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ECONOMICS COMMENTATOR

South Dakota State University

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A Look at Federal Spending in South Dakota

by

Evert Van der Sluis, & Sam Cordes¹

The U. S. federal government has historically played a major role in the life of the Great Plains region in general, and that of South Dakota in particular. Events have included military campaigns and expenditures; the Homestead Act; the creation of Indian reservations; the Missouri River Water Development program; the establishment of national parks, historical monuments and national grasslands; and the development of the Interstate Highway System. Today, federal payments remain an important contributor to the economies of South Dakota and surrounding areas.

It is important to get a full understanding of the role of the federal government in local and regional economies, because the impacts of proposed federal policy changes on South Dakota differ from those on other parts of the country. In addition, even in the absence of policy changes, federal funds remain a major source of income for rural communities in the region. Further, the contribution of specific federal programs varies by region within the state because of demographic and economic differences between and among communities.

In this *Commentator*, we examine federal spending within South Dakota. This research is based on a more comprehensive study that examines the impact of federal programs on the Great Plains region as a whole, and documents

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differences between metropolitan and nonmetropolitan counties in the Great Plains region.

Federal Funds in South Dakota

In analyzing federal spending in the state, we first divided counties into different categories and then examined two major types of federal expenditures: "government payments to individuals" and "farm program payments." We chose to focus on government payments to individuals and farm program payments because, first, these two types of federal expenditures appear to vary quite dramatically in their importance between metro and nonmetro counties in the region. Second, "government payments to individuals" are by far the largest single type of federal expenditure. Third, "farm program payments" are more important in the region than elsewhere. Fourth, it is within these two types of expenditure categories that major changes have occurred or are being contemplated. Specific examples include welfare reform, major changes in farm programs, a recent National Bipartisan Commission on the Future of Medicare, and a highlevel national debate on the Social Security program and prescription drug benefits for the elderly. Finally, Social Security, the largest single program included in the "government payments to individuals" category, and Medicare will almost certainly grow as today's "baby boomers" begin to retire en masse during the first decade of this century. Obviously, where they choose to live and retire will have a major impact on local economies.

Government payments to individuals are subdivided by the U. S. Department of Commerce into seven major categories. The first category is that of retirement and disability insurance programs, constituting 41. 8 percent of "government payments to individuals" at the national level in 1999, and 46. 8 percent in South Dakota. The largest single program in this category is Social Security, with 39.4 percent of total payments for the nation as a whole in 1999, and 45. 7 percent in the case of South Dakota. The second category is medical payments, which includes Medicaid and Medicare, and which constituted 41.4 percent of total payments at the

national level, and 37.3 percent in South Dakota. The third category is income maintenance programs, representing 10.8 percent of "government payments to individuals" at the national level, and 8.0 percent for South Dakota. This category includes Aid to Families with Dependent Children, Supplementary Security Income, the Food Stamp program, and Earned Income Tax Credit. Each of the remaining four categories—unemployment insurance programs, veterans benefits, federal education and training assistance, and "other" payments to individuals—represented less than 4 percent of government payments to individuals in the United States and South Dakota.

To facilitate our sub-state analysis, we grouped South Dakota's 66 counties into five categories. The first group is that of metropolitan counties, of which there are three in South Dakota. The remaining 63 nonmetropolitan counties were then placed into one of the following four sub-categories: nine counties containing a large trade center (i.e., with a city of at least 7.500); eight counties containing a small trade center (in which the largest city has 2,500-7,499 people); 16 counties classified as "rural" (in which there is no town larger than 2.499, and with a county population density of at least six persons per square mile); and 30 "frontier counties." in which there is no town larger than 2.499 and with a population density of less than six persons per square mile. Figure 1 shows the location of metropolitan counties in South Dakota, and the location of the four different types of nonmetropolitan counties.

