

Senior Hunger in the United States

James P. Ziliak

Center for Poverty Research

University of Kentucky

Craig Gundersen

University of Illinois

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- More information about UKCPR is available at <http://www.ukcpr.org/>

Issues We Examine

- Extent, distribution, and determinants of food insecurity among older adults
 - Differences by age, poverty status, race, and presence of grandchildren
- Health and nutrition consequences of food insecurity for older adults

Background on Adult Food Insecurity in the United States

Defining Food Insecurity

- A household is placed into food security categories based on responses to 18 questions on the Core Food Security Module (CFSM)
- Examples of questions
 - “I worried whether our food would run out before we got money to buy more”
 - “Did you or the other adults in your household ever cut the size of your meals or skip meals because there wasn’t enough money for food”
 - “Were you ever hungry but did not eat because you couldn’t afford enough food”
 - “In the last 12 months did you or other adults in your household ever not eat for a whole day because there wasn’t enough money for food?”

Categories of Food Security

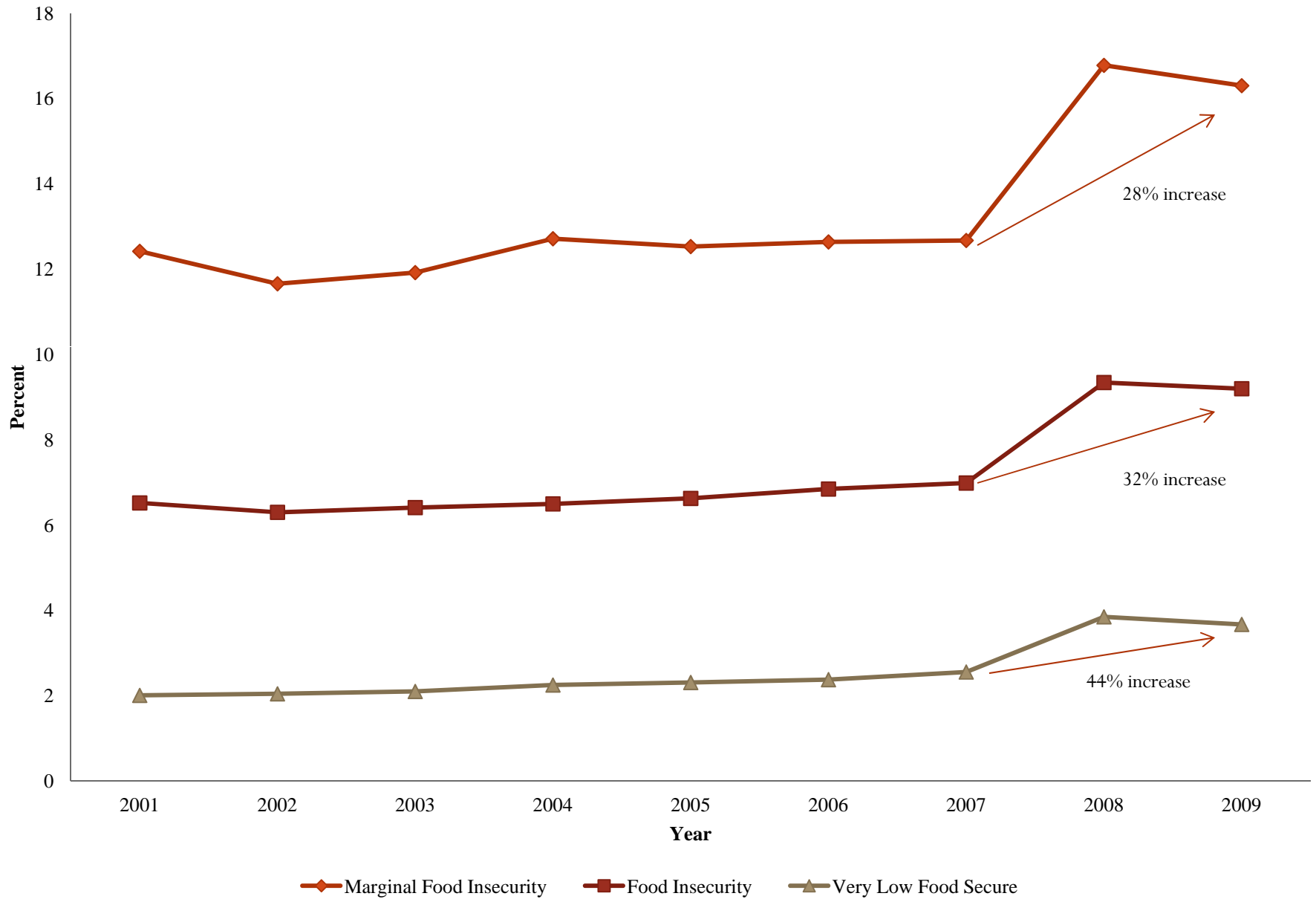
- Fully food secure
 - 0 affirmative responses to CFSM
- Marginal food insecurity
 - 1 or more affirmative responses to CFSM
- Food insecurity
 - 3 or more affirmative responses to CFSM
- Very low food secure
 - 8 or more affirmative responses to CFSM (households with children)
 - 5 or more affirmative responses to CFSM (households without children)

Trends in Older Adult Food Insecurity, 2001-2009

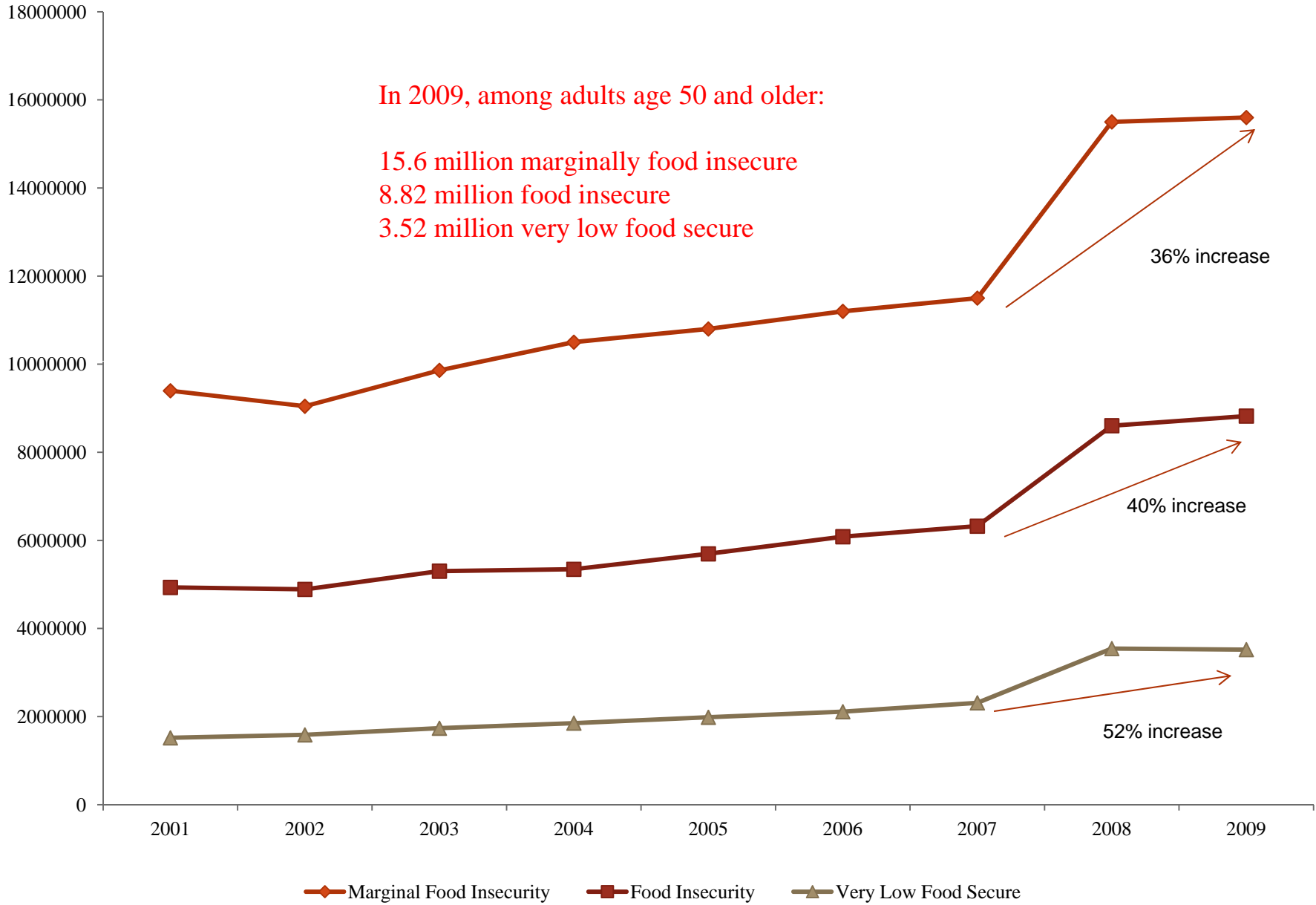
Current Population Survey

- December Supplements from 2001 to 2009
 - Supplements used to establish the official estimates of food insecurity in the United States
- Combined cross-sections
- Nationally representative (with weights)
- Full set of questions from CFSM
- Study sample restricted to persons over the age of 40

