Closing the Economic Gap Between Southern Persistently Poor Counties and Non-Southern Persistently Poor Counties and Appalachian Regional Commission Counties

Brigid (Doherty) Tuck¹ and John C. McKissick²

¹Economist and ²Coordinator, Professor, and Extension Economist
CR-02-08
Center for Agribusiness and Economic Development
College of Agricultural and Environmental Sciences
The University of Georgia

August 29, 2002
INTRODUCTION

An analysis conducted by the University of Georgia Center for Agribusiness and Economic Development has explored the economic differences between counties classified as Southern Persistently Poor Counties (SPPC), Appalachian Regional Commission (ARC), and those counties lying in the seven states of the SPPC but not classified as persistently poor (non-SPPC). The analysis revealed that significant gaps exist in the per capita output of goods and services, the source of wealth creation, with the SPPC trailing each region. Other major differences were found in the diversity of the region’s economy and dependency on low-wage manufacturing and government for the production of goods and services. While the underlying reasons for the gaps are the focus of other economic development research, the results of the economic disparity in the SPPC are clear. The comparative economic gaps lead to lower household incomes than in the other regions with a smaller percentage of household income resulting from work. The SPPC’s economic condition in turn results in the widespread and persistent nature of the region’s poverty. Poverty cannot be reduced in a sustainable manner until and unless the means to create wealth within the community is strengthened. Thus the SPPC counties were found to be uncompetitive even with those regions previously identified for targeted federal assistance to fight persistent poverty. Naturally, the question arises as to the regional cost or consequences of this economic gap.

The focus of this paper is the “opportunity cost” of not closing the wealth creation gap of the SPPC. The lost opportunity can be thought of as the resulting returns to households and even to government from a successful effort to eliminate comparative output differences in the regions analyzed. The comparison with the ARC is particularly instructive, as the ARC has enjoyed measurable success with a targeted economic development strategy over its 30-year existence.

A model of each county’s economy contained in the three regions, IMPLAN (IMpact Analysis for PLANning), was used for this analysis. Such models allows for the interaction of sectors of the economy to be studied with the impact of economic changes in each county or group of counties on employment, economic output, tax revenues and household incomes derived. Chart 1 displays the current output per capita for each of 10 industry sectors for the SPPC, ARC, and non-SPPC. Clearly, the SPPC lags behind the other groups in many of the industry sectors.

Three scenarios were modeled to evaluate the resulting impact of eliminating comparative economic gaps. The first scenario examined output per capita by industry sector. In comparison to the ARC, the SPPC lagged behind every industry sector of the economy except agriculture and government. Total output per capita (includes all sectors) in the SPPC was $40,500 while total output per capita in the ARC was $46,900. When compared to the non-SPPC, the SPPC’s output per capita was lower in all the sectors except agriculture, manufacturing, mining and government. Total output per capita in the non-SPPC is $51,000. The first scenario examined the outcomes from closing the industry gaps in the production of goods and services without regard to the gap in total output per capita. For example, the gap in output per capita in the service
sector between the SPPC and the ARC was $2,000. Since the SPPC had higher output per capita in two sectors, bringing the remaining sectors equal to ARC per capita levels forces the total output per capita in the SPPC to then exceed that of the ARC.

The second scenario examined the outcome of forcing the total output of all goods and services produced per capita to be equal in each region. In order to accomplish this, each sector’s total output per capita was raised. The amount of the increase was determined by the total amount of the gap. For instance, the service sector gap between the ARC and the SPPC is greater than the gap in mining. Therefore, the service sector was assigned a heavier weight and given more of an increase.

The third, and final scenario, examines the impact of closing the gap in a specific sector. In this case, the gap was closed in the service sector only. Services were chosen because of the relatively large size of the gap and the importance of services in the economy. Thus the service sector may hold more potential for targeted development in the SPPC than other sectors and therefore the impact of a strategy aimed at improving the competitiveness of this sector may be of greater interest to policy makers.

