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# Educational Spending: Kentucky vs. Other States

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SCHOOL CHOICE

# ISSUES

IN THE STATE

## Educational Spending: Kentucky vs. Other States



### **School Choice for Kentucky:**

Many agree with the concept. Some disagree. And some simply want more information. As the public debate continues to grow about how best to provide a quality education to all Kentucky children, it is important to know the facts about parent choice, and how parent choice programs have had an impact on communities, parents and students around the country. All of this analysis is done with one goal in mind: The best possible education for all of Kentucky's children.

Prepared By:

Dr. William H. Hoyt

Dr. Christopher Jepsen

Dr. Kenneth R. Troske

December 2008

A MESSAGE FROM THE FRIEDMAN FOUNDATION:

## OUR CHALLENGE TO YOU

Our research adheres to the highest standards of scientific rigor. We know that one reason the school choice movement has achieved such great success is because the empirical evidence really does show that school choice works. More and more people are dropping their opposition to school choice as they become familiar with the large body of high-quality scientific studies that supports it. Having racked up a steady record of success through good science, why would we sabotage our credibility with junk science?

This is our answer to those who say we can't produce credible research because we aren't neutral about school choice. Some people think that good science can only be produced by researchers who have no opinions about the things they study. Like robots, these neutral researchers are supposed to carry out their analyses without actually thinking or caring about the subjects they study.

But what's the point of doing science in the first place if we're never allowed to come to any conclusions? Why would we want to stay neutral when some policies are solidly proven to work, and others are proven to fail?

That's why it's foolish to dismiss all the studies showing that school choice works on grounds that they were conducted by researchers who think that school choice works. If we take that approach, we would have to dismiss all the studies showing that smoking causes cancer, because all of them were conducted by researchers who think that smoking causes cancer. We would end up rejecting all science across the board.

The sensible approach is to accept studies that follow sound scientific methods, and reject those that don't. Science produces reliable empirical information, not because scientists are devoid of opinions and motives, but because the rigorous procedural rules of science prevent the researchers' opinions and motives from determining their results. If research adheres to scientific standards, its results can be relied upon no matter who conducted it. If not, then the biases of the researcher do become relevant, because lack of scientific rigor opens the door for those biases to affect the results.

So if you're skeptical about our research on school choice, this is our challenge to you: prove us wrong. Judge our work by scientific standards and see how it measures up. If you can find anything in our work that doesn't follow sound empirical methods, by all means say so. We welcome any and all scientific critique of our work. But if you can't find anything scientifically wrong with it, don't complain that our findings can't be true just because we're not neutral. That may make a good sound bite, but what lurks behind it is a flat rejection of science.

# Educational Spending: Kentucky vs. Other States

Prepared By:

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SOLUTIONS





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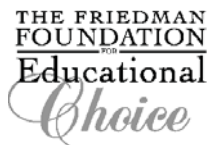
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# Friedman Foundation for Educational Choice



The Friedman Foundation for Educational Choice, dubbed "the nation's leading voucher advocates" by the Wall Street Journal, is a nonprofit organization established in 1996. The origins of the foundation lie in the Friedmans' long-standing concern about the serious deficiencies in America's elementary and secondary public schools. The best way to improve the quality of education, they believe, is to enable all parents with the freedom to choose the schools that their children attend. The Friedman Foundation builds upon this vision, clarifies its meaning to the public and amplifies the national call for true education reform through school choice.

# Bluegrass Institute



The Bluegrass Institute is a research and educational institution offering free-market solutions to Kentucky's most pressing problems. Our mission is to collaborate with supportive partners and leverage resources toward helping Kentuckians regain their freedom.

# Center for Business and Economic Research



The Center for Business and Economic Research (CBER) is the applied business and economic research branch of the Gatton College of Business and Economics. Housed within the Department of Economics, CBER has a long history of conducting applied economic studies and is the leading source of information on the Kentucky economy. CBER conducts applied business and economic research projects, serves as an expert on business and economic data and information on Kentucky, and provides economic and public policy information to interested persons, government agencies, businesses, and media across the Commonwealth.

# Acknowledgements

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# Executive Summary

The passage of the Kentucky Educational Reform Act (KERA) in 1990 had a dramatic impact on the funding of primary and secondary education in the state. The amount of money spent on education increased significantly with the passage of KERA with districts in rural areas of the state experiencing the largest growth in spending (Hoyt, 1999). This has led to a decline in the disparity between rural and urban districts in education spending. However, despite the increase in educational spending, Kentucky still lags behind the typical state in the U.S. in spending per student (Troske, 2008).

Although several studies examine the impact that KERA had on the level of spending, very little work has been done on the impact of KERA and on how the increase in education money is being spent. What evidence there is suggests that KERA may have impacted the allocation of education dollars in Kentucky. In 1996 Kentucky had the lowest ratio of teachers relative to total public school staff of any state in the country, so Kentucky appears to be spending a much larger share of its educational budget on administrative staff compared to other states (Hoyt, 1999). In addition, the share of money spent on teachers appears to have increased after KERA, particularly in rural areas which tend to receive a larger portion of their funding from the state (Hoyt, 1999). In Kentucky state dollars make up a much larger share of a district's educational budget than in other states, and this lack of control over funding could lead to less efficient uses of resources.

Additional spending on administration can be positive as long as this spending results in better administered schools that produce better educational outcomes. There is an optimal level of administration for any school or district, and spending by many districts beyond this optimal level may explain why many studies find that additional spending on education has very little impact on school performance.

This report is the first in a series of two examining how educational budgets are allocated in Kentucky and whether differences in how money is spent affect educational outcomes. In this report we focus on how education dollars are spent in Kentucky, how spending has changed over time, and how spending in Kentucky compares with spending in other states. In a companion report "Education Outcomes: Kentucky vs Other States" we examine how differences in educational spending affect educational outcomes such as standardized test scores and graduation rates.

When examining educational spending in Kentucky we divide the state up into different geographic areas and examine how spending differs by area. We look at spending separately by metropolitan and non-metropolitan areas since education spending in metropolitan areas has traditionally been higher than spending in non-metropolitan areas (see Figure 1.3). We also divide that state up into four regions: North, South, East and West, and examine spending separately by region (see Figure 1.2).

We also compare education spending in Kentucky with the average spending in all states in the United States as well as spending in other states in the South-Central Census Region. We focus on states in the South-Central Census Region because these are states that Kentucky is traditionally compared with when discussing issues such as taxes, economic development and education spending. In addition to Kentucky, the states in the South-Central Census Region are: Alabama, Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee and Texas.

## Our main findings are:

- Despite the increase in educational spending that occurred with KERA, Kentucky still lags behind the average U.S. state in current expenditures per student. However, the gap between Kentucky and other states in per-student current expenditures has narrowed from \$2,199 in 1987 to \$1,092 in 2006.
- Since KERA, Kentucky has surpassed all other states in the South-Central region in current expenditures per student. In 1987 Kentucky ranked 5<sup>th</sup> in current expenditures per students among the eight states in the region, but by 2006 Kentucky had the highest expenditures per student in the region.
- KERA has led to a significant decline in differences in educational spending across regions in the Commonwealth. The gap in current expenditures per student between metropolitan and non-metropolitan districts fell from \$600 in 1987 to \$10 in 2006. Over this same time period districts in the Eastern part of the state went from having the lowest level of current expenditures per student to having the highest expenditures per student.
- While KERA has led to greater uniformity in expenditures per student in the state, the sources of revenue continue to differ dramatically across areas of the Commonwealth. In 2006 districts in metropolitan areas received 40% of their

revenue from local sources (property taxes) with the remaining revenue coming from the state (50%) and the federal government (10%). At the same time non-metropolitan districts received only 20% of their revenue from local sources with 66% of their revenue coming from the state and 13% coming from the federal government. For school districts in the Eastern part of Kentucky only 17% of their revenue is collected locally, while for districts in the Northern part of the state 42% of revenue comes from local sources.

