# Sales Tax Revenue Trends of

# County Governments in Arkansas





# Sales Tax Revenue Trends of County Governments in Arkansas, 1999-2012

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This publication was updated and revised from the publication titled *Sales Tax Revenue Trends of Arkansas County Governments in Arkansas 1999 to 2009* by Miller, Karov and Gaughan, MP515, April 2013.

We appreciate the contributions of Chris Meux who designed the cover and Laura Goforth who did the design and layout of the publication.

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## **Highlights**

Sales tax revenue is vital to the fiscal health of Arkansas county governments. While this source of revenue represents varying degrees of importance to counties in the state, overall 23% of county government revenue in Arkansas was generated by the sales tax in 2012. Below are some highlights of the sales tax revenue trends from 1999 to 2012 and comparisons among counties, regions and economic classifications.

#### **Statewide Averages**

- Sales tax revenue received by county governments in Arkansas increased 52% from 1999 to 2012.
- However, 16 counties experienced a decline in sales tax revenue during this period.
- Sales tax revenue as a share of total county government revenue increased from 19% in 1999 to 23% in 2012.
- Sales tax revenue collected per person increased from \$57 to \$77 during this 13-year period.
- Sales tax revenue per \$1,000 of personal income also increased during this period, from \$1.89 to \$2.19.

## **Regional Comparisons**

- In 2012, the rural regions of the state (non-metro) generated a larger share of their revenue from the sales tax than did urban (metro) counties, 27% versus 19%.
- Of the rural regions, the Coastal Plains generated the largest share of county government revenue from the sales tax in 2012, 33% versus 24% for the Delta region.

- The Coastal Plains also collected the most sales tax revenue per person (\$161) and the most revenue per \$1,000 of personal income (\$4.59) in 2012.
- However, the Highlands experienced the greatest increase in sales tax revenue per person over the 13-year period, 76%.

#### **Economic Dependency Comparisons**

- Farming-dependent counties experienced the largest increase in sales tax revenue during the 13-year period, 118%.
- In 2012, farming-dependent counties generated the most sales tax revenue per person (\$118) and per \$1,000 of personal income (\$4.08).
- However, it was the manufacturing and services-dependent counties that generated the largest share of their total revenue from the sales tax in 2012, each at 27% versus only 13% in the federal/state government-dependent counties.
- While total and per capita sales tax revenue increased in all five economic dependency classifications, revenue per \$1,000 of personal income declined in federal/state government-dependent counties.

#### Tax Capacity and Effort

 Although a large share of counties in the state experienced increases in sales tax revenue during the 13-year period, many of these counties have high effort (tax rates) and low capacity (retail sales), indicating little potential to generate additional revenue from the sales tax.

## Introduction

The sales tax is an increasingly popular method of raising revenue for Arkansas state and local governments. The use of the sales tax to generate additional revenue and to replace revenue lost from the homestead property tax credit has increased the share of tax revenue coming from the sales tax. In 2012, 73 of the 75 Arkansas counties had a sales tax (Monroe and Saline counties were exceptions) to generate revenue for their county governments. Local governments may institute sales taxes if approved by a simple majority of the voters at a special or general election.

The increasing use and dependence on the sales tax to generate revenue raises concerns about the stability of future tax revenue, potential for revenue growth, over-reliance on one tax (tax structure) and the increasing tax burden on the poor (tax incidence). Counties have varying

sales tax rates, ranging from 0% to 3%, with the average county sales tax being 1.46% in 2012.

Many county governments depend heavily on this source of revenue to build and maintain roads, to provide public safety and for their general operations. Reliance on the sales tax varies across counties. In 2012, sales tax accounted for as little as 0% of total revenue in Monroe and Saline counties to as much as 49% of total revenue in Drew and Hempstead counties.

It is the goal of the authors to present a broad overview of the sales tax revenue generated by county governments in Arkansas and to analyze differences across counties based on geographic location, rural/urban classification and economic dependence during the 13-year period 1999-2012. All dollar values are reported in 2012 constant (real) U.S. dollars unless otherwise indicated.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>The South Urban (SU) consumer price index (CPI) was used to adjust the expenditures for inflation. The expenditures were then indexed to 2012 dollars so that 2012 nominal and real dollars were equal.