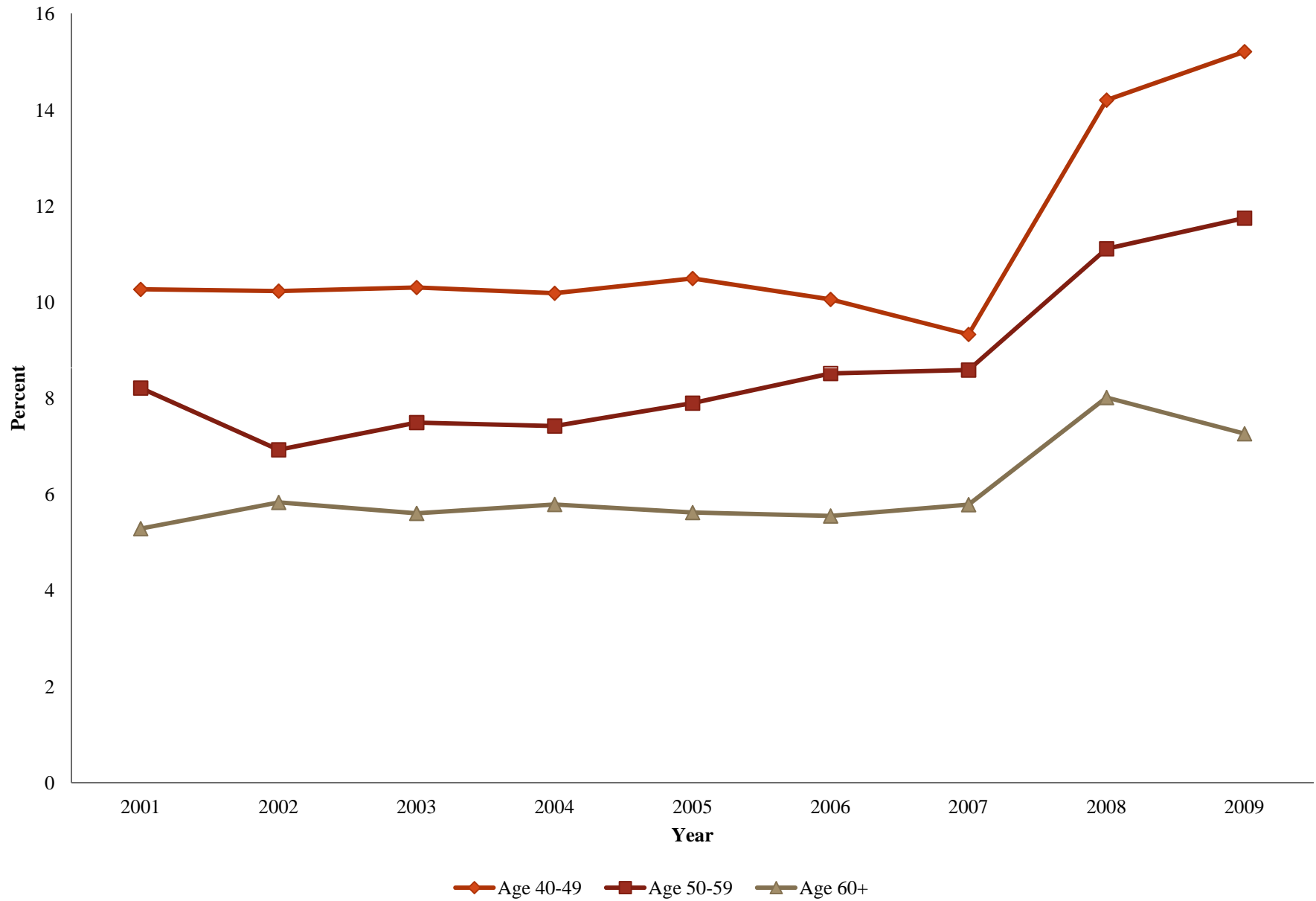
Food Insecurity Rates for Persons Age 50 and Older



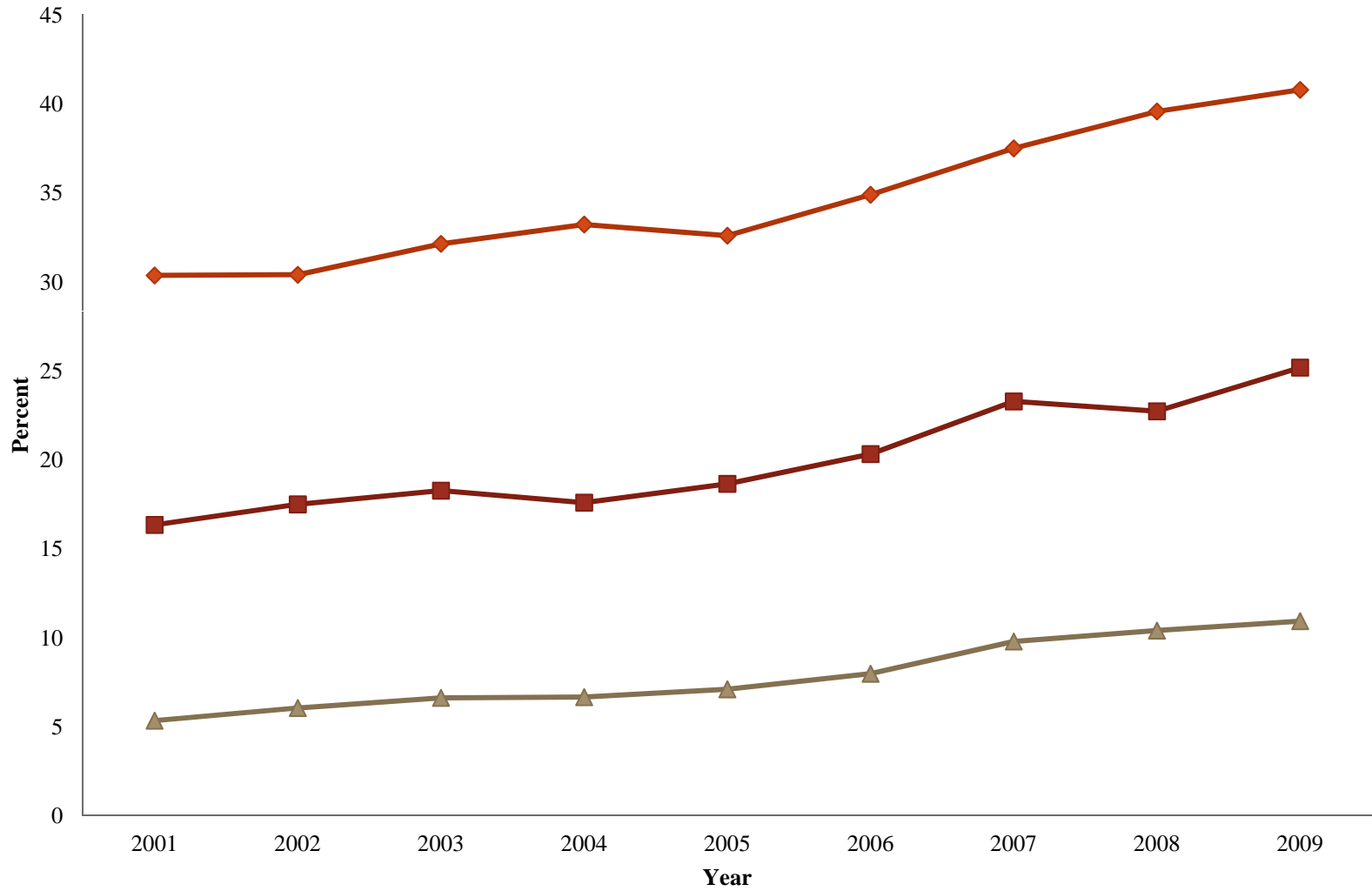
Number of Persons Age 50 and Older Facing Food Insecurity