Summary statistics for each of the county types in South Dakota are presented in Table 1. The table shows that population growth was greater in metro counties than in nonmetro counties between 1990 and 2000. The most sluggish population growth was in the frontier counties. Further, the poverty rate was relatively high for each of the nonmetro county categories. The proportion of individuals with incomes below poverty was particularly high in South Dakota's frontier and rural counties—22.9 percent and 16.7 percent, respectively. Further, the incidence of poverty increases with the degree of rurality. Similarly, per capita income decreases as the degree of rurality increases. The proportion of the population aged 65 and over also increases with the degree of rurality. Not surprisingly, Table 1 also shows that the farm share of total employment increases with rurality. The share of farm income as a proportion of total personal income tends to follow the same pattern, except in the case of frontier counties. Finally, it is noteworthy that the farm employment share of total employment exceeds the farm income

share of total personal income in each of the county groups.

Table 2 provides data on "government payments to individuals" and "farm program payments." In Table 3 the data are disaggregated by type of county, and the federal funds for these two programs are included in "government payments to individuals."

South Dakota is often referred to as a "farm state." However, Tables 2 and 3 show that "farm program payments" are dwarfed by federal "payments to individuals." Specifically, per capita "government payments to individuals" exceeded "farm program payments" by a factor of three for South Dakota. While federal per capita "payments to individuals" in South Dakota is similar to that of other states in the region, per capita "farm program payments" are relatively high, so that per capita payments are also relatively high in the state. Because South Dakota also has a relatively low per capita income, both types of payments provide an important contributor to total personal income (Table 3).

The data in Tables 2 and 3 further indicate that the sum of "government payments to individuals" and "farm program payments" are considerably more important for nonmetropolitan counties than for the states' metropolitan counties in South Dakota. Specifically, the state's nonmetropolitan counties received \$4.931 per capita, or 21.2 cents out of every dollar of personal income from the combination of "government payments to individuals" and "farm program payments" in 1999. In comparison, metro counties received \$2,903 per capita. or 10.2 cents out of every dollar of personal income from these two sources. The biggest contributor to these differences of more than \$2,000 per capita was from the nonmetro-metro differential in "farm program payments." However, significantly higher per capita payments for retirement and disability programs and medical programs were also important contributors.

There are also other distinct differences in federal payments received by metro and nonmetro counties. Within the nonmetropolitan counties, total per capita federal payments increased as the degree of rurality increased (Table 2). This same trend held in the case of farm program payments and with retirement and disability program payments. Given the lower incomes as rurality increased, an even more pronounced pattern occurs when payments are examined in relation to per capita income (Table 3). Virtually every type of programmatic payment increased in relation to per capita income as the

degree of rurality increased. The economies of frontier counties are about twice as dependent upon federal payments as are nonmetropolitan counties containing large trade centers and more than three times as dependent upon federal payments as are the metropolitan counties. Approximately one-third of the per capita income received in frontier counties in the state is from the combination of "government payment to individuals" and "farm program payments."

Concluding Comments

Although South Dakota is often referred to as a "farm state," federal per capita "payments to individuals" dwarf per capita "farm program payments." South Dakota is heavily dependent upon "government payments to individuals" and "farm program payments," but there are important differences between metro and nonmetro areas of the state. The greater dependency of nonmetro

counties is due largely to payments associated with farm programs, retirement and disability, and medical programs. As the degree of "rurality" increases, so does the dependency on these two categories of federal payments-both on a per-capita basis and as a proportion of personal income. For example, "government payments to individuals" and "farm program payments" accounted for about one-third of the personal income in the "frontier" counties of the state. This dependency on these types of federal payments in frontier counties is three times greater than what is found in the metropolitan areas of the state. Clearly, federal spending and taxationregardless of how measured-is of tremendous consequence to the people, communities, and economies of the region and the state.

For Further Reading

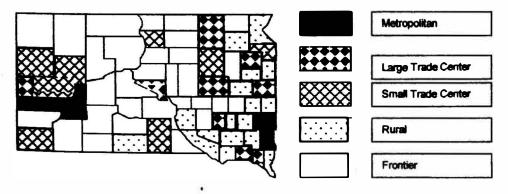
Cordes, Sam M. and Evert Van der Sluis. "The Contemporary Role of the Federal Government in The Great Plains Economy: a Comprehensive Examination of Federal Spending and Related Fiscal Activities."

