AL	17.21	AL	10.34	AZ	4.09

II. FOOD INSECURITY OVER TIME

To place the 2013 estimates into perspective, we now examine trends in food insecurity since 2001. We describe the trends for the full population of seniors along with select subgroups. In Figure 1 we display results for the full population in terms of the percentage of seniors (left-hand axis) and number of seniors in millions (right-hand axis) within each of our food insecurity categories. As seen there, across all three measures there was a substantial increase in food insecurity since the start of the recession in 2007. For example, the fraction of seniors at risk of hunger or facing hunger increased by 40% and 35%, respectively, from 2007-2013. And reflecting the fact that an increasing percentage of the U.S. population is over age 60, the number of seniors at risk of hunger or facing hunger has increased by over 60 percent since 2007. While the threat of hunger continued to increase from prior years, there was a slight slowdown in the rates of seniors at risk or facing hunger, mimicking overall population trends (Coleman-Jensen, et al. 2014). From 2001 to 2013 the fraction of seniors experiencing the threat of hunger, the risk of hunger, and hunger has increased by 44%, 66%, and 132%, respectively, while the number of seniors in each group rose 107%, 136%, and 232% reflecting the growing population of seniors.

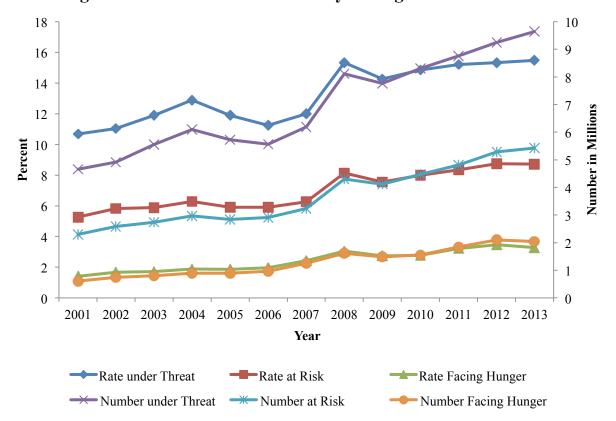


Figure 1. Trends in Food Insecurity among Senior Americans

In Table 5 we take a deeper look into underlying changes in the composition of food insecure seniors from 2012 to 2013. The table presents percentage point changes in each of the three categories of food insecurity by the same set of socioeconomic characteristics in Table 1. In the first row, the results for the full population of seniors are reported and, as discussed above, the changes in food insecurity rates from 2012 to 2013 are evident there. As seen in the subsequent rows, there is a wide degree of variation in terms of changes that are masked by the overall changes. However, in most instances there were no statistically significant changes across the pair of years. Exceptions include the near poor, blacks, widowed, the employed, and the unemployed. In some cases these groups registered increases, and in others decreases, so on net the risk of hunger was little changed from 2012. We note that the small samples of unemployed and changes in the composition of the unemployed over time make estimates of food insecurity more susceptible to large swings.