## Sales Tax Revenue Overview

From 1999 to 2012, sales tax revenue received by county governments in Arkansas increased 52%, from \$151 million to \$229 million<sup>2</sup> (Figure 1). Sales tax revenue showed a clear increasing trend from 1999 to 2008 and then dropped steadily from 2008 to 2011. Revenue increased again in 2012 but remained below the level it reached in 2008.

While the total county sales tax revenue increased, 16 Arkansas counties experienced decreases over the 13-year period (Figure 2); three of these counties experienced declines of 40% or more (Ashley, Poinsett, Saline).

Fifty-two counties experienced a decline in their sales tax revenue from 2008 to 2011, and 51 of these counties had not yet reached their 2008 levels by 2012. This shows the effect of an economic recession on the ability of counties to generate revenue from the sales tax.

In per capita terms, total county sales tax revenue increased 36%, from \$57 per person in 1999 to \$77 per person in 2012 (Figure 3). Nineteen

of the 75 counties saw a decline in per capita sales tax revenue during the 13-year period, six of which had declines greater than 20% (Figure 4).

County government sales tax revenue per \$1,000 of personal income also increased over the 13-year period. By this measure, revenue increased 16%, from \$1.89 in 1999 to \$2.19 in 2012, although there were several fluctuations from 2005 to 2012 (Figure 5). The sales tax revenue generated per \$1,000 of personal income in 2012 remained below the high of \$2.36 in 2008.

The share of county government revenue generated by the sales tax also increased over the course of the study (Figure 6) from 19% in 1999 to 23% in 2012<sup>3</sup>. Sales tax revenue accounted for a larger share of total county revenue than property tax revenue from 2001 to 2009 but was surpassed by the property tax from 2010 to 2012. This is not surprising since economic recessions have a quicker and greater effect on the sales tax compared to the property tax.

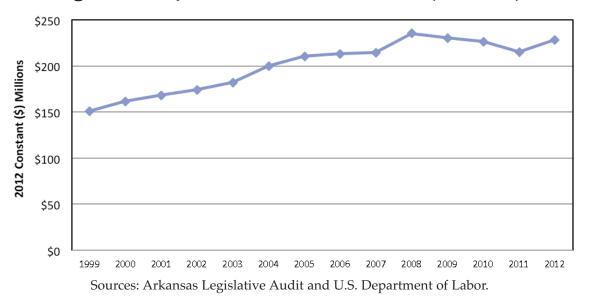


Figure 1. County Government Sales Tax Revenue (1999-2012)

therefore 2011 values were used as proxy values for 2012 in the case of Scott County.

<sup>&</sup>lt;sup>2</sup>At the time of this publication, the 2012 legislative audit report for Scott County had not been released;

<sup>&</sup>lt;sup>3</sup>Audit reports from the Arkansas Legislative Audit for Dallas County for the five-year period 2007-2012 do not show any sales and use tax revenue even though Dallas County had a sales tax in place during this period. Therefore, the sales and use tax revenue reported for Dallas County by the Arkansas Department of Finance and Administration was used for the years 2007-2012.

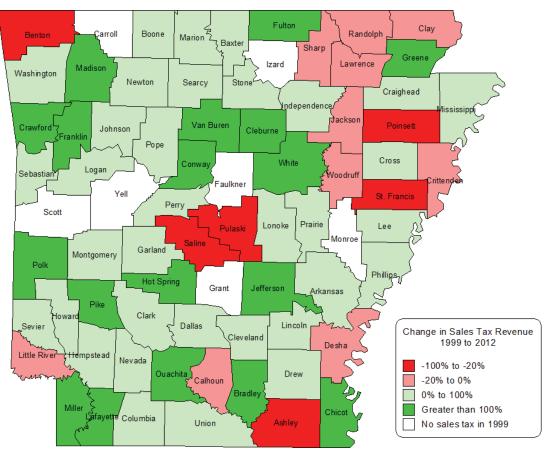


Figure 2. Change in Total County Government Sales Tax Revenue (1999-2012)

Sources: Arkansas Legislative Audit and U.S. Department of Labor.

