Employment Trends in the State of Missouri

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Summary
Employment in services and wholesale/retail trade has grown rapidly and consistently in the State of Missouri since 1970. Employment in agriculture, mining, and manufacturing decreased in the same period. Other sectors have experienced moderate growth. Since 1990, real wages in Missouri have been flat in all sectors with the exception of construction and transportation/public utilities. The Metro Areas of St. Louis and Kansas City exhibit differences from the state, both in terms of the historic pattern of employment growth and recent behavior of real wages. There are substantial differences in the geographic pattern of recent employment growth in the state.

Sectoral Employment -- Missouri
Services and wholesale/retail trade have dominated job growth in Missouri ....
Between 1970 and 1995, non-farm job growth in the state of Missouri totaled approximately 852,000, according to the Current Employment Statistics (CES) series of the Bureau of Labor Statistics (BLS). Job growth in services (425,000) and wholesale/retail trade (227,000) during the same period was roughly 76% of total job growth. The sector with the third largest contribution to non-farm job growth during the period was government, adding over 105,000 jobs. Almost all of the job growth in government was at the state and local level, rather than at the federal level. The fourth largest job growth occurred in the FIRE (finance, insurance and real estate) sector, adding over 56,000 jobs. Next are construction, adding over 39,000 jobs and transportation/public utilities, adding almost 32,000 jobs. There was a decrease in jobs in two non-farm sectors (manufacturing and mining) totaling 33,000 from 1970 to 1995. Although not strictly comparable in terms of job coverage and time period, data from the BLS ES-202 Series indicate a loss of over 40,000 farm jobs in Missouri between 1969 and 1993.

Chart 1: Non-Farm Employment by Major Sector, 1970-95: Missouri and US
Source: BLS Current Employment Statistics

Chart 1 summarizes the 25 year trends for seven major sectors of the Missouri economy. For comparison, the chart includes the same data for the US as a whole. The sensitivity of jobs in manufacturing and construction to the business cycle is evident, as is the persistence of job growth in services, wholesale/retail trade jobs, and government.

Sectoral Employment – KCMO & St. Louis
The Metro Areas of St. Louis and Kansas City have different patterns of job growth....
Both major Metropolitan Areas (MSAs) in Missouri are located on state boundaries. The CES of the BLS includes series for each metropolitan area. Caution should be used in comparing the MSA series with the state of Missouri series, since the MSA series include data from other states.

Although the St. Louis MSA had 75% more jobs than the Kansas City MSA in 1970, there was slightly more job growth in the Kansas City MSA (345,000) than in the St. Louis MSA (338,000) during the period 1970-95. Much of the Kansas City MSA growth occurred on the Kansas side of the state line. As was true for the state of Missouri, job growth in these two metro areas was dominated by the service and wholesale/retail trade sectors. These two sectors account for 73% of the job growth in the St. Louis MSA and 71% of the job growth in the Kansas City MSA.

Chart 2: Non-Farm Employment by Major Sector, 1970-95: St. Louis and Kansas City MSAs

Source: BLS Current Employment Statistics
Two major differences are apparent between the two MSAs:

- The manufacturing sector in St. Louis has declined dramatically during the period. There were 77,000 fewer manufacturing jobs in St. Louis in 1995 than in 1970. This compares with 20,000 fewer manufacturing jobs in the Kansas City MSA.

- Employment in the government sector increased by 77% during the period 1970-95 in the Kansas City MSA and now ranks third among the seven sectors. This compares to an 18% increase in the St. Louis MSA, where the number of government jobs still ranks below the number of manufacturing jobs.

It is interesting to compare Chart 2 with Chart 1, keeping in mind the caution at the beginning of this section. The historical pattern and the current profile of jobs in the St. Louis MSA is similar to those of the state of Missouri, while the historical pattern and current profile of jobs in the Kansas City MSA more closely resembles the US as a whole.

Real Wages

Real wages in Missouri have been flat in recent years....

Since 1990, the BLS has published wage information for non-supervisory jobs by sector of non-agricultural employment, excluding government jobs. For Missouri, these data are available for the state as a whole and four metropolitan areas (Kansas City, St. Joseph, St. Louis, Springfield). Non-supervisory jobs made up 81% of the total non-government jobs in Missouri in 1995. For these jobs, published data includes average weekly earnings, average hourly earnings, and average weekly hours. The level of sectoral disaggregation depends upon the number of workers in the sector. A minimum number of workers is necessary to meet the BLS criteria for statistical significance. In some cases, data are available down to a 4 digit Standard Industrial Classification (SIC) level of disaggregation. In this section we present average weekly earnings for the same geographical and sectoral coverage was used in the presentation of employment trends (excluding government).