Food Insecurity Rates for Persons Age 40 and Older, by Age



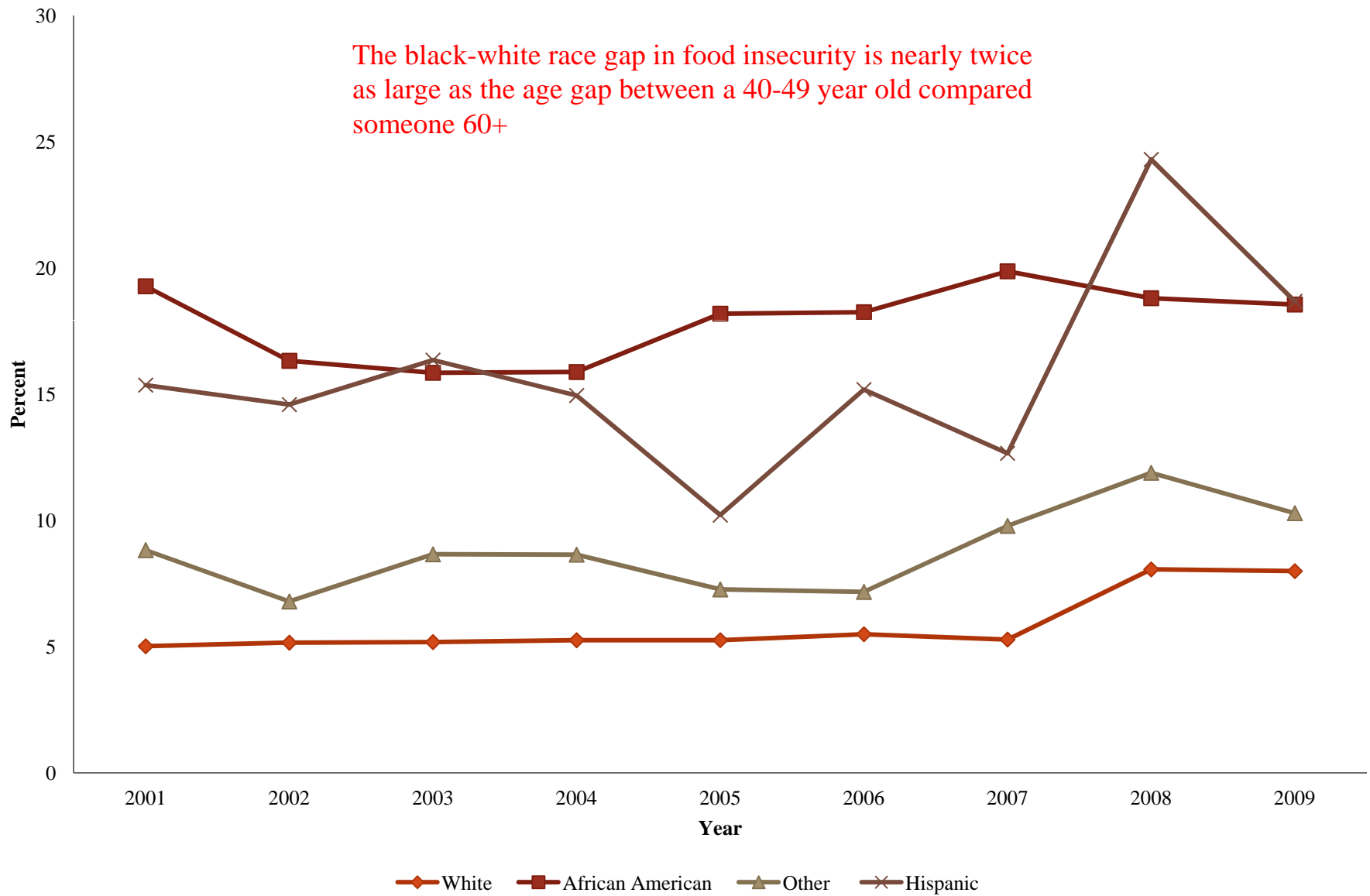
Food Insecurity Rates for Persons Age 50 and Older and Below 200% of Poverty



◆ Marginal Food Insecurity ■ Food Insecurity ▲ Very Low Food Secure

Food Insecurity Rates for Persons Age 50 and Older, by Race/Ethnicity

The black-white race gap in food insecurity is nearly twice as large as the age gap between a 40-49 year old compared someone 60+