Great Plains Research 11, 2 (Fall 2001): 301-326.0.

Table 1. Selected Statistics by South Dakota County Type

	State Total	Metro	Non-metro	Large Trade Center	Small Trade Center	Rural	Frontier
Share of Total Population, 2000 (% of state pop)	100.0	34.6	65.4	26.3	10.6	14.8	13.7
Per Cap Personal Income, 1999 (\$)	25,041	28,509	23,218	25,343	23,877	22,053	20,008
Pop. Density, 2000 (people / square mile)	9.9	62.7	6.9	19.3	8.3	9.4	2.0
Pop. Change, 1990-2000 (%)	8.5	18.3	3.9	6.2	3.5	3.1	0.7
Poverty, 1997 (% of total population)	13.8	10.5	15.4	11.4	: 13.6	16.7	22.9
65+ Population, 1999 (% of total population)	14.4	11.3	16.0	14.5	16.2	18.0	16.4
Farm Employment, 1999 (% of total full- & part-time employment)	7.6	1.5	11.6	4.6	12.1	16.6	23.5
Total farm labor & proprietors' income, 1999 (% of TPI)	5.5	0.9	8.4	3.5	7.8	13.1	15.0

Figure 1. Location of County Types



State Total	Metro	Nonmetropolitan						
		Total	Large Trade	Small Trade	Rural	Frontier		
			lars per d	apita —				
3214	2733	3467	3143	3717	3562	3787		
1506	1338	1594	1563	1735	1629	1510		
1197	999	1301	1182	1433	1347	1378		
256	166	303	171	233	343	557		
21	16	23	17	23	27	31		
130	142	123	96	228	98	125		
41	30	47	86	30	19	17		
64	42:	75	26	35	99	169		
1018	170	1464	706	1217	2019	2466		
	3214 1506 1197 256 21 130 41	Total Metro 3214 2733 1506 1338 1197 999 256 166 21 16 130 142 41 30 64 42	Total Metro Total Total Total Total 3214 2733 3467 1506 1338 1594 1197 999 1301 256 166 303 21 16 23 130 142 123 41 30 47 64 42 75	Total Metro Non Large Total Total Total Trade	Total Metro Nonmetropol Total Large Trade Small Trade 3214 2733 3467 3143 3717 1506 1338 1594 1563 1735 1197 999 1301 1182 1433 256 166 303 171 233 21 16 23 17 23 130 142 123 96 228 41 30 47 86 30 64 42 75 26 35	Total Metro Nonmetropolitan Total Total Trade Tr		

South Dakota	State Total	Metro	Nonmetropolitan						
			Total	Large Trade	Small Trade	Rural	Frombe		
	percent of per capita personal income								
Gov't Payments to	12.8	9.6	14.9	12.4	15.6	16.2	18.9		
Ret/Disability Ins Benefit	6.0	4.7	6.9	6.2	7.3	7.4	7.:		
Medical Payments	4.8	3.5	5.6	4.7	6.0	6. l	6.9		
Income Maintenance	1.0	0.6	1.3	0.7	1.0	1.6	2.8		
Umanployment Insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.2		
Voterns Benefits	0.5	0.5	0.5	0.4	1.0	0.4	0.6		
Education/Training Ass.	0.2	0.1	0.2	0.3	0.1	0.1	0.1		
Other Payments to Individuals	0.3	0.1	0.3	0.1	0.1	0.5	0.8		
Farm Program Payments	4.1	0.6	6.3	2.8	5.1	9.2	12.		
Total :	16.9	10.2	21.2	15.2	20.7	25.3	31.3		

Government Payments to Individuals and Farm Program Payments as a share of Per Capita Personal Income by

County Type in South Daketa, 1999

Table 3.

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