Chart 3: Average Real Weekly Earnings* in Non-supervisory Jobs by Sector

Chart 3 portrays the five-year trend in average weekly earnings by sector and location. All earnings data have been expressed in 1995 dollars, using the location specific price index for urban wage earners from the BLS. Weekly earnings is the product of weekly hours and hourly wage.[1] Weekly earnings may change as a result of a change in either of those factors, or may remain constant if there is a compensating change in the two factors. From 1990 to 1995 there has been a slight increase in the number of hours worked per week in all sectors in the state of Missouri. In the two sectors in which average hours per week increased by more than one-half hour (construction, up by 2.9 hours, and manufacturing, up by .6 hours), the real hourly wage decreased (construction, from $20.20 to $18.65, and manufacturing, from $12.45 to $12.18).

The most notable aspect of Chart 3 is the low and flat average weekly earnings in jobs in the service and wholesale/retail trade sectors. Recall that those are precisely the sectors which experienced persistent high job growth since 1970. The two sectors have both low hours per week (services 31.4 hours in 1995, and wholesale/retail trade 31.2 hours in 1995) and a low average hourly wage (services $9.68 in 1995, and wholesale/retail trade $8.44 in 1995). The trend toward more jobs in these sectors imparts a downward pressure on the real weekly earnings of an "average job," calculated as the weighted average of weekly earnings of private sector, non-supervisory jobs.

Between 1990 and 1995, labor productivity has increased every year. According to the BLS Major Sector Productivity Index, national output per hour of labor in non-farm business increased by 5.7% between 1990 and 1995. While this series is not available at the state level, there is every reason to believe that Missouri productivity mirrors national productivity. The "average job"in Missouri had virtually the same real weekly earnings in 1995 ($382.31) as in 1990 ($381.72). The simplistic idea that productivity gains translate directly into higher earnings does not appear to be valid in the context of a changing structure of employment. The fact that the laborer with an "average job" has the same earnings during the latter stages of a prolonged economic recovery, during which there have been substantial productivity increases and very low unemployment rates, testifies to the strength of the changing structure of employment.

The preceding discussion only addresses the earnings of non-supervisory labor. Supervisory positions typically pay better than non-supervisory positions. The percentage of supervisory positions has decreased from 21% to 19% during the period 1990 to 1995. This exerts additional downward pressure on average earnings.

Geographic Distribution
The geographic pattern of recent employment growth in the state....
In this section we analyze employment growth by county in during the period 1990-95. Map 1 shows the annual compound rate of growth in total employment from 1990 to 1995 for each county in Missouri. For the state as a whole, employment grew by 2.03% per year from 1990 to 1995. We classify counties in five categories, according to the annual growth rate:

- high growth > 3%
- moderate growth 2-3%
- below average growth 1-2%
- low growth 0-1%
- negative growth < 0%

By far the most impressive employment growth occurred in Taney county, where employment more than doubled during this five year period as a result of the growth of the Branson area. In fact three of the four counties with the highest growth in employment were in the Branson area (Taney, Stone, and Christian counties). Camden county experienced high growth associated with the expansion of tourism activities at the Lake of the Ozarks.

The largest counties with high growth are in Metropolitan Areas: Greene, Christian, and Webster (Springfield MSA), and Cass and Platte (Kansas City MSA). Adair and Butler counties are moderately sized (over 10,000 total employment) and had high growth. All other high growth counties had total employment under 10,000.

All Missouri counties in the Kansas City MSA had either high or moderate growth. All Missouri counties in the St. Louis MSA had either moderate or low growth. The counties which contain the cities of Columbia, Jefferson City, and Joplin experienced moderate growth. The counties in the St. Joseph MSA experienced low growth.

Map 1: Annual Employment Growth in Missouri Counties, 1990-95

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[1]Hours and earnings are derived from reports of gross payrolls and corresponding paid hours for production workers, construction workers, or non-supervisory workers in the private service sector, including pay for overtime, vacations, holidays, and sick leave paid directly by the firm. Excluded are deductions of any kind, employee benefits paid by the employer, tips, payments in kind, and bonuses, commissions, and other non-wage payments unless they are earned and paid regularly. For summary information, see CES State and Area Frequently Asked Questions. For more detailed information see the BLS Handbook of Methods, Chapter 2.