- Between 1987 and 2006 the share of revenue coming from local sources increased in Kentucky while the share of local revenue decreased on average in the U.S.. However, there still remains a significant difference in revenue sources between Kentucky and the average state. In 2006 the average percent of revenue from local sources in the U.S. was 42.8% while in Kentucky the percent of revenue from local sources was 31.1%. Among South Central States only districts in Alabama and Mississippi receive a smaller share of local revenue, and districts in Louisiana, Tennessee and Texas all receive a significantly larger share of local revenue.
- How Kentucky allocates its money on education is quite similar to the average state in the country with approximately 50% of current expenditures going to instruction and 7% to administration. Compensation has a larger share of total expenditures in Kentucky with 70 – 80% of total expenditures going to salaries and benefits in contrast to 69 – 73 % for the average state over the period 1989 – 2006.
- In 1987 Kentucky's pupil-teacher ratio was 18.6 compared to the U.S. average of 17.4. By 1998 both the U.S. and Kentucky average was 16.5. However, since then the U.S average has decreased at a much faster rate; in 2006, the U.S. average was equal to 15.2 and the Kentucky average was 16.0.

In the end, while per-pupil spending in Kentucky has risen since the passage of KERA, the main effect of KERA appears to be on differences in education spending across regions of the state and on the sources of educational revenue for districts in different parts of the state. Since 1990 differences in educational spending per pupil between urban and rural areas of the state have all but disappeared. At the same time there is a growing disparity in the sources of funding with urban districts now obtaining over 40% of their funding from local taxes while rural districts obtain only around 20% of their funding from local sources. And while districts in all areas of the Commonwealth tend to devote a similar share of spending to the various functions, it is still possible that the lower level of local control over districts in rural areas of Kentucky could impact educational outcomes in these districts. In our subsequent report we examine how differences in the sources of education funding affect outcomes.



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## Introduction

The passage of the Kentucky Education Reform Act (KERA) in 1990 resulted in dramatic changes in the funding of primary and secondary education in Kentucky. The amount of money spent on education increased after KERA, with rural districts in particular experiencing substantial increases in spending (Hoyt, 1999). Funding disparities between districts were also reduced. However, Kentucky has not caught up with its northern neighboring states in terms of education spending (Troske, 2008) despite the fact that education spending is the largest component of the state budget.

Because the education budget in Kentucky is not transparent, there is much concern over how the increased funding is being spent. Hoyt (1999) found that, following the implementation of KERA, Kentucky has the lowest percentage of teachers as a share of total public school staff. In other words, Kentucky seems to spend a much larger share of its educational budget on administrative staff. More recently, Kentucky's allocation of educational dollars has mirrored the allocations in most other states, particularly its neighbors in the Southeast.

Revenue for primary and secondary education comes from all three levels of government: federal, state, and local (school district) with the bulk of spending coming from the state and local governments. Kentucky has a much greater share of its revenue coming from the state and a smaller share from local sources than most states. This greater centralization suggests less local control of funding and, as a result, the possibility of less efficient uses of funding.

## Objectives

In this report, the first of two on primary and secondary education in Kentucky, we document how primary and secondary education budgets are allocated within school districts in Kentucky. In addition, we compare the allocation of education spending in Kentucky to the allocations in other states. We also investigate the relationship between the level of centralization of educational spending within a state and the allocation of that state's education budget. In our second report on Kentucky education. We will examine the impact that educational spending has on educational performance, specifically graduation rates and standardized test scores.

This report focuses on recent trends in educational spending in Kentucky with a particular interest in differences in spending patterns and distribution before and after the implementation of KERA. As the primary purpose of KERA was to address inequities in both funding and performance across districts in Kentucky, much of our analysis focuses on differences in educational spending levels and patterns among the regions of Kentucky as well as differences in metropolitan and non-metropolitan districts.

## A Brief Summary of the Kentucky Educational Reform Act (KERA)<sup>1</sup>

KERA (House Bill 940) was not simply a change in the financing of primary and secondary education, although it radically altered the financing of education in Kentucky. KERA integrated school finance reform with reforms in curriculum and school governance. Instead of simply providing additional funds to local school districts, KERA provided a dramatically expanded role for the Commonwealth in mandating curricula, evaluating school performance, and placing restrictions on district employment and compensation. Broadly, then, we might classify reforms in three categories: curriculum, governance, and finance. Here, we briefly summarize its impact on finances; for a discussion of its impact on curriculum and governance see Hoyt (1999).

Prior to KERA, Kentucky had extensive state funding assistance of local education through foundation grants and power equalization programs. However, local support varied dramatically. For example, the Kentucky Office of Education Accountability reported that in 1989-90, property wealth per pupil varied from \$39,138 to \$341,707; local equivalent mill rates<sup>2</sup> varied from \$0.229 to \$1.119; and local revenue per student varied from \$80 to \$3,716. The focus of KERA was to reduce these disparities in educational funding. To do so, a new funding program called Support Educational Excellence in Kentucky (SEEK) was established.

Under this program, districts are to receive a guaranteed level of revenue per student. In 1990-91 this base was \$2,305 per pupil and has gradually increased over time. This base is adjusted (increased) for at-risk children (measured by participation in federal school lunch programs), transportation, and special-needs students. Although the state guarantees this amount of revenue, the district must share in the financing by providing a minimum level of effort equivalent to \$0.30 per \$100 of property value. Then the adjusted base guarantee equals the base plus additional funding for at-risk children, transportation, and special-needs students, minus the local effort.

In addition to this uniform funding base, each district can increase its funding by up to 15% of the base while receiving state funding if its property value per student is less than 150% of the state average. If its property tax base is below this amount,

the state provides state funding to guarantee revenue equal to the amount collected on this property value. This is referred to as Tier I funding. Tier II funding allows districts to collect up to an additional 30% beyond the base and Tier I funding, but these districts will receive no matching state funds. This funding must also be approved by a vote of the electorate in the district. Finally, the state also provided a guaranteed annual minimum increase in state funds (8% in 1991-92 and 5% in 1991-92) and an annual maximum increase (25%).

In regard to its impact on finances, perhaps the most notable aspect of KERA was its requirement that local districts provide \$0.30 of funding for every \$100 of property value for education. As will be seen in the report, while both state and local revenues increased following KERA, the share of local revenues in total revenue increased significantly.

## Sources and Description of Data

Our data on both state and district level educational finances comes from a single source, the Common Core of Data (CCD) from the National Center of Educational Statistics at the Department of Education. Data at the district level (or, as we use it, at the regional level) within Kentucky is generally available from 1987 to 2005. Data at the state level is generally available from 1987 to 2006. The advantage of this time period is that in our analysis we can compare several years prior to KERA as well as a decade and a half following its implementation.

Part of our intent in preparing this report is examining how primary and secondary educational funding is spent in Kentucky and how these patterns of spending might be related to where the money comes from. To do this effectively, we need to consider specific categories of educational spending. The categories of spending on which we focus are relatively standard and ones on which data is readily available: current, instructional, administrative, compensation, capital, and construction. Current spending is defined to be all spending other than that on equipment, construction, property, community services, and debt financing. It includes spending on instruction, support services, and non-instructional services other than community services. It is a frequently-used measure of resources devoted to students that has the advantage of reflecting resources for current students and not obligations from past or future construction. Instructional spending includes teacher compensation, resources such as textbooks used in instruction, spending on extracurricular activities, and library staff and resources.

Administrative spending is the combination of the CCD categories of General Administration and School Administration. General administration includes compensation for school board staff and purchases of materials related to the operation of school board functions. School administration includes spending on school-level administrative staff including principals, office staff, and departmental chairs, as well as office supplies. Compensation includes both salary and benefits of all district employees. Capital outlays include both construction and property acquisitions. Construction includes all expenditures on renovation or construction of school facilities.