Table 5. Changes in the Composition of Senior Hunger from 2012 to 2013

*	Threat of	Risk of	Facing Hunger
	Hunger	Hunger	
Overall	0.15%	-0.02%	-0.19%

By Income			
Below the Poverty Line	0.77	0.86	0.12
Between 100% and 200% of the Poverty Line	-0.45	-1.25*	-0.60
Above 200% of the Poverty Line	0.37	0.00	-0.08
Income Not Reported	0.54	0.66*	-0.16
By Race			
White	-0.03	-0.33	-0.25*
Black	2.24	3.02***	-0.27
Other	-1.34	-1.07	0.69
By Hispanic Status			
Non-Hispanic	0.12	-0.06	-0.08
Hispanic	-0.43	-0.18	-1.61*
By Marital Status			
Married	0.17	0.06	-0.27
Widowed	-0.51	-1.06*	-0.72**
Divorced or Separated	0.13	1.28	0.52
Never Married	2.34	-0.35	0.76
By Metropolitan Location			
Non-Metro	-0.15	-0.79*	-0.14
Metro	0.23	0.16	-0.21
By Age			
60-64	0.39	0.03	0.30
65-69	-1.16*	0.01	-0.18
70-74	0.99	-0.25	-0.87***
75-79	-0.23	-0.17	-0.09
80 and older	0.97	0.14	-0.45*
By Employment Status			
Employed	-1.12**	-1.13***	-0.97***
Unemployed	7.23**	4.14	5.93***
Retired	0.72**	0.27	-0.07
Disabled	-1.59	0.31	0.13
By Gender			
Male	0.23	0.14	-0.03
Female	0.09	-0.16	-0.33*
By Grandchild Present			
No Grandchild Present	0.24	-0.03	-0.13
Grandchildren Present	-2.07	-0.29	-1.53*

Source: Authors' calculations. The numbers in the table reflect percentage point changes from 2012-2013. The asterisks denote statistical significance at the following levels: *** p<0.01; ** p<0.05; * p<0.1

In the next set of figures we examine trends in food insecurity since 2001 across a variety of subpopulations found in Tables 1 and 5. We begin in Figure 2 with trends in food insecurity for seniors living in metropolitan areas versus nonmetropolitan areas. The figure shows that, in the years leading up to the Great Recession there were differences between metro and non-metro areas in terms of the threat of hunger, but this seemed to dissipate during the recession. This gap, however, has re-emerged in recent years, reaching almost 2 percentage points in 2013,

similar to 2004. There are, however, no substantive gaps in metro and non-metro rates of risk of hunger or facing hunger over time.

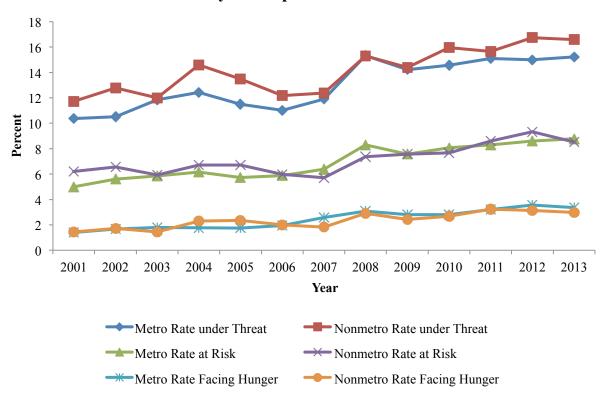


Figure 2. Trends in Food Insecurity among Senior Americans by Metropolitan Status

Figure 3a depicts trends in the threat of hunger across different races, while Figures 3b and 3c present similar trends for those at risk of hunger and for those facing hunger. As discussed above, the rates of food insecurity for blacks are substantially higher than whites. These figures reveal that these differences were present in each year from 2001 to 2013. Similarly, for marginal food insecurity and food insecurity, rates are higher among the "other" category than among whites in all years and in all years except two (2003 and 2012) for very low food security.

Rates of marginal food insecurity and food insecurity were fairly stable among blacks over the past decade, but there appears to be a strong increase in the fraction of blacks facing hunger after the 2007 recession (Figure 3c). On the other hand, the trend has, in general, been slightly increasing among whites across all three food insecurity categories.

