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Per Capita Income Grows Faster in Delta Regional Authority Counties

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Commonwealth Agri-Energy

Highlights:

- The Delta Regional Authority (DRA) invested $75 million in the Mississippi Delta region from 2002 to 2009.
- Growth in personal income per capita averaged about $600 higher in DRA-funded nonmetropolitan counties in 2002-07 than in similar counties outside the DRA region.

- Each $1 of additional DRA funding was associated with an additional $15 in growth of personal income, mainly from increased health and social services sector earnings and increased medical transfer payments.

The Delta Regional Authority is a partnership among the Federal Government and the eight States (Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi, Louisiana, and Alabama) comprising the Mississippi Delta region, targeting 252 counties, almost all of which are economically distressed. Since the DRA was authorized in 2000, four additional regional development commissions have been authorized, and startup funds have been appropriated for two of them.

The recent popularity of regional development approaches is due in part to positive impacts found in evaluations of some earlier regional development programs. However, despite the renewed emphasis on such regional approaches, evidence of their economic impacts is limited, especially for newer programs such as the DRA.

Using publicly available data, ERS researchers compared economic outcomes of nonmetro counties that received DRA funding with those of similar non-DRA counties in the Southern United States during the initial 6 years of DRA operations.

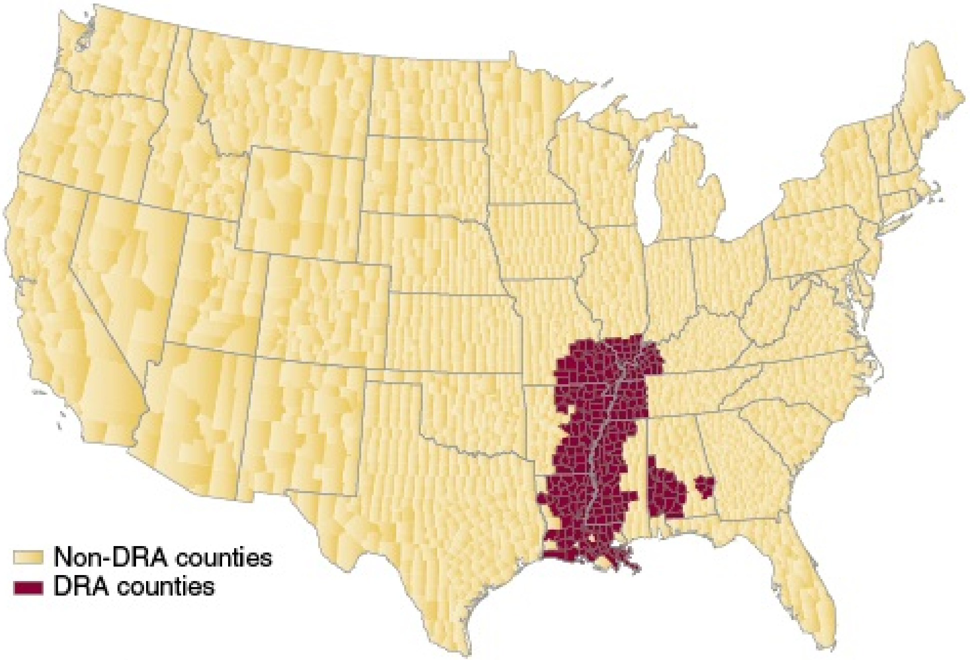
DRA Promotes Development in the Mississippi Delta Region

The DRA region had a population of 9.9 million in 2010 and is the most economically distressed region of the country. In 2009, the region's poverty rate was 55 percent higher than the national average, the high school dropout rate was almost 20 percent above the national average, and infant mortality rates exceeded the national average by 30 percent.

The DRA began funding projects in 2002. Between 2002 and 2009, the DRA invested $75 million in projects related to basic public infrastructure, such as water and sewer facilities, business development, transportation infrastructure, job training, and employment-related education. One of the DRA's priorities when selecting projects to support has been promoting health as an economic engine. Beyond funding health facilities through its Federal grant program, the DRA is promoting health improvements through its "Delta Doctors" program (a J-1 visa waiver program enabling the DRA to recruit foreign doctors for medically underserved areas) and health awareness campaigns. More than 100 physicians have been placed in the Delta region through the Delta Doctors program.

The DRA reports that these investments leveraged an additional $354 million in other public investments and $1.5 billion in private investments between 2002 and 2009. However, it is difficult to know whether these other investments would have occurred without the DRA spending. One feature of the DRA that may help it leverage other program funding is that its authorizing legislation allows DRA funds to be treated as local contributions to projects undertaken in economically distressed counties, easing the usual restrictions on the maximum Federal share of project costs.