RESULTS FROM REDUCING THE GOODS AND SERVICES OUTPUT GAP ACROSS ALL INDUSTRY SECTORS - SCENARIO 1

Chart 2 illustrates the output per capita for each sector after the sector gaps for the SPPC and ARC have been closed in the manner explained. As one can see, the SPPC output per capita for the lag sectors is now equal and SPPC output per capita exceeds the ARC in the non-lag sectors.
Increasing the amount of output per person will have impacts beyond just total output in the economy. Household receipts will be affected, as will employment and tax revenues. Under this scenario, total household receipts in the SPPC will rise to $230 billion or $31,000 per capita. Current SPPC receipts per capita are $24,000 and current ARC is $26,300. The mix of household receipts will also be altered. Chart 3 shows how household receipts change with the impact. In general, the change makes the two groups look more similar in terms of percent of household receipts by source.

Employment opportunities in the SPPC would increase by 1.4 million jobs, almost half of which would be in the service sector. Annual state and local government tax revenues would increase by $5.1 billion and federal government tax revenues by $4.3 billion.
Chart 4 illustrates the output per capita for each sector after the sector gaps have been closed between the SPPC and the Non-SPPC. As one can see, the SPPC output per capita for the lag sectors is now equal and the SPPPC output per capita exceeds the non-SPPC in the non-lag sectors.

![Chart 4: Output per Capita](image)

Total household receipts increase to $289 billion or $39,000 per capita. Household receipts per capita in the non-SPPC are $30,000. The ratio of household receipts by source is also altered, as shown in chart 5. In terms of wages and benefits, which supply a high percentage of total receipts, the SPPC approaches, but does not match the non-SPPC. However, it does continue to have more income from self-employment.

![Chart 5: Household Receipts by Source](image)
Total employment in the SPPC would rise by 2.8 million jobs. Annual tax revenues at the state and local government level would rise by $10.4 billion and at the federal level by $8.4 billion.

RESULTS FROM REDUCING THE LARGEST GOODS AND SERVICES OUTPUT GAPS - SCENARIO 2

In scenario 2, the total output per capita of the SPPC was forced to rise to be equal to the total output per capita of the ARC first and the non-SPPC second. Total output per capita was increased by first increasing the output per capita in each sector. The amount of increase in each sector was determined by the gap’s relative size. Sectors that lagged further behind received a higher percent increase than sectors whose gap was relatively minor.

Chart 6 illustrates how this process affected each sector’s output per person when the SPPC and ARC gaps were reduced. Although total economic output per capita is now equal in the SPPC to the ARC at $47,000, gaps still remain in many of the industry sectors. Concurrently, the SPPC continues to have higher output per person levels in both agriculture and government.

The second scenario impact on households will not be as dramatic scenario 1 as total output will not increase as much as under scenario 1. However, household receipts, employment levels and tax revenues will all be impacted positively. Household receipts for the region will rise to $217 billion or $29,000 per capita. Per capita household receipts in the ARC are $26,000. Chart 7 shows that wages and benefits increase to levels almost equal to the ARC under this plan. This scenario impact also decreases the gap in many of the other types of receipts.
Total employment will increase by 1 million jobs. Annual federal tax revenues will jump by $3.1 billion and state and local tax revenues by $3.8 billion.

Chart 8 depicts output per capita by sector under scenario 2 when the groups considered are the SPPC and non-SPPC. Total output per capita is equal under this scenario at $51,000. Gaps between sectors continue to exist, but in those sectors in which the SPPC lags the non-SPPC, the gaps have decreased.

Total household receipts increase to $259 billion or $35,000 per capita. Household receipts per capita in the non-SPPC are $30,000. The ratio of household receipts by source is also altered, as shown in chart 9.
Total SPPC employment will be increased by approximately 2 million jobs under scenario 2. State and local tax revenues will rise by $7.4 million while federal tax revenues will increase by $6 million.