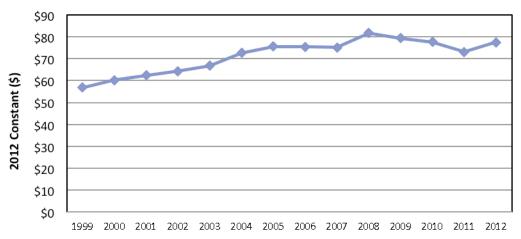


Figure 3. Per Capita County Government Sales Tax Revenue (1999-2012)

Sources: Arkansas Legislative Audit, U.S. Census Bureau and U.S. Department of Labor.

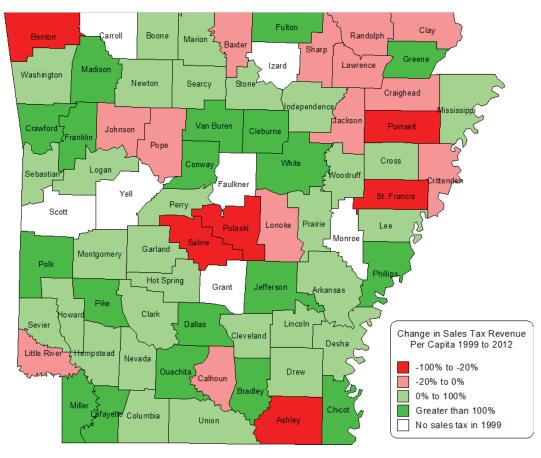


Figure 4. Change in Per Capita County Government Sales Tax Revenue (1999- 2012)

Sources: Arkansas Legislative Audit, U.S. Census Bureau and U.S. Department of Labor.

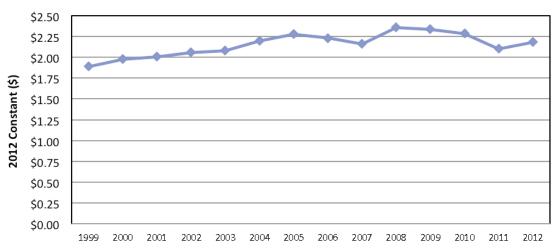
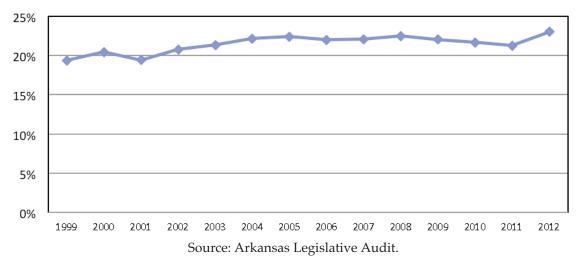


Figure 5. County Government Sales Tax Revenue Per \$1,000 of Personal Income (1999-2012)

Sources: Arkansas Legislative Audit, U.S. Department of Labor and Bureau of Economic Analysis.

Figure 6. Sales Tax Revenue as Share of Total County Revenue (1999-2012)



## **County Classifications**

To gain even more insight into the importance of sales tax revenue for Arkansas county governments, it is helpful to observe differences among counties, regions and economic classifications. The first classification system used compares metro and non-metro counties as defined by the U.S. Census Bureau in 1999. Using this classification system, Arkansas contains 13 metro or urban counties and 62 non-metro or rural counties. To compare further, the rural counties are divided into three separate geographic categories: the Coastal Plains, Delta and Highlands. Figure 7 illustrates the regional breakdowns.

In addition to comparing among regions of the state, we use the Economic Research Service economic dependence classification scheme to determine if there are differences by type of economic activity. According to this scheme, each county is classified into one of six economic dependency categories:

- 1. Farming-dependent,
- 2. Mining-dependent,
- 3. Manufacturing-dependent,
- 4. Federal/state government-dependent,
- 5. Services-dependent, or
- 6. Non-specialized.