Rates of Food Insecurity among Adults Age 60+ by Presence of Grandchildren

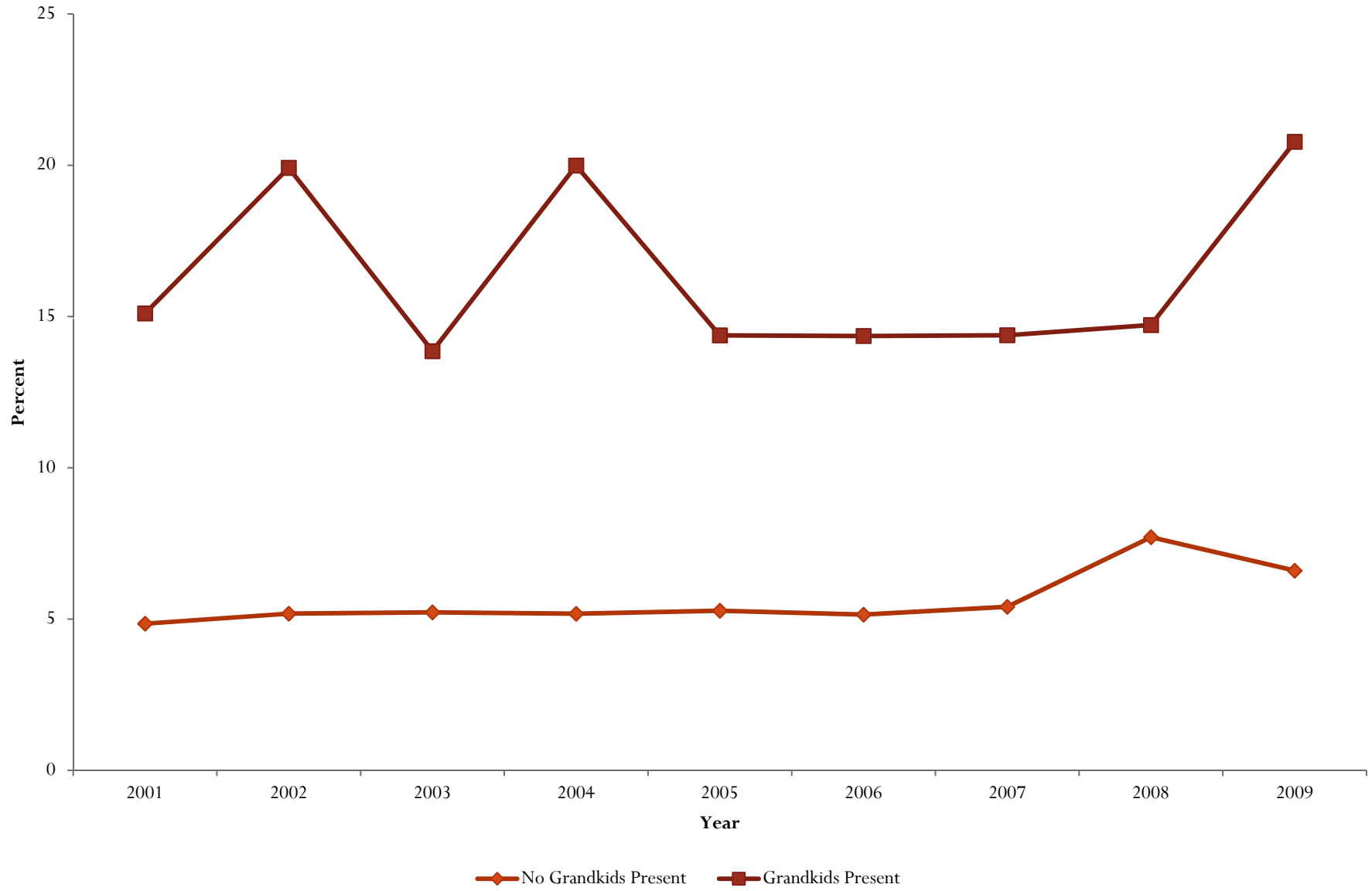
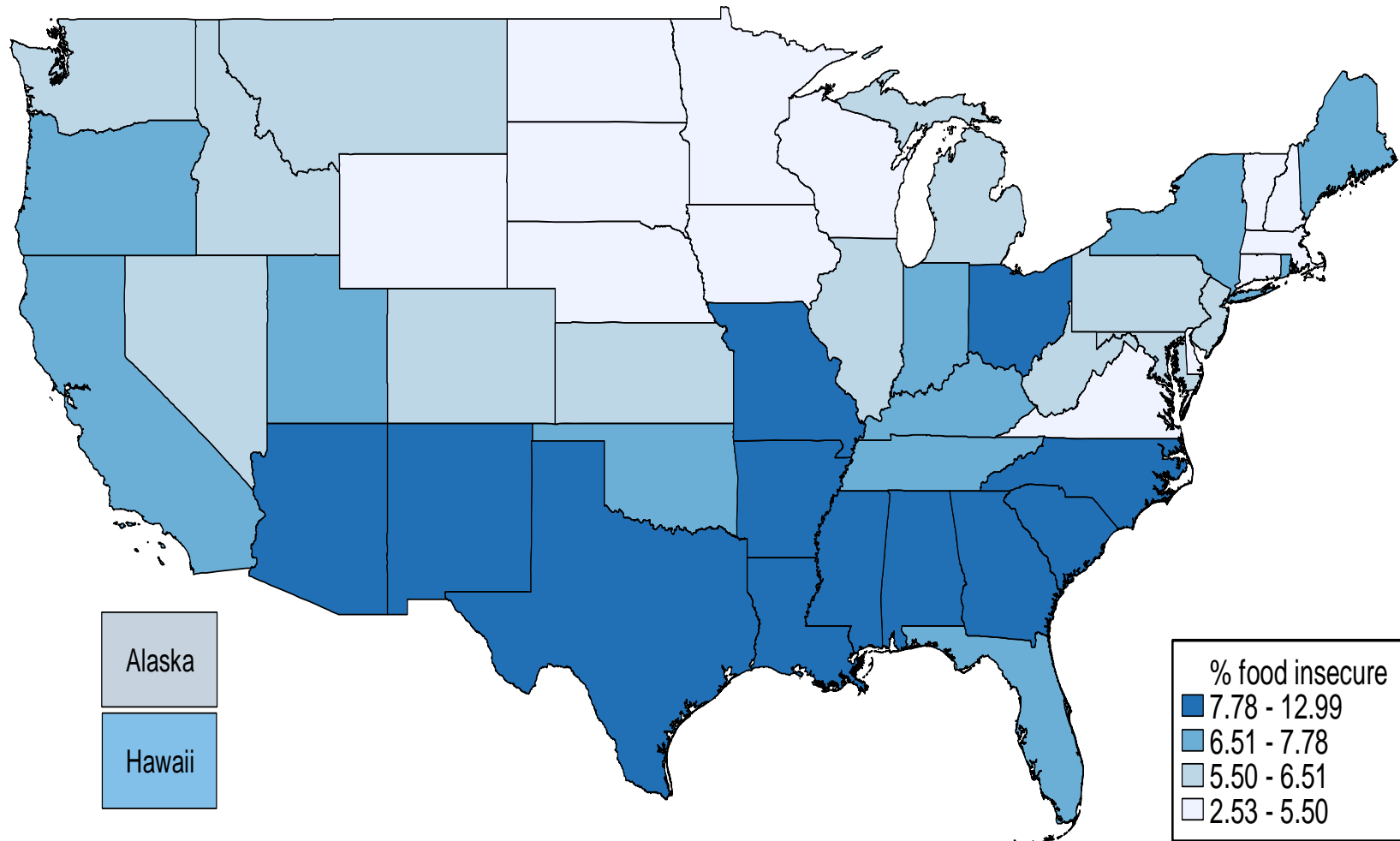


Figure 8b: State Food Insecurity Rates for Adults Age 50 and Older



Food Insecurity Rates by State for People Age 50+, 2001-2009

AL	9.32	MT	6.11
AK	7.42	NE	4.37
AZ	8.65	NV	5.97
AR	9.83	NH	3.99
CA	7.78	NJ	5.66
CO	6.37	NM	11.00
CT	5.11	NY	7.09
DE	4.95	NC	9.11
DC	7.38	ND	2.53
FL	7.02	OH	7.81
GA	9.03	OK	7.75
HI	6.68	OR	7.25
ID	6.06	PA	5.61
IL	6.25	RI	7.39
IN	6.54	SC	10.29
IA	5.50	SD	4.91
KS	6.51	TN	7.21
KY	7.28	TX	10.41
LA	8.71	UT	6.70
ME	6.92	VT	5.44
MD	6.35	VA	5.45
MA	5.46	WA	6.24
MI	6.26	WV	6.35
MN	3.74	WI	4.57
MS	12.99	WY	4.76
MO	8.07		

Box 1. Top Ten States in Terms of Food Insecurity by Age Group

40-49 Year Olds		50-59 Year Olds		Age 60 and Older	
AR	15.98	MS	13.79	MS	12.45
OK	15.97	NM	12.37	NM	10.01
MS	15.86	AZ	12.08	TX	9.67
TX	14.32	TX	11.33	SC	9.66
UT	13.80	SC	11.27	AR	9.61
ME	13.29	AL	11.07	GA	8.74
NM	13.21	NC	10.75	LA	8.32
SC	13.13	OR	10.57	AL	8.03
TN	13.08	MO	10.56	NC	7.97
FL	12.82	OH	10.41	OK	6.66

Food Insecurity Rates by Selected Metro Areas for People Age 50+, 2001-2009

Atlanta GA	8.72	Minneapolis MN	3.85
Baltimore MD	7.48	Nashville TN	5.10
Birmingham AL	5.53	New Orleans LA	6.17
Boston MA	5.12	New York NY	7.04
Charlotte NC	13.56	Oklahoma City OK	4.35
Chicago IL	7.06	Orlando FL	13.66
Cleveland OH	10.95	Philadelphia PA	5.51
Dallas TX	10.48	Phoenix AZ	9.12
Denver CO	6.11	Portland OR	8.27
Detroit MI	7.22	Riverside CA	11.14
Houston TX	10.36	Rochester NY	5.96
Indianapolis IN	7.54	St. Louis MO	7.19
Kansas City MO	7.87	Salt Lake City UT	9.76
Las Vegas NM	6.24	San Antonio TX	10.70
Los Angeles CA	8.47	San Diego CA	6.39
Louisville KY	6.24	San Francisco CA	6.61
Memphis TN	7.76	Seattle WA	5.96
Miami FL	7.12	Tampa FL	6.49
Milwaukee WI	6.77	Washington DC	5.32

