

# Economic Impact of Social Security in the United States

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Technical Report  
Fall 2011

*This study was made in partnership with the Center for Rural Strategies and funded with a grant from the National Academy of Social Insurance.*

## Introduction

This exploratory study focuses on the role Social Security particularly Old Age Survivor Disability Insurance (OASDI) benefits play in the national economy. These benefits play an important role in providing a stable source of income for communities in which the recipients live and spend their benefit checks.

The OASDI program provides monthly benefits to qualified retired and disabled workers and their dependents and to survivors of insured workers. Eligibility and benefit amounts are determined by the worker's contributions to Social Security. According to the Social Security Trustees Report, 4.8 percent of the nation's gross domestic product during 2010 was made up of these cash benefits.

According to data from the Social Security Administration, a little over 51 million people received OASDI payments during 2009. This amounts to about 16.7 percent of the total population in that same year. Similarly and according to the Bureau of Economic Analysis, the total OASDI disbursements during 2009 were around \$675 billion dollars<sup>1</sup>. This figure accounted for 5.5 percent of total personal income<sup>2</sup> and resulted in an average annual per capita (residents) payment of \$2,199 dollars.

Similarly, results of an economic impact analysis of OASDI payments at 2009 levels (discussed more in depth below) indicated an output multiplier of about 1.8 in the U.S. economy. As such, every dollar paid in OASDI generated an additional 80 cents in the economy. To put it another way, the \$675 billion paid in OASDI benefits during 2009 translated into an economic output of slightly over \$1.2 trillion dollars in the U.S. economy.

Based on these figures, the following questions come to mind: which states and counties are more dependent on OASDI payments? What is the economic impact of OASDI payments? Further, what would be the economic impact of potential reductions in OASDI payments on the U.S. economy?

In order to address the previous questions, we: (1) calculated a social security dependency index (SSDI) at the state and county level for two points in time (2000 and 2009) to better understand trends; and (2) conducted a nationwide economic impact analysis as well as an economic impact analysis of the most dependent county based on the 2009 SSDI score. It is to these two items that we now turn.

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<sup>1</sup> 2010 dollars; adjusted for inflation

<sup>2</sup> According to the Bureau of Economic Analysis, personal income includes income from all persons and all sources. In addition to wages and salaries, it includes employer-provided health insurance, dividends and interest income, social security benefits, and other types of income.

## Social Security Dependency Index (SSDI)

To better understand how “dependent” a state has become over time regarding OASDI, we calculated a social security dependency index (SSDI) at two points in time: 2000 and 2009. The SSDI was calculated using three variables: percent OASDI recipients of total population; percent OASDI payments of total personal income; and average per capita OASDI payments. Z-scores were then calculated and added up to obtain the final SSDI score and ranking.

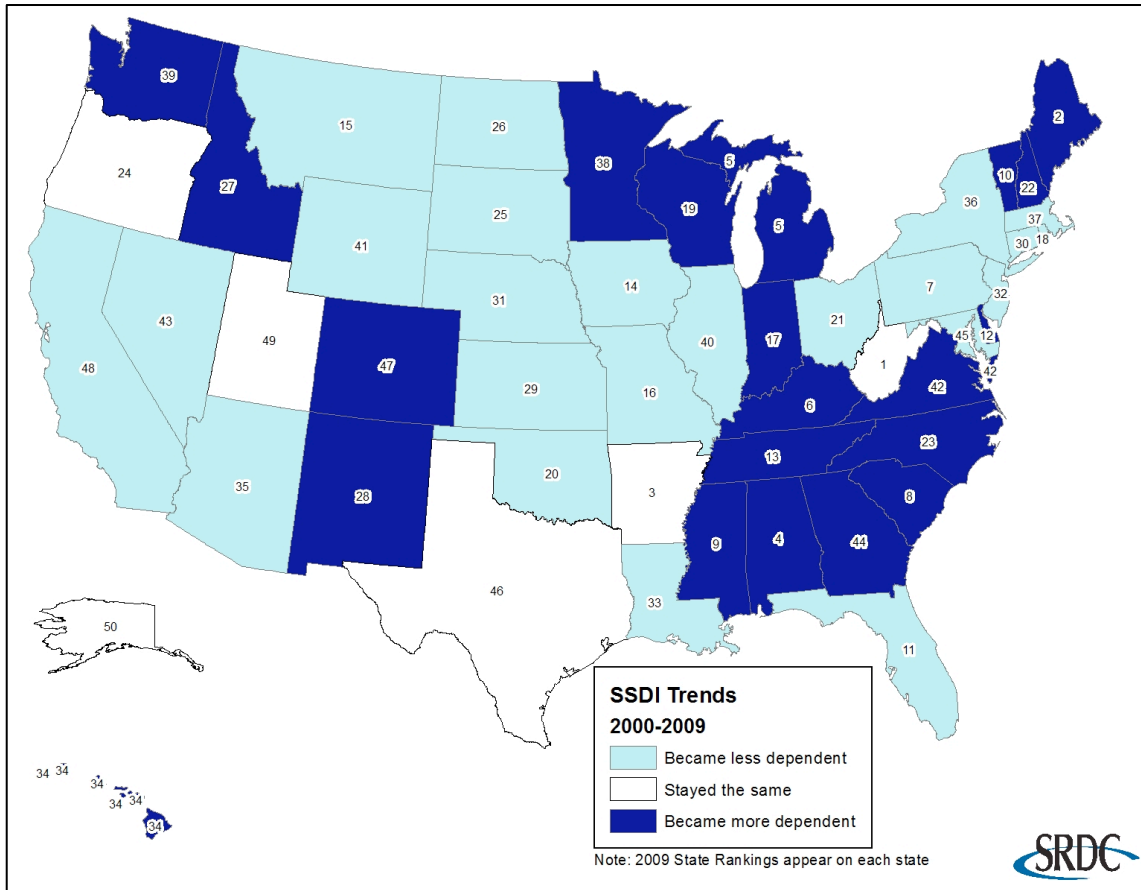
Table 1 shows the state trends. An upward movement indicates an increase in the “dependency” while a downward movement indicates a decrease. Results are ranked from first (most dependent) to place 52<sup>nd</sup> (least dependent) in descending order based on the 2009 score. The list includes the U.S. average and the score for the District of Columbia (D.C.).