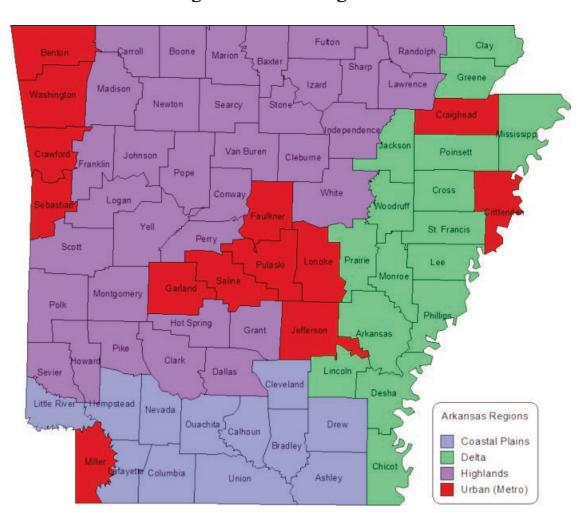


Figure 7. Arkansas Regions

Source: Cooperative Extension Service (Rural Profile of Arkansas).

Thirty counties are classified as manufacturing-dependent, 21 counties are nonspecialized and 17 counties are farming-dependent (Figure 8). Only four counties

are classified as federal/state government-dependent and three as service-dependent. No county in Arkansas is classified as mining-dependent.

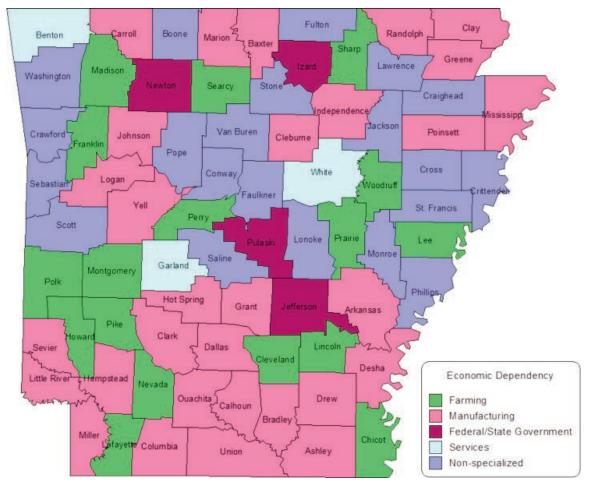


Figure 8. Economic Dependence

Source: USDA Economic Research Service.

## **Urban Versus Rural Sales Tax Revenue**

#### Metro vs. Non-Metro Sales Tax Revenue

Non-metro regions saw a greater increase in sales tax revenue than metro regions over the course of the study. Sales tax revenue in non-metro counties increased 58% from \$90 million in 1999 to \$143 million in 2012, while revenue in metro counties increased 42% from \$61 million to \$86 million during this period.

## Metro vs. Non-Metro Per Capita Sales Tax Revenue

Non-metro counties generated considerably more revenue per capita from the sales tax than metro counties during the 13-year period. In 2012, for example, non-metro counties had per capita sales tax revenue of \$113 while metro counties generated less than half this amount, \$51. In addition, non-metro counties saw a much greater increase in sales tax revenue per capita from 1999 to 2012 as compared to metro counties: 58% vs. 17%.

### Metro vs. Non-Metro Sales Tax Revenue Per \$1,000 of Personal Income

Non-metro counties also generated more sales tax revenue per \$1,000 of personal income than metro counties. For instance, in 2012 non-metro counties had average sales tax revenue per \$1,000 of personal income of \$3.60 as compared to only \$1.32 in metro counties. Additionally, sales tax revenue per \$1,000 of personal income increased more in non-metro than in metro counties during the period 1999-2012. Non-metro counties saw an increase of 34% compared to an increase of only 1% in metro counties.

#### Relative Importance of Sales Tax Revenue

The sales tax generated a larger share of total county government revenue in non-metro compared to metro counties for the majority of the 13-year period. Sales tax revenue as a share of total revenue increased from 21% in 1999 to 27% in 2012 in non-metro counties, a six percentage point change, while in metro counties it rose from approximately 17% to 19%, a two percentage point change.

## Regional Comparisons of Sales Tax Revenue

## **Total Regional Sales Tax Revenue**

Sales tax revenue increased in all four regional classifications from 1999 to 2012 (Figure 9). The greatest increase occurred in the Highlands (88%) and was followed by the increase in Urban counties (42%), the Delta (39%) and the Coastal Plains (25%).