In addition to our measures of expenditures, we also disaggregate revenues by their source: federal, state, and local. Local revenues are funds collected by local governments, both the school district and other local agencies. These funds include property and other taxes as well as other revenues from sales or rental of school property and equipment. They do not include grants or transfers from higher-levels of government. State revenues are funds from the state government to the local educational association (school district) generally in the form of grants-in-aid, revenue in lieu of taxes, and payments on behalf of the school districts. Federal revenue is similarly defined—revenue from the federal government in the form of grants-in-aid to school districts.<sup>3</sup>

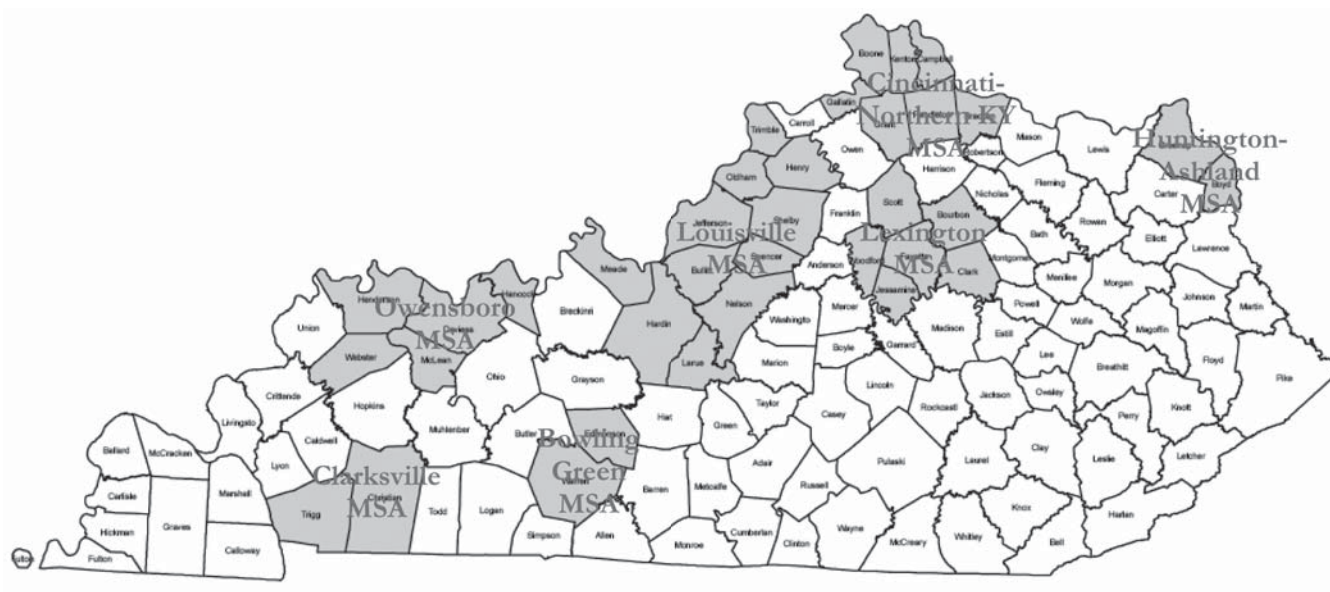
## Structure of Report

In *Section 2*, we examine trends in educational spending in Kentucky. Kentucky has 176 public school districts; 120 of them are county districts and fifty-six are independent. To make comparisons across the state and to better understand the distributional impacts of KERA, we divide the state into four regions: *North*, *East*, *South*, and *West*. *Figure 1.1* illustrates the school districts in the Commonwealth, while *Figure 1.2* shows the four regions of Kentucky with the Area Development Districts (ADDs) included in these regions as well. In addition to making comparisons among these regions, we also compare finances between the metropolitan and non-metropolitan districts in Kentucky which we loosely refer to as “urban” and “rural”. *Figure 1.3* illustrates the division of Kentucky into metropolitan and non-metropolitan counties.

In *Section 3* we compare trends in educational finance in Kentucky to other states. Again, we have two bases for comparisons. One is simply a comparison between Kentucky and the average of the rest of the states. The other comparison is between Kentucky and the other states in the South-Central Census Division. Included in this division are Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, and Texas.



FIGURE 1.3: METROPOLITAN REGIONS IN KENTUCKY



## Recent Trends in Educational Spending in Kentucky

We begin by examining trends in educational spending in Kentucky, focusing on any differences in these trends between metropolitan and non-metropolitan areas, which we loosely refer to as “urban” and “rural” and between four regions in which we have divided the Commonwealth – North, South, East, and West.

### Trends in Revenues

Table 2.1 lists average revenue per student by source (state, local, and federal) for all districts in the state, all metropolitan (MSA) districts, and all non-metropolitan (Non-MSA) districts. Throughout this report, all dollar amounts have been adjusted for inflation using the Consumer Price Index for Urban Consumers (CPI-U) and are reported in real 2006 dollars. As can be seen in the table, revenue per student from all sources has increased substantially from 1987 to 2006 for both metropolitan and non-metropolitan districts with the greatest change occurring in 1991 immediately following the passage of KERA. While both metropolitan and non-metropolitan revenue increased, the greatest changes that occurred in both state and local revenues for non-metropolitan districts are perhaps most striking. From 1987 to 2006, in non-metropolitan districts local revenue per student increased by 173.3% compared to 118.0% in metropolitan districts and state revenue per student increased by 71.0% in these districts compared to 45.0% in metropolitan districts. However as local revenue per student was substantially higher in metropolitan districts in 1987, the increase in local revenues was \$2,062 in metropolitan but only \$1,188 in non-metropolitan areas in Kentucky. In contrast, in 1987 state revenue per student was slightly higher (\$280) in non-metropolitan Kentucky than in metropolitan Kentucky while in 2006 it was \$1,329 higher in non-metropolitan areas.

In Figure 2.1 we illustrate trends for all three sources of state revenue for Kentucky. Reflecting our earlier discussion, there is very little change in the amount of federal revenue per student but substantial increases in both state and local revenue per student. State revenue increased sharply following KERA and leveled off in the late 1990’s and early 2000’s. In contrast, local revenue has seen steadier growth. Figure 2.2 illustrates the trend in local revenue per student for the Commonwealth (the line labeled “state”) as well as for metropolitan and for non-metropolitan areas in the Commonwealth.<sup>4</sup> While both metropolitan and non-metropolitan districts exhibit increasing real local revenue per student during this period, the figure shows that the rate of growth in the non-metropolitan regions slowed after 1998 while rate of growth in metropolitan districts continued at the same rate or perhaps even a faster rate after 1998.

Table 2.2 provides a breakdown of revenue per student for the four regions of Kentucky. Perhaps most interesting is the pronounced difference in the rate of growth in local revenue in the most rural regions of Kentucky (East, West, and South) and the more urban Northern region. Between 1987 and 2006 in the North, local revenue per student grew by 118% compared

to a growth rate of at least 142% during the same time period in the other regions in the state. The rate of growth in state revenue from 1987 to 2006 was also substantially greater in regions other than the North, with the East experiencing the greatest increase in state revenues.

As was the case with our comparison of metropolitan and non-metropolitan Kentucky, when we compare regions according to absolute growth in revenue per student we find the greatest growth in local revenue occurring in the North, the region with the highest initial level of local revenue. The North also had the smallest growth in state revenue per student. Whereas state revenue per student in 1987 was only about \$240 less in the North than the other regions, by 2006 it was almost \$1,000 less than in the West, \$1,200 less than in the South, and almost \$1,800 less than in the East. In contrast, in 2006 local revenue per student was almost \$2,500 more in the North compared with the East, over \$2,000 higher than in the South, and about \$1,700 higher than in the West. *Figure 2.3* illustrates the trends from 1987 to 2006 in local revenue per student for the four regions of the Commonwealth. Although we find that local revenue per student has steadily increased throughout the Commonwealth during this period, the rate of growth after 1998 decreased in all regions except the North, which led to an increased gap in local revenue between the Northern region and the rest of the Commonwealth.