Rural/Urban Estimates

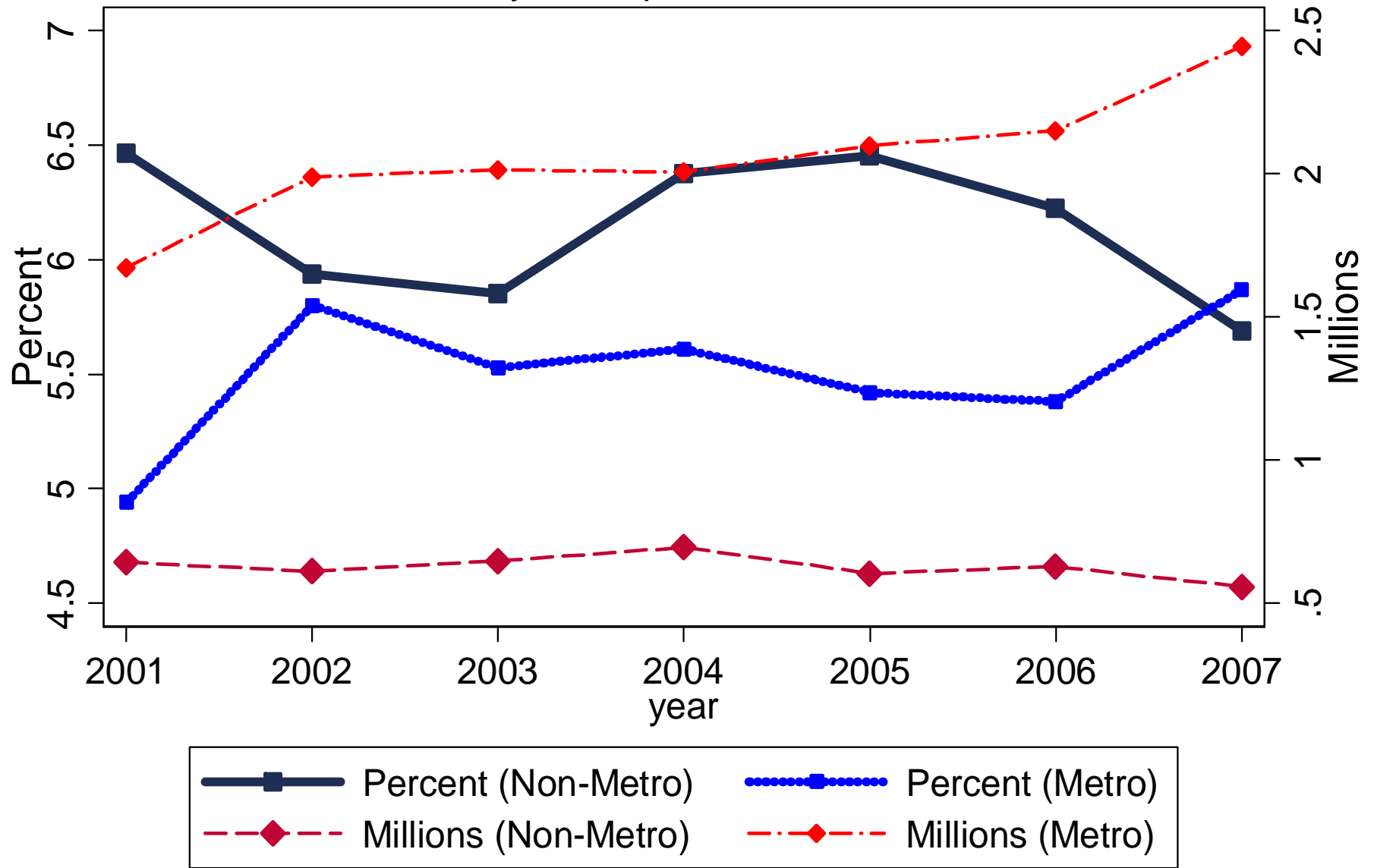
Potential Differences between Rural and Urban Areas

- Higher in rural areas?
 - For full population, poverty rates are higher in rural areas.
 - Limited access to food shopping opportunities may be especially a problem in rural areas, especially in remote rural areas.
- Higher in urban areas?
 - Costs of housing and other non-food items are higher in urban areas.

Definition of Rural

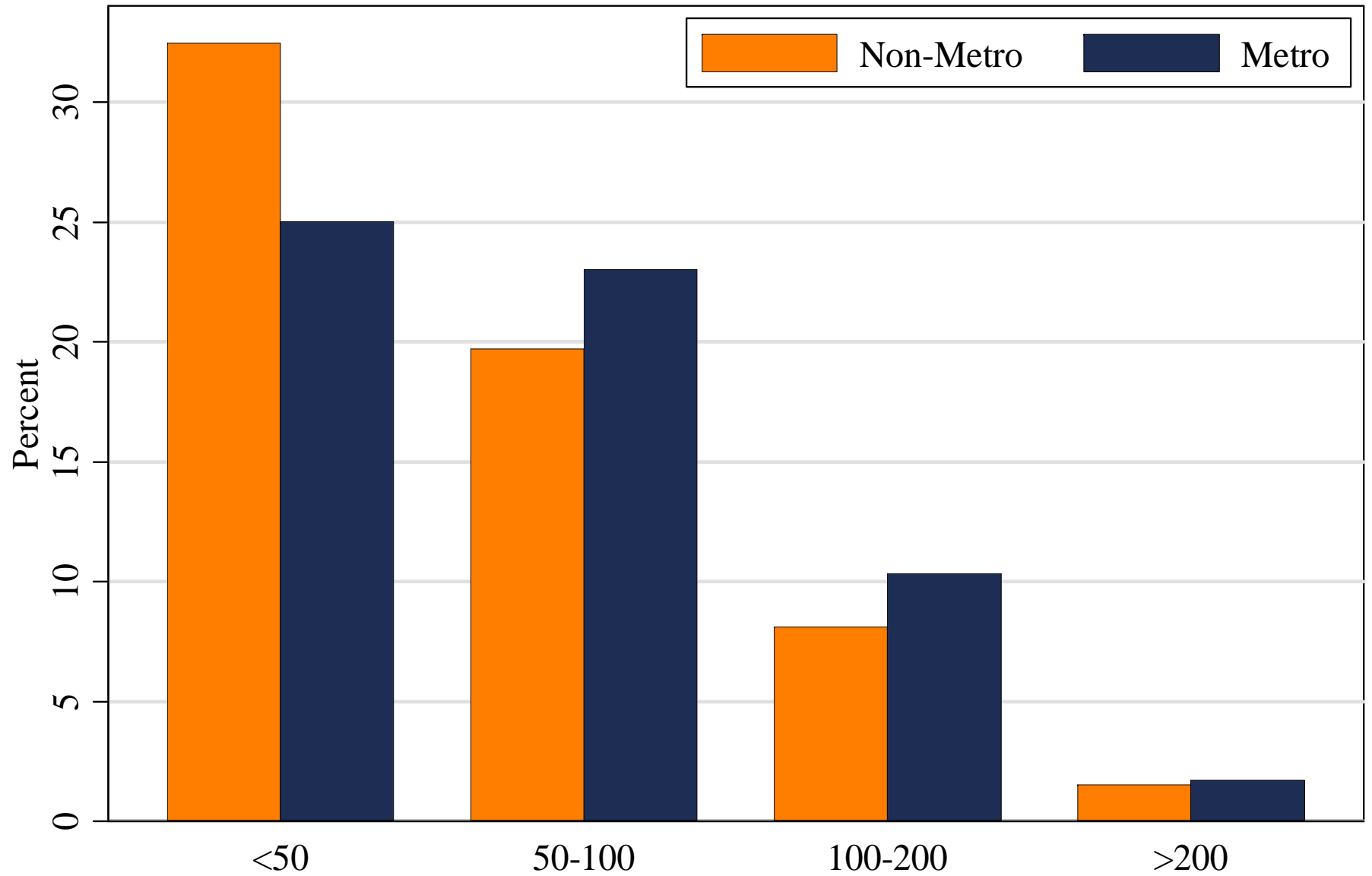
- Many ways to describe rurality of a county in the United States
 - Two of the most common are
 - Rural-Urban continuum codes (Beale Codes)
 - Metro versus Non-Metro
 - In the data from this project, only metro/non-metro is available
- Metro is defined as a county with
 - at least one city with a population of 50,000 or more
 - an urbanized area
 - economic ties to a metro area

Figure 3: Trends in Food Insecurity among Senior Americans
By Metropolitan Status