The two regions with the most sales tax revenue, the Urban and Highlands regions, experienced the largest declines in sales tax revenue resulting from the 2007-2008 economic recession. From 2008 to 2012, sales tax revenue declined by 7.5% in the Urban region and 6% in the Highlands.

#### Per Capita Regional Sales Tax Revenue

On a per capita basis, all three rural regions generated more revenue from the sales tax than the Urban region for the entire 13-year period. In 2012, the Coastal Plains generated the most (\$161), followed by the Highlands (\$107) and the Delta (\$95). The Urban region generated only \$51 per capita from the sales tax.

The regions experienced varying changes in per capita sales tax revenue from 1999 to 2012. The Highlands region saw the greatest increase,

76% from \$61 in 1999 to \$107 in 2012. For Urban counties on the other hand, sales tax revenue increased only 17% during the same period: from \$44 to \$51. The Delta and Coastal Plains regions saw per capita sales tax revenue increase 53% and 36%, respectively. Figure 10 illustrates these trends.

Although the Highlands experienced the largest percent increase in per capita revenue for the sales tax, the Coastal Plains still generated substantially more sales tax revenue per person than any other region. The Urban counties generated the least revenue per person from the sales tax, and the growth in this revenue source per person was the slowest among all regions.

# Regional Sales Tax Revenue Per \$1,000 of Personal Income

Total sales tax revenue per \$1,000 of personal income followed a fairly similar trend among the four Arkansas regions during the 13-year period (Figure 11). The rural regions received more sales tax revenue per \$1,000 of personal income and experienced larger percentage growth in this source of revenue compared to the Urban region from 1999 to 2012.

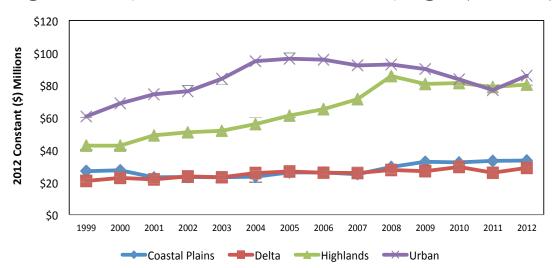


Figure 9. County Government Sales Tax Revenue by Region (1999-2012)

Sources: Arkansas Legislative Audit and U.S. Department of Labor.

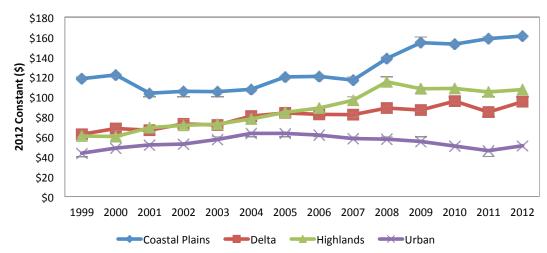


Figure 10. Per Capita County Government Sales Tax Revenue by Region (1999-2012)

Sources: Arkansas Legislative Audit, U.S. Census Bureau and U.S. Department of Labor.

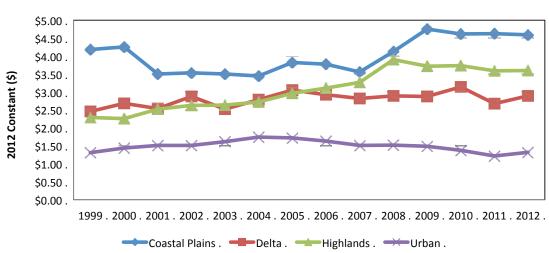


Figure 11. County Government Sales Tax Revenue Per \$1,000 of Personal Income by Region (1999-2012)

Sources: Arkansas Legislative Audit, U.S. Department of Labor and Bureau of Economic Analysis.

In the Highlands, county sales tax revenue per \$1,000 of personal income rose 57%: from \$2.26 in 1999 to \$3.59 in 2012. This was followed by increases of 18% in the Delta, 10% in the Coastal Plains and 1% in the Urban region.