## Trends in Spending

Given the substantial increases in revenue per student during the past twenty years in Kentucky, it should come as no surprise that expenditures per student have increased as well. What is of more interest is understanding and documenting how they changed – that is, where the money has gone. In *Table 2.3*, we list expenditure per student for all districts and for metropolitan and nonmetropolitan districts for the categories of current, instructional, administrative, capital, and other spending. As current spending is a standard measure of educational spending, it is useful to begin by examining the trends and differences in current spending among metropolitan and nonmetropolitan Kentucky. In 1987 metropolitan districts were spending \$590 more per student than non-metropolitan districts. By 2005 this difference had virtually disappeared with metropolitan districts spending only \$10 more per student. As we would expect, the greatest change in spending in both areas occurred between 1990 and 1992 with the implementation of KERA.

Perhaps more interesting are the changes in instructional spending. In 1987, nonmetropolitan districts lagged metropolitan districts in instructional spending by over \$500 or 18%. By 2005 instructional spending per student was almost \$200 higher in nonmetropolitan districts. In *Figure 2.4a* we can see that by 1994, current expenditures per student were essentially identical for metropolitan and nonmetropolitan Kentucky. A similar pattern is found in *Figure 2.4b* for instructional expenditures per student.

We report three other categories of spending: administrative, capital, and other. Data on administrative expenditures did not begin until 1990 so we obviously cannot track the growth in administrative spending prior to 1990. However, from 1990 to 2005 administrative spending per student increased by an average of 90.5% in the state, 81.6% in metropolitan Kentucky and 101.4% in nonmetropolitan Kentucky. During the same period, the average increase in current expenditures per student was 69.6% in the state, 58.9% in metropolitan Kentucky, and 82.1% in nonmetropolitan Kentucky. *Figure 2.4c* illustrates the dramatic increase in administrative spending, showing that much of it occurred from 1994 to 1995 in both metropolitan and nonmetropolitan Kentucky. The figure also shows that, like current and instructional spending, spending levels converged in the two areas of the state.

Even more pronounced were the changes in capital spending. While, as *Figure 2.4d* shows, capital spending fluctuates more than other forms of spending, from 1987 to 2005 it increased by an average of 429.8% in the state with a similar increase in metropolitan and nonmetropolitan areas. The figure there was a surge of capital spending throughout the Commonwealth in the mid 1990's followed by a slowdown and then another increase in 2004.

Discerning trends in expenditures in the “other” category is more difficult as prior to 1990 administrative expenditures were merged into this category. As a result it is more insightful to examine the trend from 1990, when administrative expenditures were reported separately. Here, too, the rate of growth has been substantial, though relatively uniform, throughout the state (see *Table 2.3*).

As can be seen in *Table 2.4* and *Figures 2.5a* through *2.5d*, the four regions of Kentucky experienced similar trends in spending. In the metropolitan North, the rate of growth in spending was smaller in all categories. As a consequence, after the mid 1990's spending patterns are similar throughout the state with the North and East spending the most per student. By 2005, current spending per student in the South (\$7,529) was almost \$600 less than it was in the East (\$8,122) and \$450 less than in the North (\$7,975). In 2005 average current spent per student in the West was \$7,793. In 2005, the difference in instructional

spending per student is less pronounced when the East spending \$200 more per student than in the North, approximately \$300 more than in the South and about \$150 more than in the West.

## A Summary of Trends in Kentucky Revenue and Spending

In the past twenty years, real educational spending in Kentucky has increased substantially. As federal revenue has remained relatively constant and is a small share of total revenue, this has also meant a substantial increase in state and local revenue. Spending has, for the most part, converged among metropolitan and nonmetropolitan Kentucky during this period, with this convergence occurring following the passage and implementation of KERA in the early- and mid-1990's. In addition to a convergence in spending levels, the similarity in spending trends in metropolitan and nonmetropolitan Kentucky indicates the degree of uniformity that KERA has imposed on spending patterns and local choices in education spending.

A somewhat different conclusion is arrived at when looking at regional differences in spending patterns. Here we find that in the nonmetropolitan East current and instructional spending is somewhat higher than in the metropolitan North and significantly higher than in the South. While there are differences in the levels, the trends in spending are still quite similar among the four regions.

In all regions, there were also changes in the mix of spending. Instructional spending did not increase as much as administrative, capital, or other spending in percentage terms although, as the largest single share of the budget, it had the greatest absolute increase. While capital and administrative spending did increase more than instructional spending in percentage terms, some caution should be taken in drawing conclusions from these changes as much less is spent on these functions, making small absolute changes in spending seem more significant in terms of percentage changes.

However, KERA did not lead to convergence in the sources of revenue among metropolitan and nonmetropolitan regions or between the metropolitan North and the less metropolitan East, South, and West. It did, however, significantly increase the local contribution of nonmetropolitan districts and actually lowered the percentage of funds coming from the state.

## How Does Kentucky Compare in Educational Finance?

In this section, we compare trends in primary and secondary revenues and expenditures in Kentucky during the past twenty years to other states in the U.S. We begin by comparing Kentucky to an average of all states in the U.S. Next we compare Kentucky to other states in the South-Central Census Region. In addition to Kentucky, this region includes Alabama, Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee and Texas.

### Comparisons to the Average of States

#### *Comparisons in Revenue*

*Table 3.1* shows revenue per student by source for all states as well as for Kentucky from 1988 to 2006. It also shows the share of state and local revenue for all states and Kentucky. *Figure 3.1* illustrates trends in state and local revenue shares from 1988 to 2006. During this period, the trend in Kentucky's sources of revenue was quite different from the average state. Specifically, local revenue as a share of total revenue declined by an average of 5.5% for all states but increased by 34.4% for Kentucky from 1988 to 2006. In contrast, while state revenue as a share of total revenue increased slightly for the average state, in Kentucky it decreased by 12.3% during this period. While most states moved away from local financing, Kentucky, primarily as a result of local funding requirements of \$0.30 per \$100 of property value in KERA—increased local revenue contributions.

#### *Comparisons in Expenditures*

*Tables 3.2a* and *3.2b* present a breakdown of expenditures for all states for the categories of total, current, instructional, capital, and construction expenditures and compensation per student and as a share of current expenditures or total expenditures. Real current spending per student increased by \$3,017 for the average state from 1987 to 2006, a 42.8% increase. For Kentucky, whose per-student expenditures are given per student in *Table 3.3a* and as share of total or current spending in *Table 3.3b*, current spending increased by \$4,124 or 85.0% during the same period, reducing the difference in current spending per student between Kentucky and the U.S. from \$2,199 in 1987 to \$1,092 in 2006. The increases in instructional spending in the U.S. and Kentucky, both in absolute and percentage terms, are closer, with the average state increasing instructional spending



by \$1,710 (39.1%) and Kentucky increasing it by \$1,792 (50.5%) from 1987 to 2006. For instructional spending Kentucky lagged the U.S. average by \$828 in 1987 and by \$747 in 2006 – a much smaller narrowing of the gap.

As shown in *Table 3.2b*, how spending is allocated has remained relatively unchanged for all states, with instructional spending as a percentage of total spending decreasing from 54.8% in 1989 to 52.4% in 2006 and administration spending decreasing as well from 7.9% in 1989 to 6.8% in 2006. Only construction, as a share of total expenditure, increased significantly during this period. Compensation has remained relatively steady. In contrast, in Kentucky instructional spending as a share of total expenditures has decreased significantly, from 56.6% in 1987 to 50.9% in 2006. Capital, as a share of total expenditures, has significantly increased, from 4.8% in 1989 to 11.1% in 2006. Construction went from almost nonexistent in 1989 to 8.0% of total expenditures in 2006.

*Figure 3.2* illustrates the trends in current and instructional spending for Kentucky and the U.S. The figure suggests a narrowing of the gap in both current and instructional spending from 1987 to 2001, although the gap diminished much more for current spending. From 2001 to 2006, the gap somewhat widened for both categories.