Delta Regional Authority (DRA) targets 252 economically distressed counties in 8 States



Source: USDA, Economic Research Service using data from the Delta Regional Authority.

Regional Approaches to Rural Development Show Promise…

The DRA draws upon the experience of earlier regional development programs initiated in the 1930s and 1960s, including the Tennessee Valley Authority and the Appalachian Regional Commission (ARC). The DRA was patterned after the ARC, the multistate agency established to promote regional development in Appalachia in the 1960s. Both are Federal-State partnerships, employ multicounty local planning districts, emphasize infrastructure investments, target investments to distressed areas, and use Federal funds to leverage other public and private investments. The ARC has been the subject of several economic assessments over the years. Although not all of the findings have been positive, research suggests the ARC has had some significant economic impacts.

For example, a 1995 study by Isserman and Rephann found that ARC counties had higher growth in personal income per capita, population, total personal income, and earnings between 1969 and 1991 than similar counties outside of the ARC. Other studies used project-level survey data on ARC investments completed after 1990, as well as model-based predictions of multiplier impacts, and found that the total government cost of creating jobs on ARC projects was relatively low compared with other economic development programs and that ARC projects generated significant wage income.

Like the ARC, the U.S. Department of Commerce's Economic Development Administration (EDA) was created in the 1960s. It is a nationwide, rather than multistate, program. However, it is otherwise similar to the ARC and DRA in employing multicounty local planning districts to pursue regional development projects targeted to assist distressed areas. Several assessments of EDA's Public Works program using multiple methods have found favorable economic impacts and reasonable costs per job created.

… Although More Solid Evidence Is Needed

Studies of the economic impact of regional development efforts to date are not without critics, including a 1996 report by the U.S. General Accounting Office (GAO, renamed the Government Accountability Office in 2004), which argued that the methods used in these studies limited the ability to infer the causal impact of these programs or make comparisons across studies. However, more recent studies of the EDA have addressed some of GAO's criticisms and found positive impacts consistent with the earlier studies.

The need for solid evidence on the impacts of such programs has increased as several new regional development commissions have been established, beginning with the Denali Commission, authorized in 1998 to promote economic development in Alaska, and the DRA, authorized in 2000. The Food, Conservation, and Energy Act of 2008 authorized the creation of four additional regional development authorities covering parts of the Northern Great Plains, the Northeast, the Southeast, and the Southwest, although appropriations for these have so far been limited. Other smaller scale regional approaches to economic development, such as the recent USDA Regional Innovation Initiative, are also being pursued.

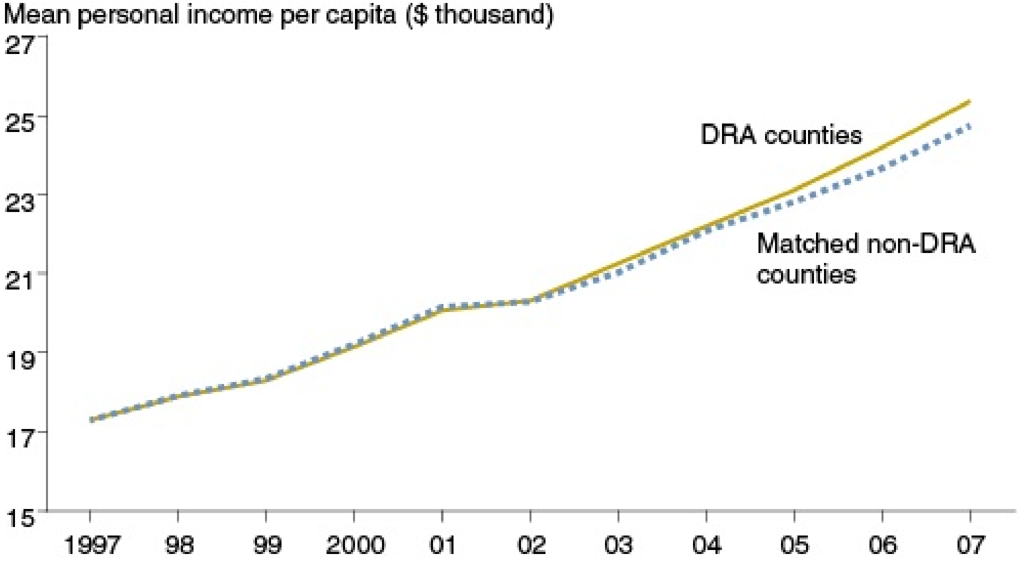
Personal Per Capita Income Grew Faster in DRA Counties

ERS researchers compared changes in per capita personal income, employment, and population in counties that had received DRA grant funds during 2002-07 with changes in counties outside the region that had similar socioeconomic and demographic characteristics in 2000. Researchers matched nonmetro DRA counties with similar non-DRA counties in the Delta region and elsewhere in the Southeastern United States. This matching technique ensured that the "control" group of non-DRA counties had similar economic and demographic characteristics to DRA recipient counties prior to implementation of the DRA. Comparisons of mean (average) changes in the outcomes of these two groups of counties after DRA began actively funding projects allow for estimates of the DRA's impacts on the counties served.