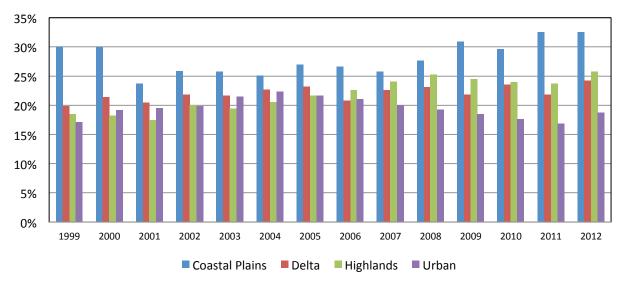
In 2012, sales tax revenue per \$1,000 of personal income ranged from a high of \$4.59 in the Coastal Plains to a low of \$1.32 in the Urban region. The Highlands and the Delta regions generated \$3.59 and \$2.89 of sales tax revenue per \$1,000 of personal income, respectively.

#### Relative Importance of Sales Tax Revenue

In the 14 years of the study, sales tax revenue as a share of total county government revenue was larger in the Coastal Plains than in any other region of the state (Figure 12). In 2012 the share of county government revenue generated by the sales tax ranged from a high of 33% in the Coastal Plains to a low of 19% in the Urban region. The Highlands and the Delta received 26% and 24% of their revenue from the sales tax, respectively.

During the 13-year period, every region saw an increase in sales tax revenue as a share of total revenue, although the magnitude of increase varied. The Urban region increased the least from 1999 to 2012, only two percentage points from 17% to 19%, while the Highlands increased the most, eight percentage points from 18% to 26%. The Delta and Coastal Plains increased by four and three percentage points, respectively.

Figure 12. Sales Tax Revenue as Share of Total County Government Revenue by Region (1999-2012)



Source: Arkansas Legislative Audit.

## Sales Tax Revenue by Economic Dependence

# Total Sales Tax Revenue by Economic Dependence

From 1999 to 2012, all economic dependency classifications saw an increase in sales tax revenue (Figure 13). Farming-dependent counties saw the greatest increase at 118%. This was followed by a 59% increase in the nonspecialized counties, a 58% increase in the services-dependent counties, a 42% increase in the manufacturing-dependent counties and only an 18% increase in federal/state government-dependent counties.

# Per Capita Sales Tax Revenue by Economic Dependence

There was a wide range in the amount of sales tax revenue generated per capita among the different economic dependency groupings. In 2012, the farming- and manufacturing-dependent counties generated the most sales tax revenue per capita, \$118 and \$107, respectively. The services- and non-specialized-dependent counties generated \$77 and \$63 per capita while the federal/state government-dependent counties generated the least at \$39 per capita.

All five economic dependency groups saw an increase in per capita sales tax revenue during the 13-year period (Figure 14). The increase was greatest in farming-dependent counties – 126% from \$52 in 1999 to \$118 in 2012. Manufacturing counties experienced an increase of 40% and non-specialized counties an increase of 33% during the same period. Finally, services and federal/state government-dependent counties experienced increases of only 17% and 13%, respectively.

#### Sales Tax Revenue Per \$1,000 of Personal Income by Economic Dependence

There was a wide range in sales tax revenue generated per \$1,000 of personal income among the five economic dependency groupings. In 2012, farming-dependent counties had the highest sales tax revenue per \$1,000 of personal income of \$4.08 compared to only \$0.91 for federal/state government-dependent counties. Manufacturing, services and non-specialized counties were between these two extremes, generating revenue of \$3.16, \$2.10 and \$1.88 per \$1,000 of personal income, respectively.

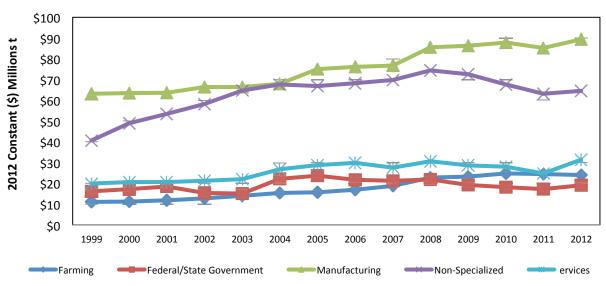


Figure 13. County Government Sales Tax Revenue by Economic Dependence (1999-2012)

Sources: Arkansas Legislative Audit and U.S. Department of Labor.