*Figure 3.3* compares administrative and capital spending per student. Kentucky is very similar in trend and level for administrative spending for most of this period. Both the U.S. and Kentucky saw dramatic increases in capital spending with the U.S. average being a more gradual increase, no doubt in part due to the fact that it is an average of all states' capital spending trends.

Finally, trends in compensation, as measured per student rather than per teacher, are illustrated in *Figure 3.4*. Here, as with instructional and current spending, there is a significant decrease in the gap between Kentucky and the U.S. from 1989 to 1997. In 2002, the gap widened somewhat but narrowed again in 2006.

### *Pupil-Teacher Ratios*

A frequent measure of primary and secondary educational inputs is the pupil-teacher ratio. Pupil-teacher ratios for the U.S. and Kentucky are reported in *Table 3.4* and graphed in *Figure 3.5*. As can be seen in *Figure 3.5*, Kentucky had a significantly higher pupil-teacher ratio than the U.S. (18.6 pupils per teacher in Kentucky compared to 17.4 in the U.S.) in 1987. For both the U.S. and Kentucky's rates decreased from 1987-2000 with Kentucky's declining steeply enough to match the national average by the end of that period. However, since 2000, while the pupil-teacher ratio in the U.S. continued to decline, the pupil-teacher ratio increased in Kentucky so that by 2006 there is again a gap in the ratio between Kentucky and the U.S. of 0.8 pupils per teacher.

## Comparisons with Central South States

In addition to comparing Kentucky to the U.S. average we also compare it to states in the Central-South Census division. While it is not obvious that this is the ideal set of states to which Kentucky should be compared, they have the advantage of being familiar to many in Kentucky having some similar economic and demographic conditions.

### *Comparisons of Revenue*

*Tables 3.5a* and *3.5b* report the share of total revenue from local, state, and federal sources from 1988 to 2006 for states in the South Central region. At the start of the period, Kentucky's local share was 23.2%, which was similar to the local share in Alabama (22.4%), Mississippi (24.5%), and Oklahoma (25.4%). However, the share of local revenue grew faster in Kentucky than in these other states, so that in 2006 Kentucky's share (31.1%) was equal to Oklahoma, slightly above Alabama (30.9%), and noticeably larger than Mississippi (28.3%). In contrast, throughout the period Tennessee and Texas relied on local revenue for more than 40% of total revenue. These trends can also be seen in *Figures 3.6a* and *3.6b*. All states except Arkansas experienced a decline in state revenue as a share of total revenue. In Alabama the share of state revenue remained relatively constant over this period. Kentucky, Arkansas, and Alabama had similar shares of federal funding at the start and end of the period, whereas Louisiana, Mississippi, Oklahoma, and Texas experienced dramatic increases in their share of federal funding.

### *Comparisons in Expenditures*

*Figures 3.7a* and *3.7b* document trends in current expenditures per pupil during the 1987 to 2006 period. Kentucky's current expenditures grew at a much faster pace than the other three East South Central states (Alabama, Mississippi, Tennessee). By 2006, Kentucky spent nearly \$1,000 more per pupil than each of the other three states. In that same year, Kentucky spent marginally more than the four West South Central states. Closer inspection of the trends in *Tables 3.6a* and *3.6b* show that in

1991, after the passage of KERA, Kentucky's expenditures were second only to Texas. In subsequent years, Kentucky continued to spend more than all of the states in the South Central region, including Texas.

This pattern of spending also holds for the different categories of expenditures. *Figures 3.8a* and *3.8b* illustrate the trend in instructional spending. Again, Kentucky spends much more than its three East South Central neighbors, and it spends slightly more than each of the four West South Central States. It is interesting to note that Texas actually decreased instructional expenditures starting in 2004, so that Arkansas is now the second-leading state in instructional spending.

*Figures 3.9a* and *3.9b* show that Kentucky also is a high-expenditure state with respect to administrative expenses. By 1993, the third year of KERA, Kentucky had the highest administrative expenditures per student and it remained the highest spending state in terms of administrative expenses until 2006, when spending in Alabama surpassed spending in Kentucky.

As shown in *Tables 3.6a* and *3.6b* and in *Figures 3.10a* and *3.10b*, Kentucky has relatively low expenditures on capital relative to its South Central neighbors. States varied dramatically in the amounts spent per pupil on capital expenditures. This variation reflects several factors such as the quality of the education capital stock, the rate of school-age population growth, and each state's attitudes and laws regarding school bonds.

### *Comparisons in Pupil-Teacher Ratios*

Section 3.1 illustrated that Kentucky had high pupil-teacher ratios in the late 1980's, but with the passage of KERA, Kentucky's averages have become similar to the national average. However, Kentucky's pupil-teacher ratio has grown relative to the national average in recent years.

*Table 3.7a* and *3.7b* compares Kentucky's pupil-teacher ratios to that of other South Central states with *Figure 3.11a* giving the trends in pupil-teacher ratios for the East South Central states and *Figure 3.11b* giving them for the West South Central states. At the start of the period, 1987, Kentucky's per-pupil ratio (18.6) was similar to its neighbors. Oklahoma had the smallest ratio (16.9) and Tennessee (19.9) had the largest. Kentucky remained similar to these other states until 2001, when the ratio increased by more than a student to 16.8. This increase gave Kentucky the largest ratio; Mississippi was second largest at 16.1. Kentucky had the highest pupil-teacher ratios in the South Central region for the next five years, although the ratios in Kentucky and Tennessee were both 16.0 in 2006. Thus, Kentucky has a higher pupil-teacher ratio than both its South Central neighbors and the nation as a whole.

## Conclusion

While per-pupil spending in Kentucky has risen since the passage of KERA, the main effect of KERA appears to be equalizing differences in education spending across regions of the state and equalizing the sources of educational revenue for districts in different parts of the state. Since 1990 differences in educational spending per pupil between urban and rural areas of the state have all but disappeared. While disparities in spending have equalized, differences in the sources of funding have not. Urban districts are now obtaining over 40% of their funding from local taxes while rural districts obtain only around 20% of their funding from local sources. Even though districts in all areas of the Commonwealth tend to have similar spending patterns, it is still possible that the lower level of local control over districts in rural areas of Kentucky could impact educational outcomes in these districts. In our subsequent report we will examine how differences in the sources of education funding affect outcomes.

Although local revenues now make up a much greater share of total revenue in Kentucky than before KERA, local revenues still compose a much smaller share of total revenue; 31.1% in Kentucky in 2006, compared to an average of 47.8% for the U.S. Total spending per student. Kentucky was still below the U.S. average by \$1,113 in 2006, but this amount is a significant reduction in the gap of \$3,471 that existed in 1989. In fact, in 2006 Kentucky had the highest current spending per student of any of the South-Central states. Even though Kentucky's level of spending may be somewhat higher than other states in the South-Central, its allocation of spending appears to be quite similar to the allocations in other South Central states.

**TABLE 2.1: REVENUE PER STUDENT BY SOURCE FOR STATE, METROPOLITAN (MSA), AND NONMETROPOLITAN (NON-MSA) AREAS WITHIN KENTUCKY**

Year	Local			State			Federal		
	State	MSA	Non-MSA	State	MSA	Non-	State	MSA	Non-MSA
1987	1,213	1,748	685	3,418	3,277	3,557			
1988	1,470	1,923	774	3,536	3,428	3,701	489	432	577
1989	1,499	1,998	780						
1990	1,329	1,899	750	3,096	3,005	3,188	508	401	616
1991	1,541	2,031	813	4,026	3,785	4,384			
1992	1,579	2,094	1,045	3,655	3,360	3,960	645	552	741
1993	1,810	2,305	1,084	4,361	4,087	4,763	618	551	717
1994	1,921	2,433	1,164	4,334	4,058	4,742	662	610	739
1995	2,020	2,556	1,443	4,588	4,179	5,029	647	529	774
1996	2,100	2,640	1,513	4,566	4,174	4,992	613	532	701
1997	2,233	2,815	1,602	4,752	4,304	5,239	682	563	811
1998	2,227	2,846	1,531	4,636	4,193	5,132	707	609	817
1999	2,327	2,919	1,657	4,915	4,433	5,462	722	597	863
2000	2,401	3,067	1,646	4,861	4,396	5,390	794	677	928
2001	2,475	3,184	1,665	4,954	4,447	5,533	810	686	952
2002	2,506	3,254	1,656	4,944	4,486	5,464	876	744	1,026
2003	2,550	3,310	1,675	5,060	4,521	5,682	878	679	1,107
2004	2,637	3,416	1,730	5,018	4,458	5,669	1,026	890	1,185
2005	2,723	3,501	1,809	5,070	4,487	5,756	1,050	918	1,204
2006	2,925	3,810	1,873	5,359	4,752	6,081	1,060	936	1,207