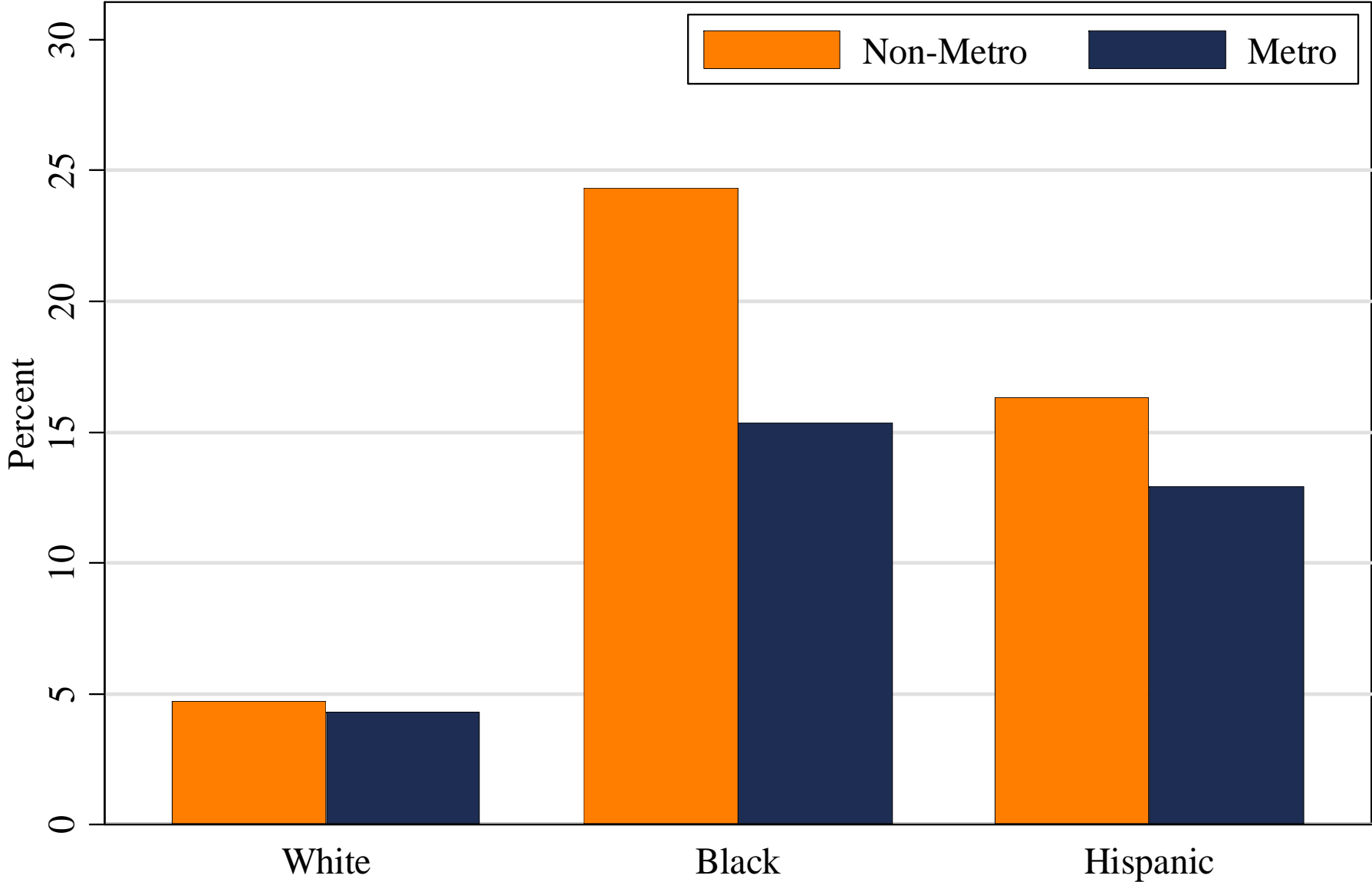


Food Insecurity Rates

By Income as Percent of Poverty Line

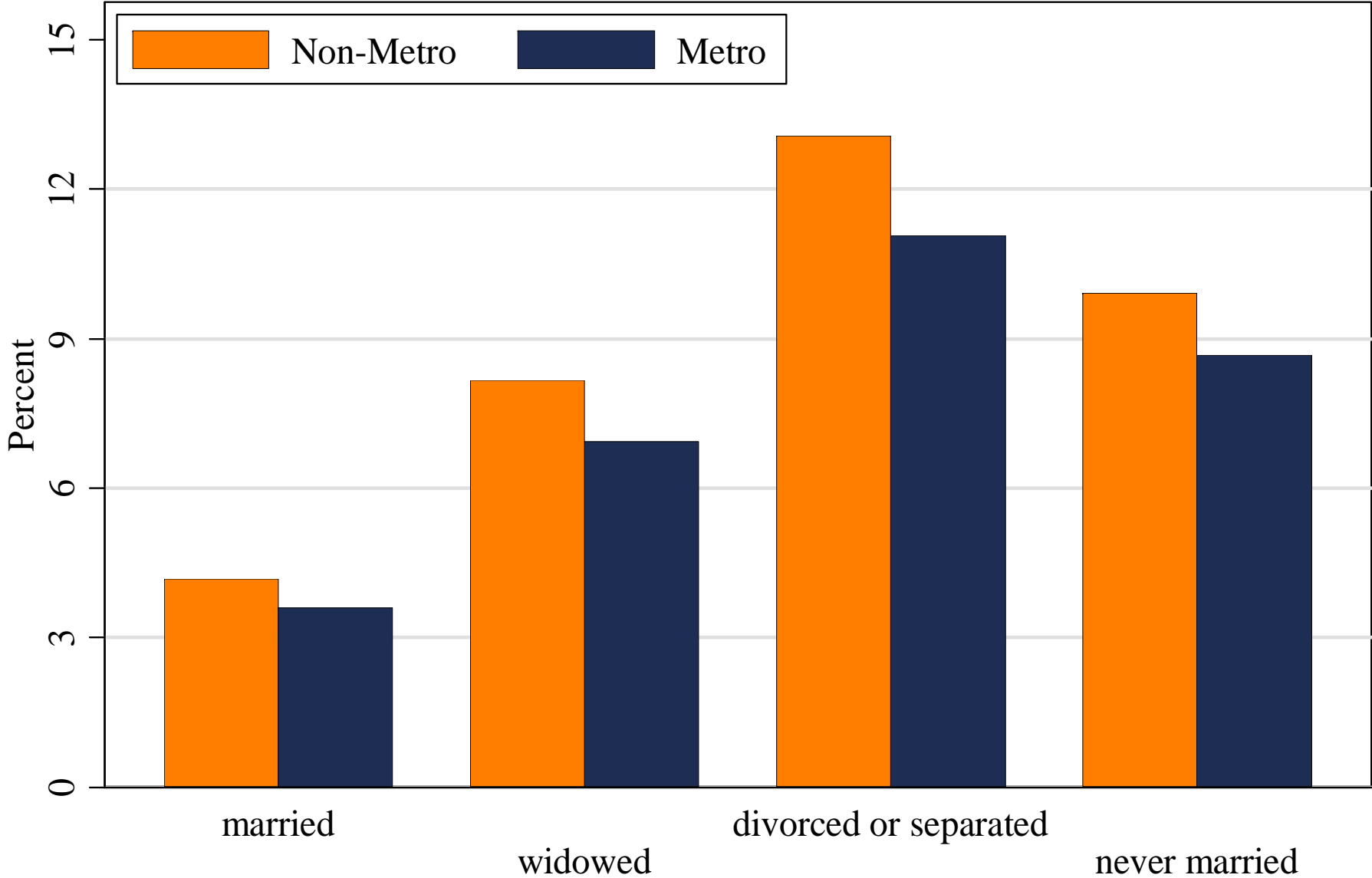


Food Insecurity Rates By Race/Ethnicity Categories



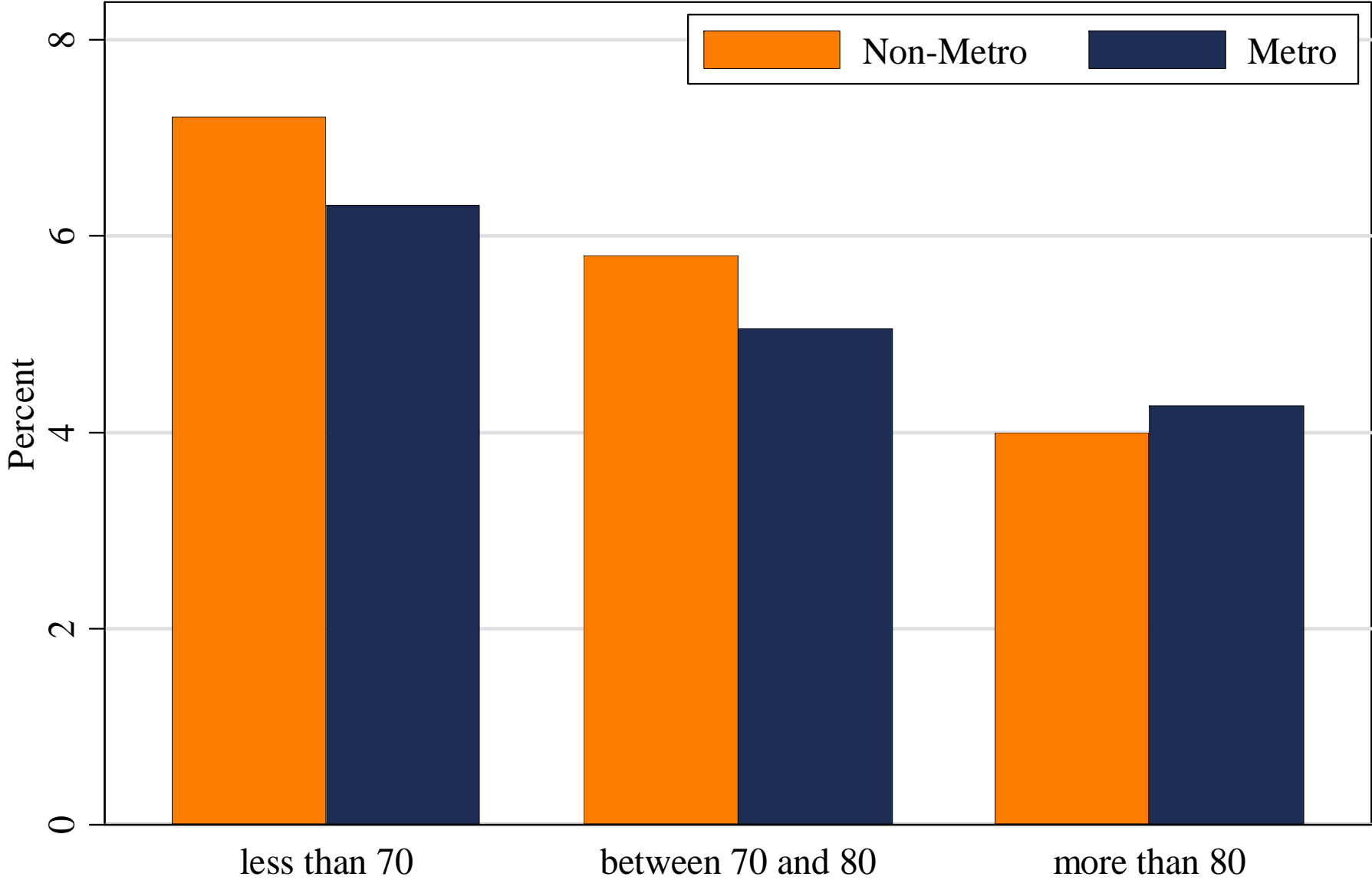
Food Insecurity Rates

By Marital Status



Food Insecurity Rates

By Age Categories

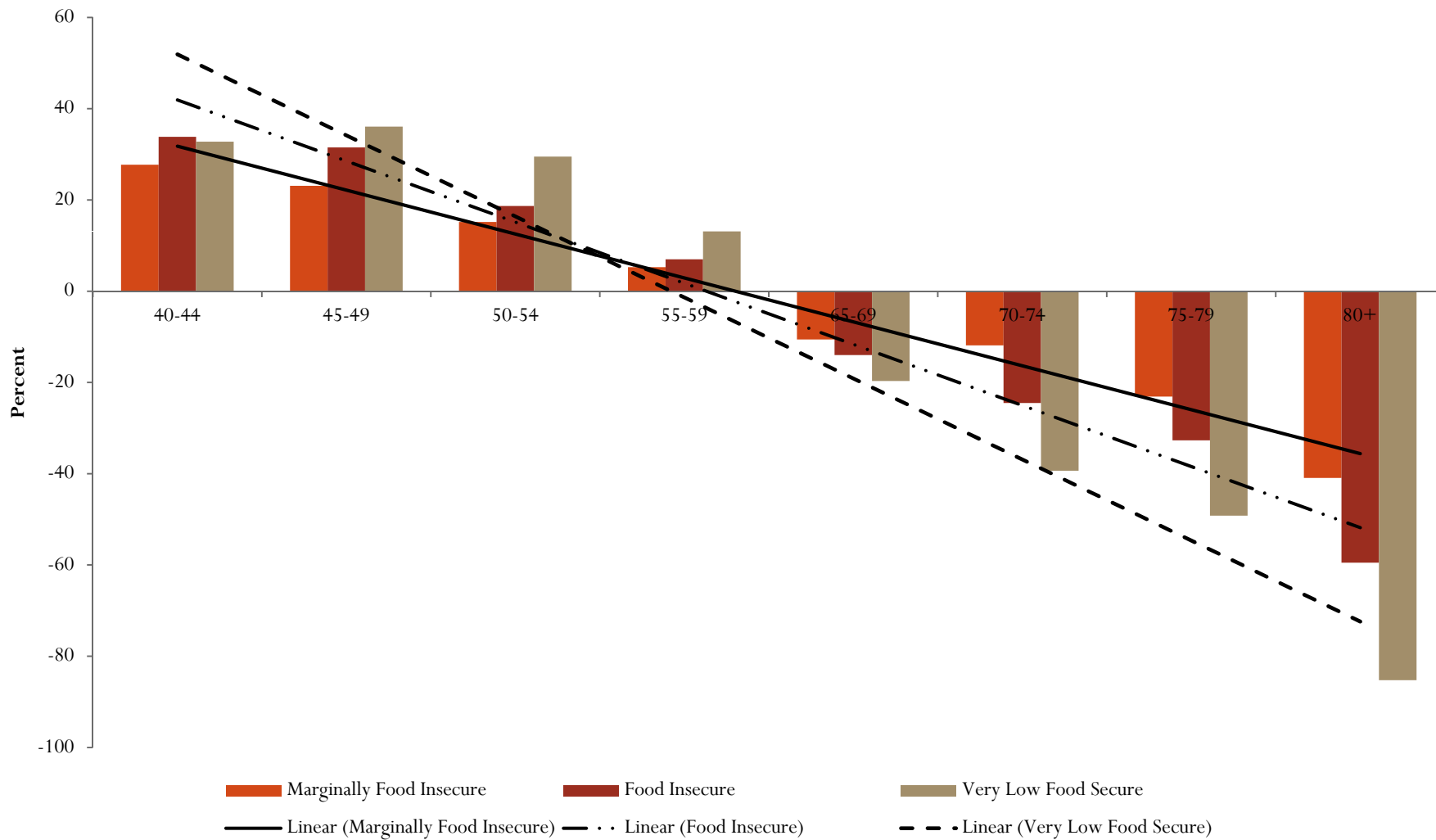


Determinants of Older Adult Hunger Risk

Multivariate Regression Models

- Controlling for other factors we find that food insecurity is more likely among older adults
 - Living at or below the poverty line
 - Without a high school degree
 - Who are African-American or Hispanic
 - Who are divorced or separated
 - Who are younger
 - A 40-44 year old has a risk of marginal food insecurity that is 28 percent higher than a 60-64 year old
 - A senior over age 80 has a risk of marginal food insecurity that is 41 percent lower than for a 60-64 year old

Figure 5. The Effect of Age on the Probability of Food Insecurity Relative to Adults Age 60-64 (as a fraction of sample mean)



Presence of a grandchild is destabilizing even in “secure” households

	Profile is a senior who is white, retired, married, living in metro area, > ages 80+, with a college degree		Profile is a senior who is African American, retired, divorced/separated, living in metro area, ages 60-64, and a high school dropout	
Grandchild Present:	No	Yes	No	Yes
Income				
< 50% Poverty	5.8	36.9	53.8	69.6
50-100% Poverty	5.2	25.8	51.6	57.9
100-200% Poverty	2.8	21.0	40.5	51.7
> 200% Poverty	0.6	5.7	19.9	23.2

Health Consequences of Food Insecurity

National Health and Nutrition Examination Survey (NHANES)

- Nationally representative
- Medical information collected by trained personnel
- Full set of questions from CFSM
- Examined those over age 40
- 1999-2008