Only four of the five economic dependency groups saw an increase in sales tax revenue per \$1,000 of personal income during the 13-year period (Figure 15). The increase was greatest in farming-dependent counties, 101%. Manufacturing-dependent and non-specialized counties also saw increases of 17% and 12% respectively. Services-dependent counties experienced only a 2% increase, and federal/state government-dependent counties saw a decline of 3% during this period.

#### Relative Importance of Sales Tax Revenue by Economic Dependence

In 2012, the share of county government revenue coming from the sales tax was similar in four of the five economic dependency groupings. All of the economic dependency groupings except federal/state government-dependent counties generated between 22% and 27% of their revenue from the sales tax, while federal/state government-dependent counties

\$140 \$120 \$100 2012 Constant (\$) \$80 \$60 \$40 \$20 \$0 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 Farming Federal/State Government Manufacturing Non-Specialized

Figure 14. Per Capita County Government Sales Tax Revenue by Economic Dependence (1999-2012)

Sources: Arkansas Legislative Audit, U.S. Census Bureau and U.S. Department of Labor.

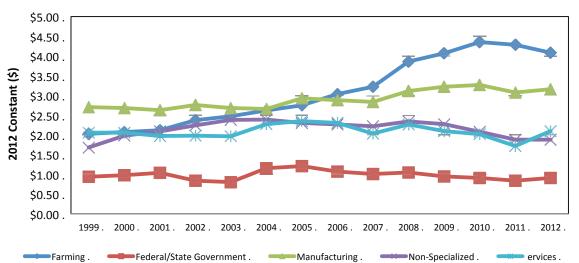


Figure 15. County Government Sales Tax Revenue Per \$1,000 of Personal Income by Economic Dependence (1999-2012)

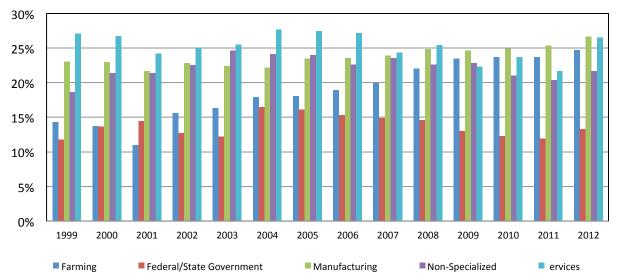
Sources: Arkansas Legislative Audit, U.S. Department of Labor and Bureau of Economic Analysis.

raised only 13% of their revenue from the sales tax in the same year.

Over the period 1999-2012, the relative importance of sales tax revenue increased in all economic dependency groupings except in

service-dependent counties (Figure 16). The increase was greatest in farming-dependent counties, which increased from 14% in 1999 to 25% in 2012. Service-dependent counties decreased by half a percentage point, from 27% to 26.5%.

Figure 16. Sales Tax Revenue as a Share of Total County Government Revenue by Economic Dependence (1999-2012)



Source: Arkansas Legislative Audit.

## **Sales Tax Capacity and Effort**

In an effort to estimate the ability of county governments to raise local revenue, sales tax capacity and effort have been analyzed for the year 2012 (Figure 17).

- Capacity refers to the county's tax base as measured by per capita retail sales.
   Counties that had per capita retail sales greater than the state average (\$13,305) in 2012 were considered to have high capacity. All other counties were considered to have low capacity.
- by the county sales tax rate, as measured by the county sales tax rate. Counties that had a county sales tax rate greater than the average for all Arkansas counties (1.46%) in 2012 were considered to be

high-effort counties. All other counties were considered to be low-effort counties.

Once measured, these two figures can be used together to determine how much sales tax revenue counties are raising compared to the amount they could possibly raise.

Of particular interest are the counties which have a low capacity and high effort. These counties, represented by stripes in the map below, cannot generate much additional revenue from the sales tax. A total of 35 counties, nearly half of all 75 counties in the state, were considered to be "low capacity/high effort" counties in 2012. All but one of the 35 counties are in rural (nonmetro) regions, which suggests that many rural counties do not have the potential to raise much additional revenue from the sales tax.