*Source: Authors' calculations based on Common Core of Data, U.S. Department of Education*

**TABLE 2.2: REVENUE PER STUDENT BY SOURCE FOR REGIONS OF KENTUCKY**

Year	Local				State				Federal			
	East	North	South	West	East	North	South	West	East	North	South	West
1987	652	1,860	775	887	3,514	3,275	3,512	3,540				
1988	721	2,104	841	1,109	3,749	3,395	3,658	3,564	647	418	512	470
1989	719	2,147	1,039	1,032								
1990	638	2,003	833	1,142	3,164	2,992	3,195	3,160	682	389	550	510
1991	728	2,221	946	1,056	4,540	3,720	4,328	4,039				
1992	913	2,211	1,160	1,340	4,081	3,343	3,849	3,631	817	554	661	607
1993	933	2,490	1,263	1,417	5,006	4,045	4,548	4,281	800	549	636	571
1994	1,006	2,626	1,361	1,492	5,019	4,001	4,523	4,270	829	618	622	624
1995	1,333	2,688	1,587	1,663	5,194	4,121	4,899	4,642	828	532	666	675
1996	1,344	2,779	1,626	1,841	5,208	4,117	4,843	4,567	814	528	618	551
1997	1,458	2,940	1,696	1,984	5,421	4,208	5,082	4,933	909	573	693	643
1998	1,352	2,975	1,642	1,976	5,396	4,094	4,892	4,830	913	607	710	698
1999	1,502	3,043	1,725	2,088	5,708	4,329	5,235	5,146	968	591	731	743
2000	1,443	3,196	1,763	2,160	5,632	4,286	5,176	5,102	1,044	679	779	798
2001	1,437	3,333	1,817	2,147	5,803	4,330	5,314	5,198	1,088	676	833	793
2002	1,422	3,421	1,816	2,133	5,724	4,380	5,247	5,162	1,176	733	895	854
2003	1,438	3,499	1,819	2,129	5,959	4,403	5,401	5,373	1,280	651	966	890
2004	1,471	3,625	1,884	2,158	5,954	4,334	5,368	5,371	1,378	888	1,012	971
2005	1,516	3,717	1,993	2,227	6,022	4,382	5,434	5,428	1,391	925	1,024	988
2006	1,579	4,064	2,017	2,359	6,333	4,650	5,831	5,640	1,373	948	1,041	998

*Source: Authors' calculations based on Common Core of Data, U.S. Department of Education*

**TABLE 2.3: EXPENDITURES PER STUDENT BY TYPE FOR STATE, METROPOLITAN (MSA), AND NONMETROPOLITAN (NON-MSA) AREAS WITHIN KENTUCKY**

Year	Current			Instructional			Administrative			Capital			Other		
	State	MSA	Non-MSA	State	MSA	Non-MSA	State	MSA	Non-MSA	State	MSA	Non-MSA	State	MSA	Non-MSA
1987	4,303	4,600	4,010	3,034	3,290	2,780				250	279	221	232	261	204
1988	4,684	5,020	4,169	3,341	3,596	2,950				253	273	221	278	305	238
1989	4,716	5,034	4,256	3,367	3,632	2,983				274	316	213	123	128	115
1990	4,657	4,973	4,335	2,806	3,007	2,602	323	344	302	227	243	211	112	122	101
1991	5,250	5,480	4,908	3,192	3,335	2,979				426	420	434	223	239	198
1992	5,154	5,275	5,027	2,988	3,107	2,865	376	385	366	304	293	316	133	147	119
1993	5,287	5,378	5,154	3,038	3,129	2,904	368	374	360	364	345	392	128	133	121
1994	5,453	5,549	5,312	3,147	3,243	3,005	383	392	369	352	336	375	135	145	121
1995	6,616	6,507	6,733	3,893	3,893	3,893	508	496	521	296	258	338	120	137	101
1996	6,698	6,629	6,774	3,959	3,939	3,980	530	529	531	831	936	717	149	155	142
1997	6,969	7,033	6,900	4,231	4,276	4,183	576	551	603	647	659	634	165	180	149
1998	6,800	6,837	6,759	4,068	4,039	4,101	582	557	611	769	840	689	155	171	136
1999	7,105	7,178	7,022	4,253	4,222	4,288	597	578	618	908	957	851	175	191	157
2000	7,238	7,311	7,155	4,364	4,370	4,359	617	604	632	958	1,066	836	197	217	174
2001	7,437	7,478	7,391	4,483	4,473	4,494	630	616	646	284	267	304	181	204	154
2002	7,748	7,905	7,569	4,683	4,737	4,620	647	627	669	263	239	291	172	189	152
2003	7,744	7,764	7,720	4,684	4,620	4,757	657	653	662	221	213	231	224	236	211
2004	7,832	7,933	7,714	4,604	4,605	4,603	635	632	639	844	724	983	216	227	204
2005	7,898	7,902	7,892	4,653	4,572	4,749	617	624	608	1,204	1,242	1,161	239	251	225

*Source: Authors' calculations based on Common Core of Data, U.S. Department of Education*

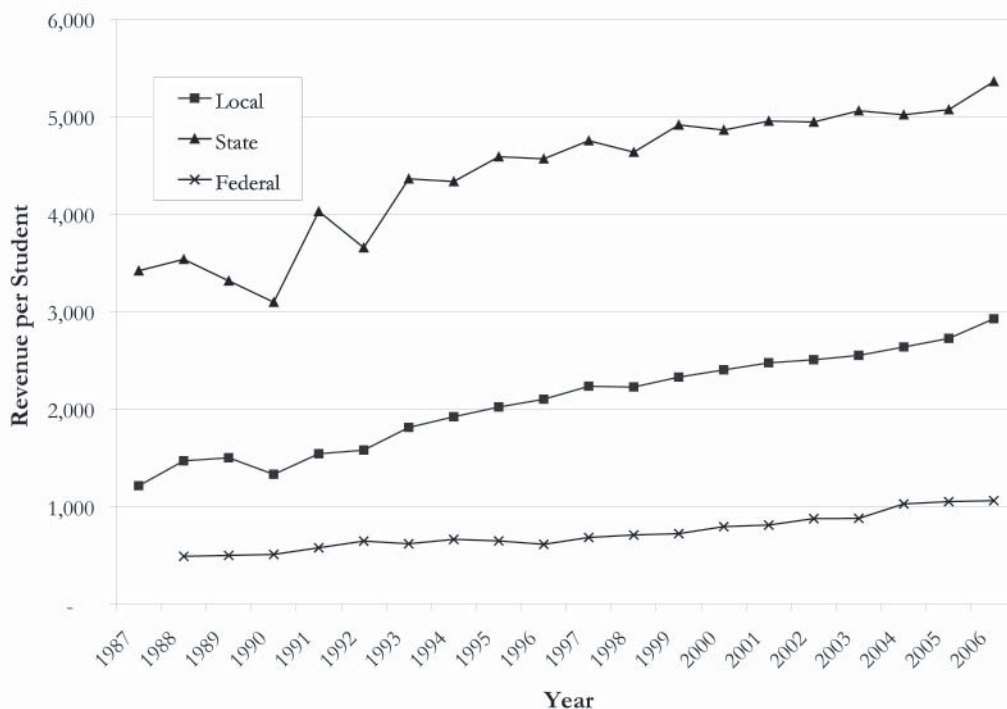
**TABLE 2.4: EXPENDITURES PER STUDENT BY TYPE OF EXPENDITURE FOR REGIONS OF KENTUCKY**