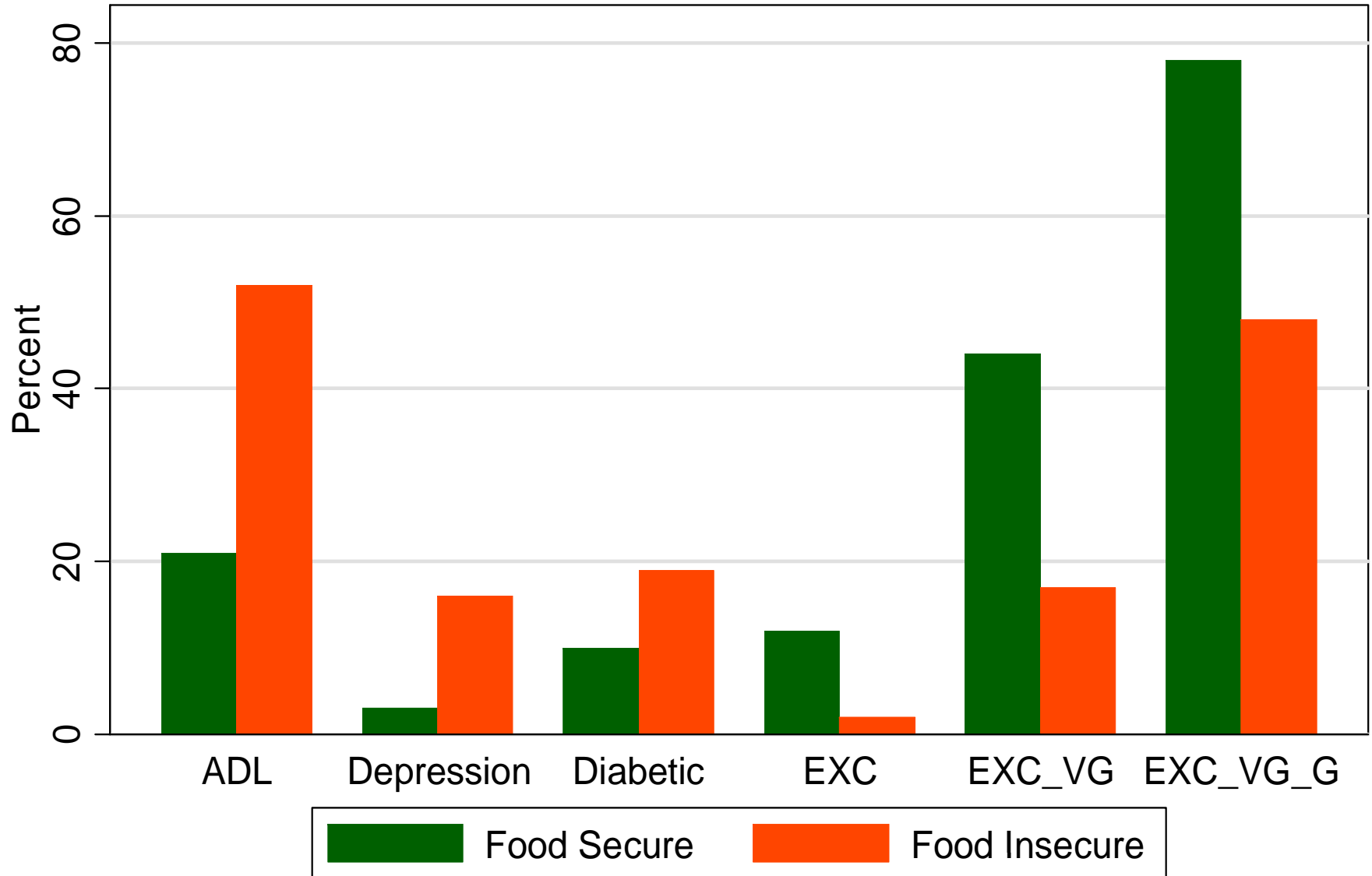
Nutrient Intakes

- Statistically significant differences in nutrient intakes between food secure and food insecure persons between 50 and 59
 - Vitamin A
 - Thiamin
 - Vitamin B6
 - Calcium
 - Phosphorous
 - Magnesium
 - Iron
- Differences are not large in magnitude
- When restrict to those below 200% of the poverty line
 - No statistically significant differences

Nutrient Intakes

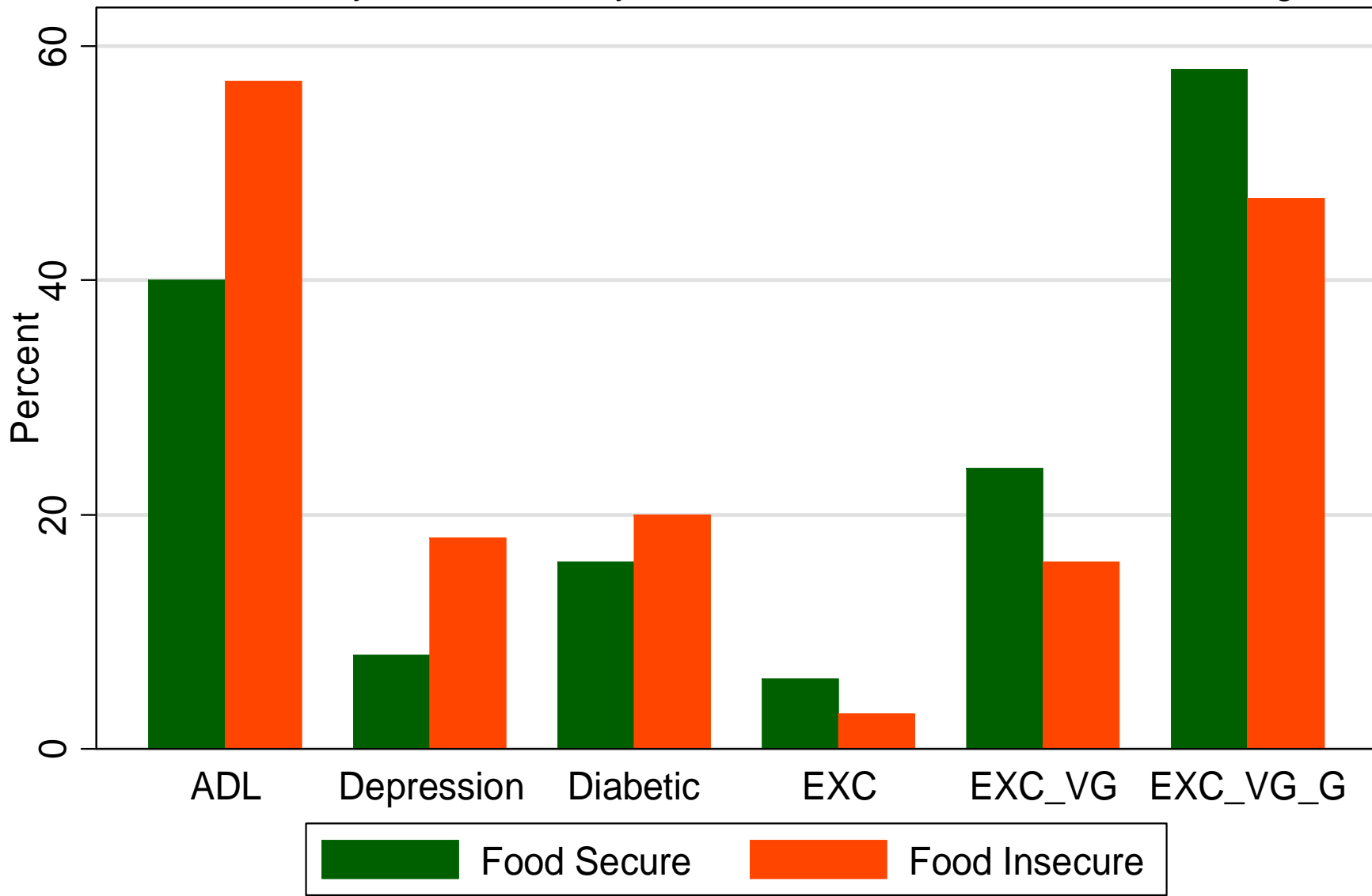
- Contrast with
 - Food insecure persons have substantially lower food intakes than food secure persons in the age 60 and above group
 - For all nutrients
 - No statistically significant difference for any nutrient by food insecurity status in the 40-49 age group

Health Outcomes by Food Insecurity Status: Ages 50-59



ADL denotes at least one ADL limitation, EXC denotes in excellent health, EXC_VG denotes in very good or better health, EXC_VG_G denotes in good or better health

Health Outcomes by Food Insecurity Status, Incomes Under 200% of PL: Ages 50-59



ADL denotes at least one ADL limitation, EXC denotes in excellent health, EXC_VG denotes in very good or better health, EXC_VG_G denotes in good or better health

Multivariate regression models

- Controlling for other factors food insecure persons:
 - Between ages 50-59 do not have lower nutrient intakes
 - In contrast, effects are statistically significant and negative for seniors 60+
 - Ages 50+ are less likely to be in excellent or very good health
 - Roughly equivalent to about \$12,000 less income
 - Ages 50+ are more likely to be depressed
 - Roughly equivalent to being divorced or never married
 - Ages 50+ are more likely to have ADL limitations
 - Roughly equivalent to being 13 years older

Concluding Remarks

- Food insecurity rates decline with age
 - Need to take into consideration when constructing policies
 - Importance of SNAP for this age range
- Food insecurity among those over age 50 is not evenly distributed across country
 - May wish to consider geographic specific efforts
- Food insecure persons over age 50 face serious health consequences
 - Most pronounced among 60+
 - When calculating benefits to reducing food insecurity, take into consideration the savings in health care costs