We are in the process of revising our Mississippi Indices of Leading and Coincident Indicators. We hope to have this complete for the April issue of Mississippi’s Business. In the mean time, you can enjoy the analysis of urban and rural populations in Mississippi by Dr. Barbara Logue (page 1) and an examination of the impact of the Great Recession on the various sectors of Mississippi’s economy by Pete Walley (page 4).

**URBAN AND RURAL POPULATIONS IN MISSISSIPPI: A COMPARISON**
By Barbara J. Logue, Ph.D.

Precise criteria, such as population density and commuting patterns, determine what territory qualifies as urban. According to the U.S. Census Bureau, “urban” comprises “all territory, population, and housing units in urbanized areas and in places of 2,500 or more persons outside urbanized areas.” The rural population is what is left over after the urban population has been defined.

At least since the Industrial Revolution, around 1750, people have been leaving rural areas to concentrate in cities and towns. But rural outmigration is not a random occurrence. Instead, migrants are typically self-selected, as younger, healthier, more educated, and more ambitious. It follows that the group of people left behind tends to be disproportionately older, sicker, less educated, and so on. Hence it is of some interest to compare urban and rural residents on key variables affecting quality of life.

Most Americans now live in urban areas, with only one in five classified as rural. In sharp contrast, a majority of Mississipians (51.2 percent) live in rural areas. Only three states (Maine, Vermont, and West Virginia) have a larger share of rural residents than Mississippi. Back in 1900, the state was almost entirely rural, at 92.3 percent. But whereas the nation as a whole became urbanized relatively quickly during the 20th century, Mississippi has changed more slowly. In 2000, in fact, 59 of the state’s 82 counties had 50.0 percent or more rural residents, while 21 counties were classified as 100.0 percent rural.

Table 1 shows some key differences between Mississippi’s rural and urban residents. The table also contains data for the nation as a whole, showing that whatever the relative advantages of urban versus rural residence may be in Mississippi, they pale when either is compared to national averages.

**Education.** Educational attainment is shown for adults aged 25 and older, since by age 25 most people have completed their formal education. Urban areas are clearly advantaged, with higher fractions of both high school graduates and people who earned a Bachelor’s or higher degree. Since the variety of jobs available and specialized skills needed are greater in urban than in rural areas, it is not surprising that more educated people concentrate in cities and towns.

**Employment.** Labor force participation rates are shown for the population aged 16 to 64. The proportion in the work force is somewhat lower in rural areas, but the unemployment...
rate is higher for the urban work force. Nationwide, for the 2005-2009 period, the unemployment rate was lower than either state rate.

What is more noteworthy about the figures in the table is that roughly three in ten working-age people in the state are not in the work force, compared to one in four nationwide. Many of these, of course, are still in school, but other factors such as health problems, dropping out of high school, and responsibility for child care also deter paid work. Mississippi’s employment disability rate, for example, is among the highest in the nation, as is the state’s fraction of single mothers with sole responsibility for childrearing. The lower percentage of nonworkers in the nation as a whole suggests that both urban and rural areas in Mississippi are disadvantaged.

**Work Disability.** Chronic health problems that limit a person’s ability to earn a living have far-reaching effects on individuals, their families, and the community. If those health problems are present at birth or occur early in life, they tend to limit educational attainment and thus inhibit paid work in adulthood. Disabled people have relatively low labor force participation rates. Some cannot work at all, whereas others are unable to find work suited to their capacities, especially if their education is limited. Even when disabled workers hold down a job, they are less likely to work full time, tend to earn less than their nondisabled counterparts, and are more likely to live in poverty.²

Clearly, Mississippi citizens, both urban and rural, show substantially higher disability rates for any type of disability and for employment disability in particular, relative to the national average. Within the state, however, rural areas are worse off on both disability measures.

**Elderly Disability.** Disabilities at the older ages, of course, matter to the individual sufferer and his/her family,
but they also affect the larger society. Table 1 indicates that every type of disability for those 65 and older is higher in the state’s rural areas than in our cities and towns. It is common for family members to assist disabled elderly relatives, and many make financial sacrifices to do so. The provision of personal assistance may, and often does, necessitate that relatives cut back on their work hours, quit their job, or refuse a transfer or promotion that entails longer hours or moving to a new location. Compared to their non-caregiving counterparts, caregivers who stay on the job also face a greater risk of physical fatigue, depression, and other forms of physical and emotional stress that affect their productivity.3

When it comes to caregiving burdens on family members, Mississippi’s rural residents are disadvantaged, because proportionally more elderly people in rural areas are disabled, regardless of the specific type of disability. It should be noted, moreover, with respect to disability at the older ages, that many, if not most, elders experience more than one form of disability.

Income. Median family income and median household income are both higher in the state’s rural areas. Per capita income is only slightly higher in urban areas. All three income figures, for both urban and rural areas, however, are substantially lower than the national averages. A lower cost of living in the state may mitigate those differences somewhat. It is worth noting that average family size and average household size do not differ significantly from urban to rural, nor is there any difference from the national averages. Regardless of geography, average household size is about 2.6 persons and the average family consists of about 3.2 persons.

Poverty. At 24.4 percent, overall poverty is substantially worse in Mississippi’s urban areas; the rural rate is a much lower 18.8 percent. Family structure, however, makes a huge difference in the poverty picture. Regardless of residence, married couples with minor children are rarely poor. In sharp contrast, the worst poverty is associated with households headed by unmarried mothers with children under 18. Whether urban or rural, one in two of such households in Mississippi have incomes below the poverty line.