Year	Current				Instructional				Administrative				Capital				Other			
	East	North	South	West	East	North	South	West	East	North	South	West	East	North	South	West	East	North	South	West
1987	3,971	4,655	4,032	4,207	2,670	3,338	2,857	3,011					204	264	292	240	176	245	256	261
1988	4,162	5,125	4,292	4,392	2,912	3,684	3,036	3,146					203	270	282	240	242	277	379	234
1989	4,154	5,174	4,233	4,516	2,853	3,750	3,027	3,205					195	310	312	245	115	143	109	86
1990	4,319	5,050	4,302	4,513	2,559	3,060	2,602	2,731	306	348	289	320	211	234	230	230	100	138	89	86
1991	4,946	5,564	4,948	4,961	2,984	3,389	2,971	3,055					397	371	560	511	188	264	207	161
1992	5,083	5,358	4,946	4,928	2,858	3,162	2,856	2,859	380	390	351	356	273	315	337	283	116	160	115	108
1993	5,305	5,477	5,016	4,935	2,963	3,210	2,838	2,797	388	382	335	330	359	335	463	354	122	144	122	92
1994	5,568	5,651	5,050	5,101	3,112	3,322	2,893	2,908	407	402	336	341	357	313	424	388	123	156	126	93
1995	6,891	6,609	6,476	6,381	3,954	3,972	3,772	3,719	552	503	481	488	327	247	363	313	90	149	112	91
1996	6,991	6,678	6,559	6,479	4,098	3,996	3,851	3,769	551	526	546	492	731	1,011	722	593	129	169	142	131
1997	7,093	7,094	6,721	6,711	4,261	4,351	4,081	4,016	599	557	596	575	664	660	698	527	140	183	160	156
1998	6,943	6,859	6,507	6,766	4,170	4,064	3,921	4,106	611	569	562	606	693	908	516	767	126	176	147	143
1999	7,183	7,217	6,809	7,007	4,340	4,257	4,128	4,263	621	588	577	613	788	1,004	861	847	155	195	157	163
2000	7,329	7,371	6,831	7,192	4,403	4,421	4,162	4,381	657	616	579	608	806	1,061	877	969	164	229	169	181
2001	7,603	7,514	7,098	7,371	4,583	4,507	4,332	4,446	656	621	600	655	322	231	336	330	142	208	172	164
2002	7,768	7,995	7,311	7,500	4,682	4,791	4,490	4,590	666	645	623	654	305	225	285	295	136	179	210	152
2003	7,876	7,822	7,494	7,618	4,768	4,641	4,669	4,712	665	672	618	647	238	197	238	252	201	250	208	198
2004	7,936	8,019	7,356	7,688	4,659	4,646	4,445	4,592	634	644	591	665	925	651	1,110	997	194	235	213	193
2005	8,122	7,975	7,529	7,793	4,823	4,623	4,524	4,667	608	631	566	648	941	1,349	1,169	1,167	206	265	223	226

Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

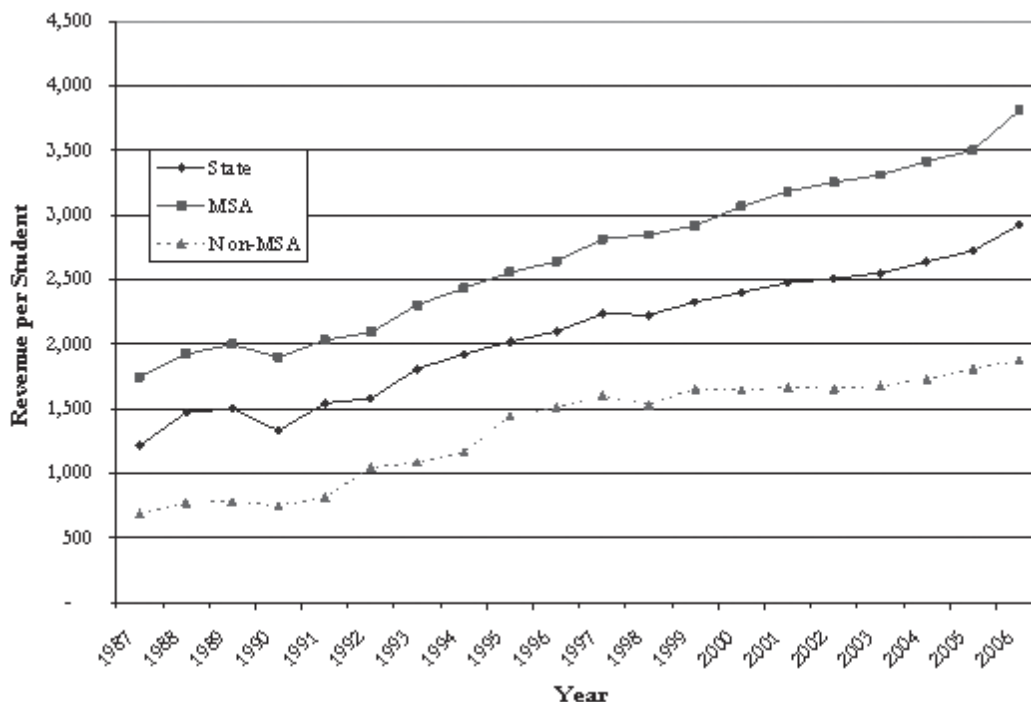
# Appendix

**FIGURE 2.1: REVENUE BY SOURCE FOR KENTUCKY SCHOOL DISTRICTS**



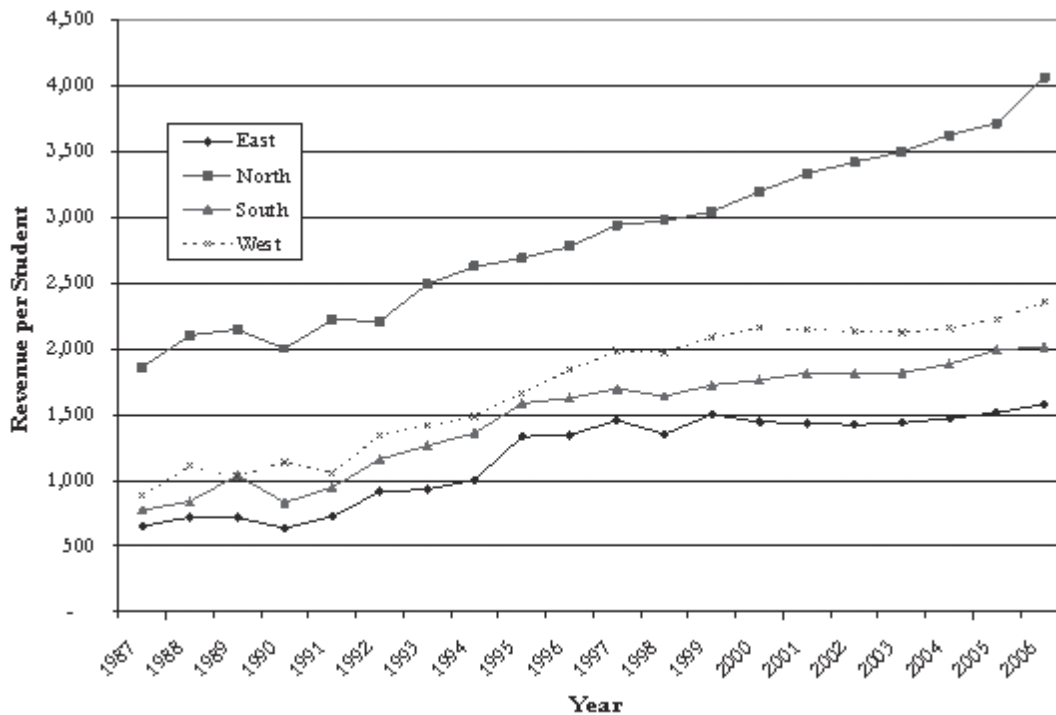
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