RESULTS FROM REDUCING THE SERVICES OUTPUT GAP - SCENARIO 3

In scenario 3, the impact of closing the gap in a single, selected sector is examined. For example, consider services. Services is one the sectors with the largest gap. It is also the single largest employment sector in each region.

The process of raising total output in the SPPC service sector in order to be comparable to the ARC raises total output in the SPPC from $303 billion to $318 billion. Concurrently, total output per capita in the SPPC increases from $40,500 to $42,500. In reference, total output per capita in the ARC is $46,900.

This process also affects total household receipts. Additional output in the economy generates additional labor and other income. Household receipts per capita in the SPPC are $24,379 before the service sector change and $26,141 after. Household receipts per capita are $26,300 in the ARC. Further, the percent of total household receipts represented by wages and benefits in the SPPC is increased. This is shown visually in chart 1. As shown below, wages and benefits become a larger percentage of total household receipts. However, their percentage in the modified SPPC is still not as high as the percentage in the ARC.
Increases in service sector activity also have impacts in other areas of the economy. Total employment in the region would increase by approximately 500,000 jobs with this amount of an impact. Further, tax revenues at the state and local level would increase by $1 billion. Federal tax revenues would increase by the amount of $2.2 billion.

Total output in the SPPC would increase to $339 billion in order to bring output per capita in the service sector to equality with the non-SPPC. Therefore, output per capita will also increase to $45,000. Total output per capita, by comparison, in the non-SPPC is $51,000. The gap between the two groups narrows with the increase in service sector output, but is not completely covered.

In this scenario, household receipts in the form of labor and other income also is enlarged. Household receipts per capita currently in the SPPC are $24,000. Increasing service sector output will cause household receipts per capita to become $28,500. Household receipts per capita in the non-SPPC are $30,000. Here again, the gap between the two groups becomes smaller, but is not completely erased. The chart below shows how each category of household receipts is affected under this scenario.
The chart clearly shows that the gaps in most sectors closing. This is important in the wages and benefits sector, as this is a key source of household receipts. Note, however, that the SPPC continues to generate a higher percentage of their household receipts from self-employment income than the non-SPPC.

Effects from a change in the service sector also accrue in other areas on the economy. Total employment will climb by 1.1 million jobs. Further, state and local tax revenues will rise by $2.4 billion. Federal tax revenues will also increase by $2.8 billion.

CONCLUSION

Previous research has identified the magnitude and location of gaps in the competitiveness of the SPPC’s economy as compared to the non-SPPC and even to the ARC, a region previously identified as worthy of focused economic development assistance due to persistent poverty. The gaps result in a poverty that will not be cured until and unless the community has the ability to produce wealth through the creation of goods and services.

The focus of this paper has been the “lost opportunity” that is suffered by the region due to the comparative economic disadvantage. Other research has attempted to attach different cost to such economic gaps as household or per capita income. Societal cost are born for instance through associated high incarceration rates, high health cost etc in low-income areas. This research suggests an alternative to such methods as the productivity cost to society due to the regions economic shortcomings.

The magnitude of these costs was found to be great. For instance, the SPPC/non-SPPC competitive gap in the service sector alone cost $36 billion annually. Even the SPPC/ARC service sector gap has a yearly cost of $15 billion. The annual return to state and local government from a policy to close the SPPC/non-SPPC service sector gap was found to be $2.4 billion and from closing the SPPC/ARC gap $1 billion. The annual returns to the federal treasury were found to be $2.8 billion for the SPPC/non-SPPC gap closure and 2.2 for the SPPC/ARC gap closure.

The authors do not suggest that the economic gaps of the SPPC can be closed immediately or easily. But this research does suggest that the cost to society at large is probably greater than most policy makers previously realized, at least when measured in terms of lost economic opportunity. Alternatively, the potential payback to local, state and federal government in tax revenues alone suggest that an effective, targeted program to close the gaps, which underlie persistence poverty, could be a wise investment strategy.