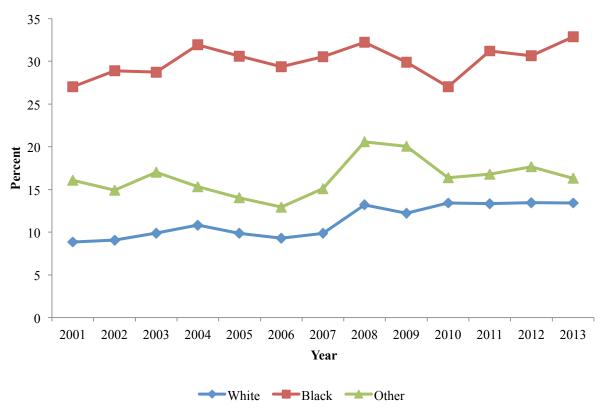


Figure 3a. Trends in Threat of Senior Hunger by Race

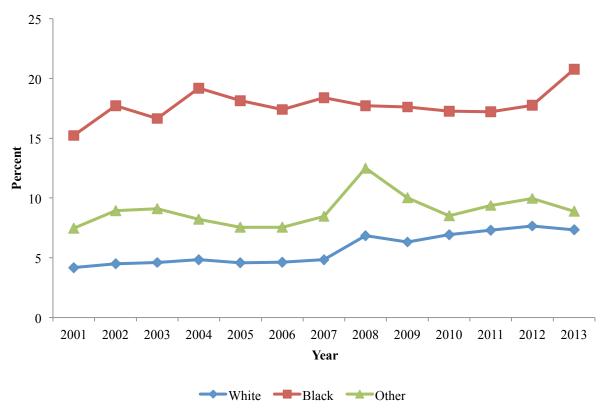


Figure 3b. Trends in Risk of Senior Hunger by Race

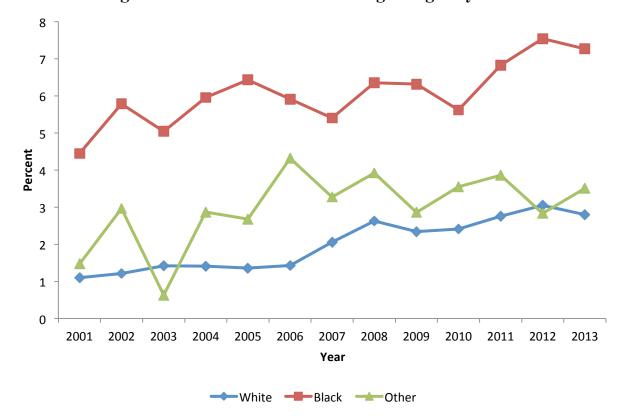
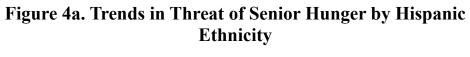
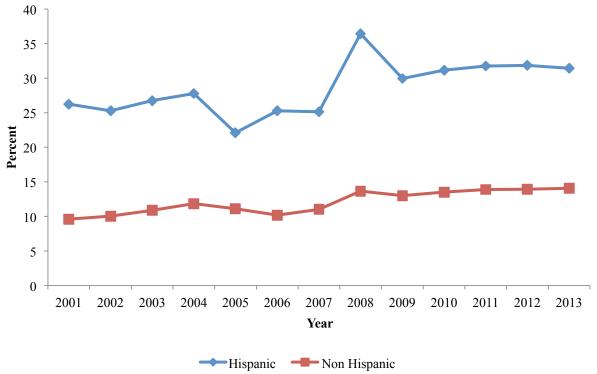
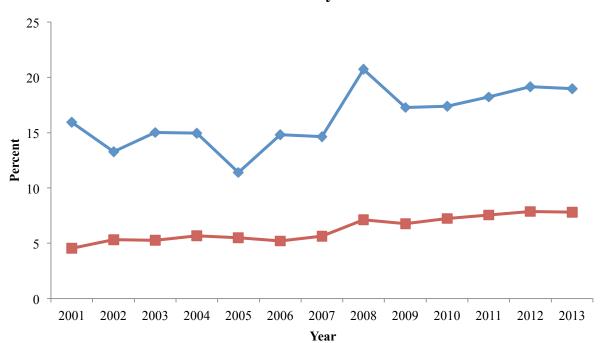


Figure 3c. Trends in Seniors Facing Hunger by Race

In Figures 4a-4c we present trends broken down by Hispanic status. In most years Hispanics face rates of food insecurity 2-3 times higher than non-Hispanics. One key difference in the trajectories over time is with respect to what occurred after the sharp increase in 2008 for the threat of hunger and risk of hunger. After this increase, in 2009 for Hispanics there was a fall to levels just above those in 2007 in contrast to non-Hispanics who did not see such a sharp fall. However, from 2009-2012 there were, in general, slight increases among both Hispanics and non-Hispanics in all three food insecurity categories, though this abated somewhat in 2013 among Hispanics.