Table 1. SSDI State Rankings

Rank	Name	Trend	No.	Rank	Name	Trend	No.
1	West Virginia	=	--	27	Idaho	↑	+11
2	Maine	↑	+ 3	28	New Mexico	↑	+9
3	Arkansas	=	--	29	Kansas	↓	-4
4	Alabama	↑	+ 3	30	Connecticut	↓	-3
5	Michigan	↑	+ 13	31	Nebraska	↓	-5
6	Kentucky	↑	+ 3	32	New Jersey	↓	-3
7	Pennsylvania	↓	- 3	33	United States	↑	+2
8	South Carolina	↑	+ 9	34	Louisiana	↓	-4
9	Mississippi	↑	+ 1	35	Hawaii	↑	+4
10	Vermont	↑	+ 13	36	Arizona	↓	-4
11	Florida	↓	- 9	37	New York	↓	-3
12	Delaware	↑	+ 7	38	Massachusetts	↓	-7
13	Tennessee	↑	+ 3	39	Minnesota	↑	+2
14	Iowa	↓	- 6	40	Washington	↑	+2
15	Montana	↓	- 4	41	Illinois	↓	-1
16	Missouri	↓	- 4	42	Wyoming	↓	-6
17	Indiana	↑	+ 4	43	Virginia	↑	+1
18	Rhode Island	↓	- 10	44	Nevada	↓	-1
19	Wisconsin	↑	+ 3	45	Georgia	↑	+1
20	Oklahoma	↓	- 6	46	Maryland	↓	-1
21	Ohio	↓	- 1	47	Texas	=	--
22	New Hampshire	↑	+11	48	Colorado	↑	+1
23	North Carolina	↑	+5	49	California	↓	-1
24	Oregon	=	--	50	Utah	=	--
25	South Dakota	↓	-10	51	D.C.	=	--
26	North Dakota	↓	-13	52	Alaska	=	--

As shown in Table 1, West Virginia had the highest SSDI score in 2009 (most “dependent”) and Alaska the lowest (least “dependent”). Maine and Vermont jumped up 13 places between 2000 and 2009 compared to North Dakota whose ranking slipped by 13 spots during the same period. The dependency of West Virginia, Arkansas, Oregon, Texas, Utah, D.C., and Alaska remained unchanged. Figure 1 shows a map color-coding the states based on the SSDI trends.

Figure 1. SSDI State Trends, 2000-2009



Note: Map does not include U.S. average and District of Columbia

As shown in Figure 1, pockets of states in the southeast, northeast, and north central regions became more dependent on OASDI over the 2000 and 2009 time period. On the other hand, states on the Midwest reduced their dependency on OASDI during these two points in time. Further studies could focus on explaining these regional differences regarding the dependency on OASDI over time.

To further understand the “dependence” on OASDI, the SSDI was also calculated at the county level. Table 2 shows the top 10 more “dependent” counties<sup>3</sup> in 2009. As shown, Sumter County in Florida ranked the highest in the SSDI. Further, eight out

<sup>3</sup> For a list including all counties please contact either of the authors.

of the top ten are considered rural or noncore based on the 2003 Office of Management and Budget core-based statistical area (CBSA) typology.

Table 2. Top Ten “More Dependent” Counties based on the SSDI, 2009

Rank	State	Name	FIPS	OMB
1	Florida	Sumter	12119	Small City
2	Michigan	Alcona	26001	Rural
3	Idaho	Lewis	16061	Rural
4	Michigan	Roscommon	26143	Rural
5	Missouri	Hickory	29085	Rural
6	Michigan	Montmorency	26119	Rural
7	Texas	Polk	48373	Rural
8	Michigan	Iosco	26069	Rural
9	Florida	Citrus	12017	Small City
10	Arkansas	Sharp	05135	Rural

### Economic Impact of OASDI

In this section, we conducted an economic impact analysis of OASDI at the national level and Sumter County in Florida (which had the highest SSDI score in 2009) using an input-output modeling system known as IMPLAN. Each county’s adjusted<sup>4</sup> OASDI benefits were included in the IMPLAN model as direct payments to households. The household income range is based on the median household income<sup>5</sup> in the nation and/or county analyzed. The household spending profile in IMPLAN that was closest to the median county income was used in the model.