In 2009, more than half (55.2 percent) of all births and four out of five minority births in the state occurred to unmarried mothers.4 Many of these women are high school dropouts, have no job skills and, in any case, are unable to work unless they have reliable (and affordable) child care arrangements. Regardless of family structure, the national poverty statistics are always lower than Mississippi’s.

Conclusion
It is readily apparent from the data in Table 1 that there is a mixed picture of advantages and disadvantages when Mississippi’s urban and rural residents are compared. In some respects, rural Mississippians are disadvantaged relative to their urban counterparts. For example, educational attainment is lower, the labor force participation rate is lower, and the prevalence of disability is uniformly higher, both among people of working age and the elderly.

On the other hand, both median family income and median household income are somewhat higher in rural areas, despite virtually identical average family size and average household size in urban areas. Although the average rural dweller is less likely to live in poverty, one in two woman-headed households with minor children lives below the poverty line, whether they reside in an urban or a rural area. It is likely that differences in cost of living between urban and rural areas exist, but they cannot be accounted for in this analysis.

Notes
1. Estimates of urban and rural population and characteristics reflect boundaries of urbanized areas defined based on Census 2000 data, since data from the 2010 census are not yet available.


THE GREAT RECESSION’S IMPACT ON INDUSTRY SECTORS: EMPLOYMENT CHANGES 2007 TO 2009

By Pete Walley

How did Mississippi’s economic sectors perform during the 2007 to 2009 “Great Recession?” Using total full and part-time job data from Econometric Modeling Specialists, Inc., Figure 1 lists the 20 major sectors of Mississippi’s economy in order from most jobs gained to most jobs lost over the 2 year time frame.

To no one’s surprise, the manufacturing sector had the greatest number of jobs lost among all sectors. Reflecting the nation’s sector trends, Mississippi manufacturing continued to decline.

Three sectors-manufacturing, construction and retail trade-together had total jobs losses greater than the state’s net job losses (50,865 vs 50,496 for the state). Three sectors-government, health care and social assistance, and mining, quarrying and oil and gas extraction-increased total jobs by more than 14,600

Note that 11 of the 20 sectors representing about 60% of the state’s total full and part-time jobs experienced declines in number of jobs.

Figure 2 displays employment share of each sector of the total employment in order of largest to smallest percentage. Mississippi is heavily dependent on four sectors of the economy-government, retail trade, manufacturing and health care and social assistance-for about half of all jobs.

Economic Sector Location Quotients

Location quotients are ratios that allow an area’s (Mississippi) distribution of employment by economic sector to be compared to a reference area’s (United States) distribution. A location quotient of 1 means that Mississippi has the same percentage of jobs in a sector as does the nation. Location quotients smaller than 1 imply that

Figure 1. Number of Mississippi jobs gained/lost by economic sector between 2007 and 2009

Source: EMSI Complete Employment - 4th Quarter 2010
the state is less specialized in those economic sectors than the nation. Similarly, location quotients greater than 1 imply that the state is more specialized in those sectors compared to the nation. For example, the Government sector in Mississippi comprises almost one out of every five jobs (18.9%) and it has a location quotient relative to the US of 1.36. Mississippi has more government jobs relative to the US.

Similarly, Mississippi’s Information sector employs about 1 in 100 jobs (1%) and has a location quotient of 0.54. Mississippi is more dependent on out of state information providers compared to the United States. Chart 3 displays the U.S. location quotients for each Mississippi economic sector listed from least to highest.

Chart 4 is another visual method to analyze Mississippi’s economic sectors. Each bubble represents one of the 20, 2-digit North American Industry Classification System (NAICS) sectors. The placement of each bubble along the horizontal access indicates percent change in employment from 2007 to 2009 while bubble placement along the vertical access indicates the national location quotient in 2009, and the size of each bubble represents the number of employees in a sector in 2009.

One quick analysis, for example might be to identify those economic sectors that had a positive gain in jobs between 2007 and 2009 and had a national location quotient less than one.

**Average Earning per Worker**

Mississippi’s average earnings per worker, $40,140 is about 78% of the average US earnings per worker. None of Mississippi’s economic sectors pay as much as the equivalent US sector based on average earnings per worker. For example, average earnings per worker in the Information sector is only about half of the US average earnings per work, while agriculture, forestry, fishing and hunting pay about 96% of the U.S. average earnings per worker.

Next month an analysis of the Great Recession’s effects on Mississippi occupations will be presented.

---

**Figure 2. Percentage of all Mississippi jobs by economic sector, 2009**

Source: EMSI Complete Employment - 4th Quarter 2010
<table>
<thead>
<tr>
<th>Economic Sector</th>
<th>Location Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry, Fishing and Hunting</td>
<td>1.98</td>
</tr>
<tr>
<td>Mining, Quarrying, and Oil and Gas Extraction</td>
<td>1.58</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>1.54</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>1.15</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>0.94</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>0.86</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>0.85</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.81</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>0.73</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>0.69</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>0.68</td>
</tr>
<tr>
<td>Government</td>
<td>0.62</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>0.62</td>
</tr>
<tr>
<td>Mining, Quarrying, and Oil and Gas Extraction</td>
<td>0.60</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing and Hunting</td>
<td>0.55</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>0.40</td>
</tr>
</tbody>
</table>

**Figure 3. U.S. Location Quotient for Mississippi Economic Sectors, 2009**

**Figure 4. Mississippi Economic Sectors**

Source: EMSI Complete Employment - 4th Quarter 2010