Hispanic Non Hispanic

Figure 4b. Trends in Risk of Senior Hunger by Hispanic Ethnicity

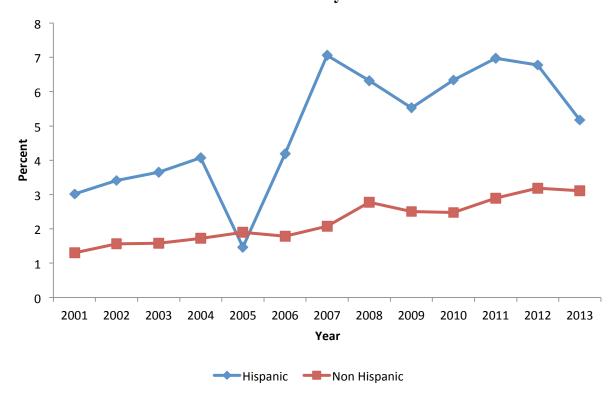


Figure 4c. Trends in Seniors Facing Hunger by Hispanic Ethnicity

Figures 5a-5c present a parallel set of results for seniors of three age groups—60-69 years old, 70-79 years old, and age 80 and older. As seen in Figure 5a, there were sharp increases in the threat of hunger from 2007 to 2008 across all three age groups and these rates remain, in 2013, substantially above those found in 2007. There are some interesting patterns in the age graphs over the past year. In Figure 5a it appears there is some convergence across age groups in the fraction under the threat of hunger, primarily driven by increases in the 70-79 and 80+ categories and a slight fall in the 60-70 category. Figure 5c displays an increase in divergence, due primarily to sharp declines in to the 70-79 and 80+ age categories compared to those seniors ages 60-69.