We examined total output, employment, and tax revenues utilizing 2009 OASDI spending and incorporated three different scenarios into the model looking at a 5%, 10%, and 15% reduction and its impacts on output, employment, and tax revenues.

At the national level, 2009 OASDI payments (approximately \$675 billion) had a multiplier of 1.8 in the national economy or for every dollar spent on OASDI payments and additional 80 cents were generated. In other words, 2009 OASDI payments supported a total output in the nation of \$1.2 trillion dollars. Regarding employment, this same amount supported approximately 8.4 million jobs (includes

<sup>4</sup> OASDI benefits for the U.S. and county analyzed were adjusted by an average propensity to consume (APC) to obtain net OASDI benefits using the Bureau of Economic Analysis’ 2009 National Income and Product Accounts savings rate of 5.46% (i.e. an APC of 94.54%).

<sup>5</sup> Changes in Social Security benefits were treated as changes in household income since these benefits comprise a significant portion of the total income of recipients in the target counties and states. The household income is based on BEA’s median household income among heads of household in each county, state, and U.S. in 2009. The IMPLAN sector for each income range was used to calculate the economic impacts of Social Security payments on employment, income, output, and taxes in the study.

full and part-time) in the nation. Regarding tax revenues, a total of \$157.2 billion was generated of which \$71.9 billion were state/local taxes and \$85.2 federal taxes.

On the other hand, 2009 OASDI payments (about \$622 million) had a multiplier of 1.5 in Sumter County’s economy, or for every dollar spent on OASDI payments an additional 50 cents were generated. What this means is that 2009 OASDI payments supported a total output in the local economy of \$938 million dollars. Regarding employment, OASDI payments supported approximately 3,077 jobs (includes full and part-time) and \$41 million in taxes of which \$20.3 million were state/local taxes and \$20.8 million federal taxes. Table 3 shows a summary for the nation and Sumter County, FL.

Table 3. OASDI Economic Impact Summary

	U.S.	Sumter County, Florida
2009 OASDI Payments	\$675 billion	\$622 million
Output	\$1.2 trillion	\$938 million
Multiplier	1.8	1.5
Employment	8.4 million	3,077
Tax Revenues	\$157.2 billion	\$41.1 million
Local/State	\$72 billion	\$20.3 million
Federal	\$85.2 billion	\$20.8 million

Reduction Scenarios

What would be the economic impact of a reduction on OASDI payments? To address this question, we modeled three different scenarios: a 5%, 10%, and 15% reduction on 2009 OASDI spending. The results for the nation are shown in Table 4 while Table 5 showcases the results for Sumter County, Florida.

Table 4. National OASDI Reduction Results

	Current	5%	10%	15%
Output	\$1.2 trillion	-\$63 billion	-\$126 billion	-\$190 billion
Employment	8.4 million	-419,000	-840,000	-1.2 million
Tax Revenues	\$157 billion	-7.8 billion	-\$15 billion	-\$23 billion

If 2009 OASDI payments were to be reduced 5%, the nation’s economic output would decrease by \$63 billion, approximately 419,000 jobs would be lost, and tax revenues would decrease by \$7.8 billion. If a 15% reduction on 2009 OASDI payments were implemented, the nation’s economic output would shrink by almost \$200 billion dollars and approximately 1.2 million jobs. The loss in tax revenues would be about \$23 billion.

Table 5. Sumter County, FL OASDI Reduction Results

	Current	5%	10%	15%
Output	\$938 million	-\$15 million	-\$31 million	-\$47 million
Employment	3,077	-154	-308	-462
Tax Revenues	\$41 million	-\$2 million	-\$4 million	-\$6 million

The impact of OASDI reductions would also affect Sumter County, FL. If the 2009 OASDI payments were reduced 15%, the county’s economic output would shrink by almost \$50 million dollars, approximately 462 jobs would be lost and its tax revenues would decline by \$6 million.

**Conclusions**

The fact that OASDI spending supported approximately 8.4 million jobs in the nation during 2009 highlights the importance of this program. Further, the SSDI shows interesting results in that states and/or counties whose populations are not necessarily becoming proportionally older ranked high in the dependency index.

Our hope is that this technical report spurs discussion regarding the impact of OASDI and its importance not only to the local or national economy, but also to families that may rely heavily on this payment. A balanced and objective discussion of this topic is encouraged so that federal, state, and local leaders, along with citizens, get a better understanding of the true impacts of OASDI payments.

Finally, it is important to acknowledge the limitations of this study. It is exploratory and descriptive in nature. Thus, it does not seek to explain differences behind OASDI disbursements or rankings. Nonetheless, future studies can focus on explaining some of the descriptive data mentioned throughout this study and/or explaining the differences in rankings as well as geographic distribution.

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