Between 2002 and 2007, mean personal income per capita grew about $600 more in the DRA grant-recipient counties than in the comparison counties, representing a difference of about 3 percent of mean income per capita in these counties in 2002. The differences in employment and population growth between these two groups of counties were not statistically significant.

The mean personal incomes per capita in the DRA and in matched non-DRA counties began to diverge only after the DRA began operations in 2002, supporting the hypothesis that the DRA was at least partly responsible for faster income growth in DRA counties.

Personal income per capita grew faster in the Delta Regional Authority (DRA) recipient counties only after 2002



Source: USDA, Economic Research Service.

Personal Income Also Grew Faster Where DRA Spending Was Greater

Based on statistical analysis, each additional $1 in program spending by the DRA was associated with about $15 more growth in personal income per capita in counties receiving DRA funds. Among the major sources of personal income--net earnings, property income, and personal transfer payments (transfer payments are payments from a Government to individuals, including payments made under Social Security, Medicare, the Supplemental Nutrition Assistance Program, and other programs)--net earnings and transfer payments grew significantly faster in counties with higher levels of DRA spending. Each $1 of additional DRA spending was associated with an additional $8 in net earnings growth and an additional $5 in transfer payments. DRA spending levels were not associated with significant changes in employment or population.

Each $1 of additional DRA spending was associated with $15 of additional personal income

Outcomes-change from 2002 to 2007:	Change per $1 of DRA funds per capita
Personal income/capita	$15.32**
Net earnings/capita	$7.88*
Health care and social services	$8.21**
Property income (dividends, interest, rent)/capita	$2.32
Transfer payments/capita	$5.12***
Medical	$2.49**
Retirement/disability	$1.67***

*, **, *** Result statistically significant at 10-percent, 5-percent, and 1-percent levels, respectively. Source: USDA, Economic Research Service.

A Large Share of the Increased Income Occurred in the Health Sector

Across industrial sectors, DRA spending was associated with increased earnings mainly in the health and social services sector. Each additional $1 of DRA spending was associated with increased earnings in the sector by nearly $8. Growth in medical transfer payments (primarily Medicare and Medicaid program payments) was the largest contributor to higher transfer payments, with each $1 of DRA spending associated with about $2.50 in additional medical transfer payments.

These findings suggest that the DRA is having an impact on personal incomes by increasing the supply and demand for health care services through investments in medical facilities, the Delta Doctors program, and health awareness campaigns. By increasing the use of health care services, these investments can result in increased medical transfer payments and increased health sector earnings. Since these investments are associated with other public sources of funds, such as medical transfer payments and investments in medical facilities by other agencies, the increase in personal income associated with DRA spending cannot be attributed solely to DRA spending or seen as the return to DRA spending alone. However, it demonstrates that regional authorities can have an impact by influencing the investments and activities of other agencies and institutions.

DRA's Impact on Regional Health Investments Deserves Further Attention

By increasing the supply and demand for health care services, the DRA also is likely positively influencing health awareness, behaviors, and outcomes of people in the DRA region. With health outcomes in the Delta region among the worst in the country, further research to help quantify such impacts would provide valuable input to the policymaking process.

As with research on regional development programs, research on the economic impacts of health care investments is limited, largely based on self-reported employment figures and model-based results rather than on observed economic outcomes. The data and methods demonstrated in this study could be helpful in such research.

This article is drawn from...

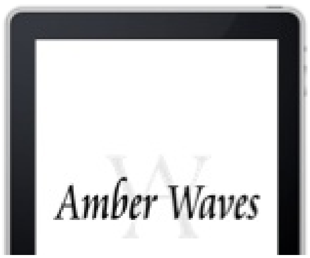
Impacts of Regional Approaches to Rural Development: Initial Evidence on the Delta Regional Authority, by John Pender and Richard Reeder, USDA, Economic Research Service, June 2011

You may also be interested in...

Rural Development Policy, by Richard Reeder, USDA, Economic Research Service, May 2012

"The Economic Effects of the Appalachian Regional Commission: An Empirical Assessment of 26 Years of Regional Development Planning", by Andrew Isserman and Terance Rephann, Journal of the American Planning Association, 1995, Vol. 61, Issue 3, pp. 345-364

Economic Development: Limited Information Exists on the Impact of Assistance Provided by Three Agencies, U.S. General Accounting Office, April 1996, GAO/RCED-96-103



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