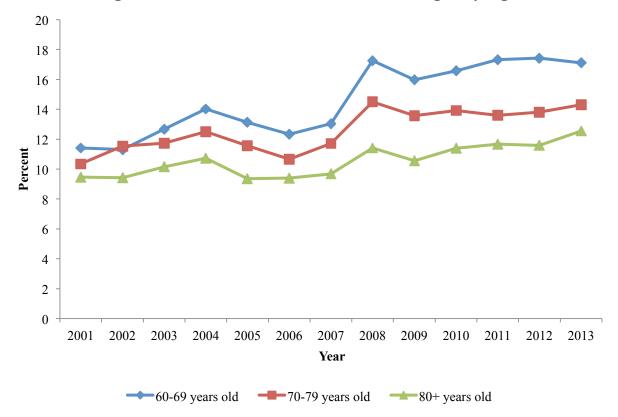


Figure 5a. Trends in Threat of Senior Hunger by Age

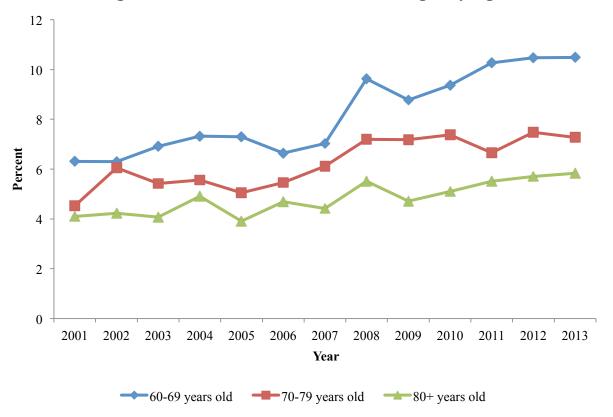


Figure 5b. Trends in Risk of Senior Hunger by Age

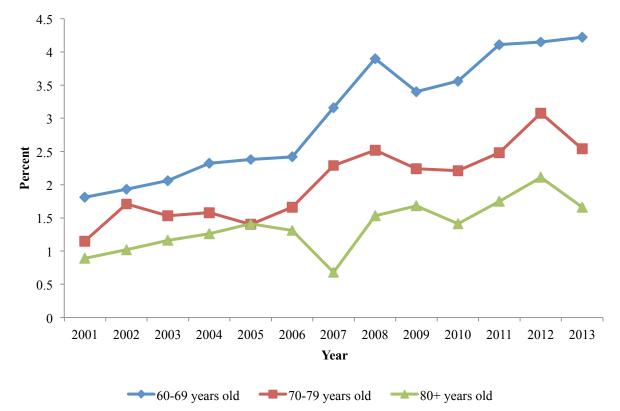


Figure 5c. Trends in Senior Americans Facing Hunger by Age

III. CONCLUSION

This report demonstrates that food insecurity among seniors in America is a continued crisis facing the nation. Despite the end of the Great Recession in 2009, almost 1 in 6 seniors faced the threat of hunger in 2013. Even more troubling is the astonishingly large 232% increase in the number of seniors facing hunger in 2013 compared to 2001. Given the compelling evidence in Ziliak and Gundersen (2013) that food insecurity is associated with a host of poor nutrition and health outcomes among seniors, this report implies that the these high rates of food insecurity among seniors will likely lead to additional public health challenges for our country. This suggests that a key potential avenue to stem the growth of health care expenditures on older Americans is to ameliorate the problem of food insecurity.

APPEXDIX

The CPS is a nationally representative survey conducted by the Census Bureau for the Bureau of Labor Statistics, providing employment, income and poverty statistics. Households are selected to be representative of civilian households at the state and national levels, using suitably appropriate sampling weights. The CPS does not include information on individuals living in group quarters including nursing homes or assisted living facilities. For this report and previous reports, we use data from the December Supplement which contains the Core Food Security Module (CFSM). The questions from the CFSM are found in Appendix Table 1. Because our focus is on hunger among seniors, our CPS sample is of persons age 60 and older. In 2013 this results in 22,616 sample observations. Appendix Table 2 presents selected summary statistics for the CPS sample.

Appendix Table 1: Questions on the Core Food Security Module

Food Insecurity Question	Asked of Households with Children	Asked of Households without Children
1. "We worried whether our food would run out before we got money to	X	X
buy more." Was that often, sometimes, or never true for you in the		
last 12 months?		
2. "The food that we bought just didn't last and we didn't have money to	X	X
get more." Was that often, sometimes , or never true for you in the last 12 months?		
3. "We couldn't afford to eat balanced meals." Was that often, sometimes , or never true for you in the last 12 months?	X	X
4. "We relied on only a few kinds of low-cost food to feed our children	X	
because we were running out of money to buy food." Was that often,		
sometimes, or never true for you in the last 12 months?		
5. In the last 12 months, did you or other adults in the household ever cut	X	X
the size of your meals or skip meals because there wasn't enough		
money for food? (Yes/No)		
6. "We couldn't feed our children a balanced meal, because we couldn't	X	
afford that." Was that often, sometimes, or never true for you in the		
last 12 months?		
7. In the last 12 months, did you ever eat less than you felt you should	X	X
because there wasn't enough money for food? (Yes/No)		
8. (If yes to Question 5) How often did this happen—almost every month,	X	X
some months but not every month, or in only 1 or 2 months?		
9. "The children were not eating enough because we just couldn't afford	X	
enough food." Was that often, sometimes , or never true for you in the		
last 12 months?		
10. In the last 12 months, were you ever hungry, but didn't eat, because	X	X
you couldn't afford enough food? (Yes/No)		
11. In the last 12 months, did you lose weight because you didn't have	X	X
enough money for food? (Yes/No)		
12. In the last 12 months, did you ever cut the size of any of the children's meals because there wasn't enough money for food? (Yes/No)	X	
13. In the last 12 months did you or other adults in your household ever not	X	v
eat for a whole day because there wasn't enough money for food?	X	X
(Yes/No)		
14. In the last 12 months, were the children ever hungry but you just	X	
couldn't afford more food? (Yes/No)	Α	
15. (If yes to Question 13) How often did this happen—almost every	X	X
month, some months but not every month, or in only 1 or 2 months?	Α	
16. In the last 12 months, did any of the children ever skip a meal because	X	
there wasn't enough money for food? (Yes/No)		
17. (If yes to Question 16) How often did this happen—almost every	x	
month, some months but not every month, or in only 1 or 2 months?		
18. In the last 12 months did any of the children ever not eat for a whole	X	
day because there wasn't enough money for food? (Yes/No)		