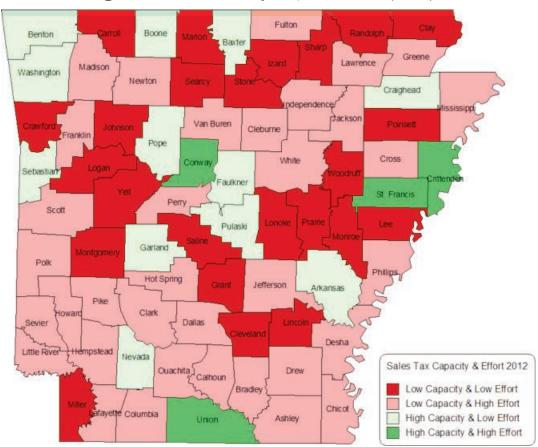


Figure 17. Sales Tax Capacity and Effort (2012)

Sources: Arkansas Department of Finance and Administration, U.S. Census Bureau and Woods & Poole Economics 2014 State Profile.

## **Summary**

The amount of sales tax revenue generated, growth of this revenue source and reliance on the sales tax as a source of revenue for county governments in Arkansas varied greatly among counties, regions and economic dependency classifications.

Although county government sales tax revenue grew by 52% from 1999 to 2012, there was considerable variation in revenue growth among counties, regions and economic classifications. County government sales tax revenue change ranged from a decline of 100% in Saline County to increases of more than 100% in others. Six counties did not have a sales tax in 1999 compared to only two counties in 2012. The Highlands region experienced the largest growth in sales tax revenue during this period (88%) while other regions saw their revenue grow from 25% in the Coastal Plains to 42% in the Urban region. Farming-dependent counties saw their revenue from the sales tax grow 118% during this period, the largest increase of any county grouping.

Statewide, the sales tax generated 23% of county government revenue in 2012. This varied greatly among counties, from 0% in Monroe and Saline counties to 49% in Drew and Hempstead counties. Rural county governments generated a larger share of their revenue from the sales tax (27%) compared to Urban counties (19%) in 2012. As the sales tax revenue increased during this

13-year period so did the share of total county government revenue generated by the sales tax, from 19% in 1999 to 23% in 2012.

The per capita sales tax revenue collected by county governments also increased during this 13-year period, from \$57 to \$77. Again, the increase was greater for Rural compared to Urban counties.

One indicator of the sales tax burden, sales tax revenue collected per \$1,000 of personal income, increased slightly during this period, from \$1.89 to \$2.19. All four regions saw an increase in this indicator with the Highlands increasing the most at 57%.

The sales tax revenue received by county governments was greatly affected by the 2007-2008 economic recession. Sales tax revenue declined by \$20 million from 2008 to 2011, a 9% decrease. This volatility of sales tax revenue and the heavy reliance on the sales tax by many county governments, especially in rural regions of the state, makes it difficult for counties to maintain the infrastructure and services demanded by local businesses and residents.

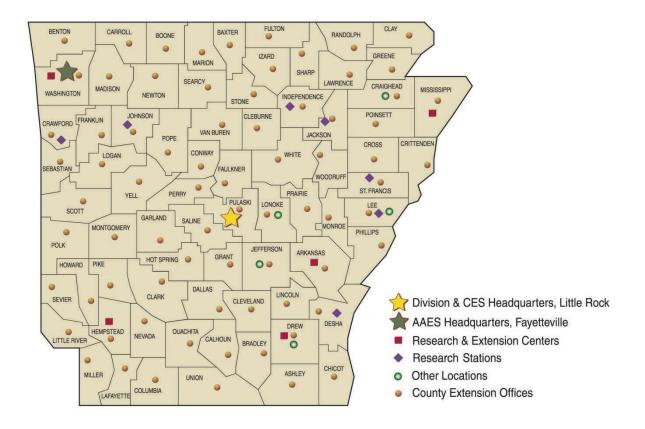
Despite a drop from 2008 to 2011, sales tax revenue grew over the 13-year period and was the second largest source of county government revenue in 2012.



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