Notes: Responses in bold indicate an "affirmative" response.

Appendix Table 2: Selected Characteristics of Senior Americans Age 60 and older in 2013

Appendix Table 2: Selected Characteristics of Senior Americans Age	e 60 and older in 2013
Income Categories Below the Poverty Line	9.18%
Between 100% and 200% of the Poverty Line	15.41
	45.37
Above 200% of the Poverty Line	
Missing Income	30.14
Racial Categories	0.4.51
White	84.51
Black	9.74
Other	5.76
Hispanic Status	0.40
Hispanic	8.18
Non-Hispanic	91.82
Marital Status	
Married	60.46
Widowed	20.27
Divorced or Separated	13.71
Never Married	5.57
Metropolitan Location	
Non-Metro	19.05
Metro	81.95
Age	
60 to 64	29.30
65 to 69	23.75
70 to 74	17.03
75 to 79	12.42
80 and older	17.51
Employment Status	
Employed	27.72
Unemployed	1.60
Retired	61.14
Disabled	9.55
Education Level	3.50
Less Than High School	15.41
High School Diploma	33.21
Some College	23.84
College Degree	27.54
Food Stamp Recipient	6.28
Grandchild Present	0.20
No Grandchild Present	95.07
Grandchild Present	4.92
Female	54.69
Living Alone	25.25

References

Coleman-Jensen, A., C. Gregory, and A. Singh. 2014. *Household Food Security in the United States in 2013*. Economic Research Report No. (ERR-173).

Ziliak, J., and C. Gundersen. 2015. *The State of Senior Hunger in America 2013: An Annual Report*. Report submitted to National Foundation to End Senior Hunger.

Ziliak, J., and C. Gundersen. 2013. *The Health Consequences of Senior Hunger in the United States: Evidence from the 1999-2010 NHANES*. Report submitted to National Foundation to End Senior Hunger.

Ziliak, J., and C. Gundersen. 2014. *The State of Senior Hunger in America 2012: An Annual Report*. Report submitted to National Foundation to End Senior Hunger.

Ziliak J. and C. Gundersen. 2013. *The State of Senior Hunger in America 2011: An Annual Report.* Report submitted to National Foundation to End Senior Hunger.

Ziliak, J. and C. Gundersen. 2012. *The State of Senior Hunger in America: Food Insecurity in 2010*. Report submitted to Meals on Wheels Association of America Foundation.

Ziliak, J. and C. Gundersen. 2009. *Senior Hunger in the United States: Differences across States and Rural and Urban Areas.* Report submitted to Meals on Wheels Association of America Foundation.

Ziliak, J., C. Gundersen, and M. Haist. 2008. *The Causes, Consequences, and Future of Senior Hunger in America*. Report submitted to Meals on Wheels Association of America Foundation.

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