**FIGURE 2.2: LOCAL REVENUE PER STUDENT FOR STATE, METROPOLITAN (MSA), AND NONMETROPOLITAN (NON-MSA) AREAS WITHIN KENTUCKY**



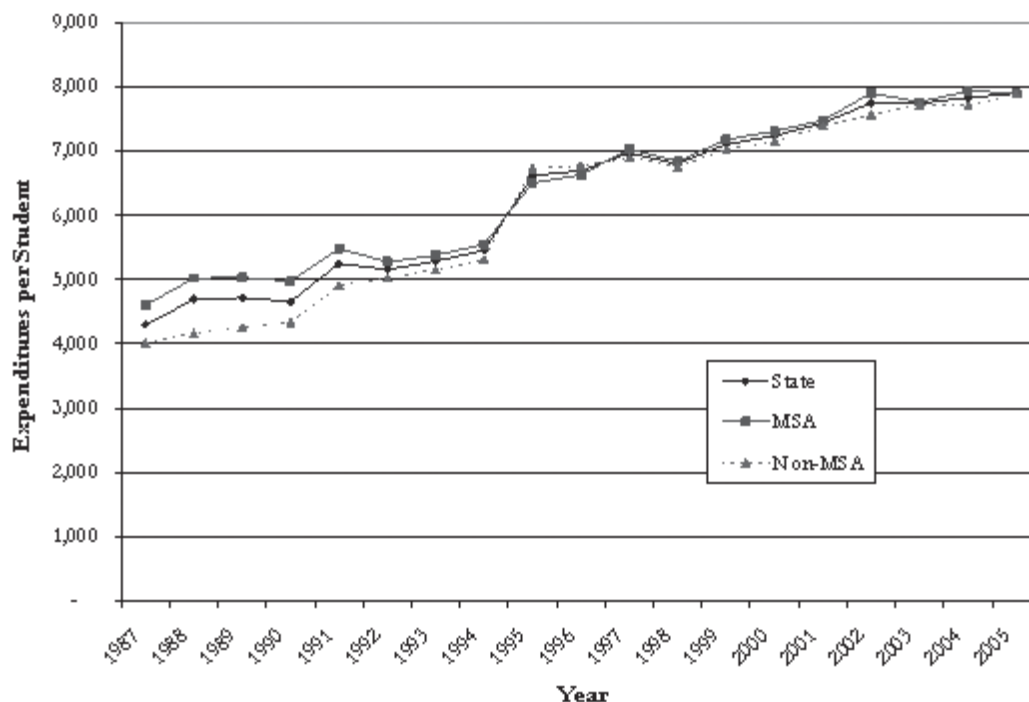
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 2.3: LOCAL REVENUE PER STUDENT FOR REGIONS OF KENTUCKY



Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

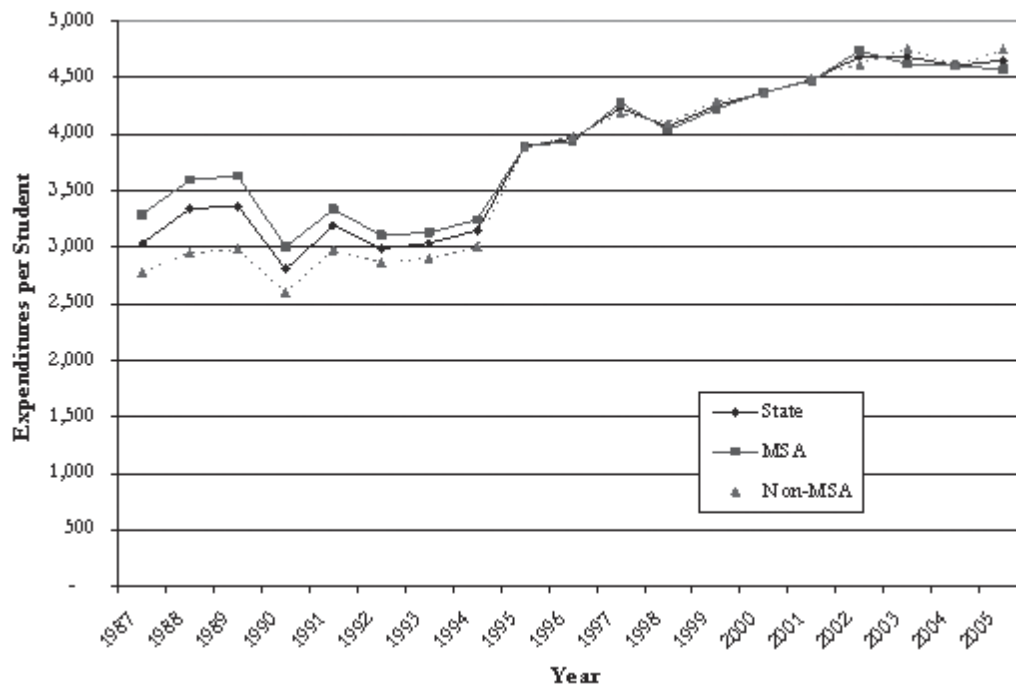
FIGURE 2.4A: TOTAL EXPENDITURES PER STUDENT FOR STATE, METROPOLITAN (MSA), AND NONMETROPOLITAN (NON-MSA) AREAS WITHIN KENTUCKY



Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

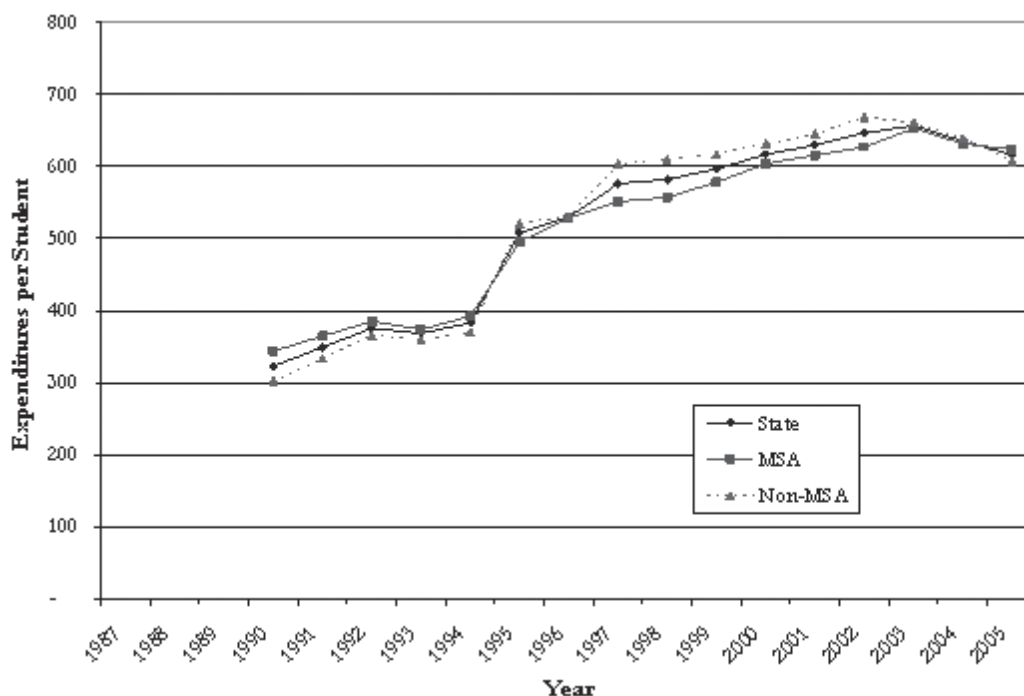


FIGURE 2.4B: INSTRUCTIONAL EXPENDITURES PER STUDENT FOR STATE, METROPOLITAN (MSA), AND NONMETROPOLITAN (NON-MSA) AREAS WITHIN KENTUCKY



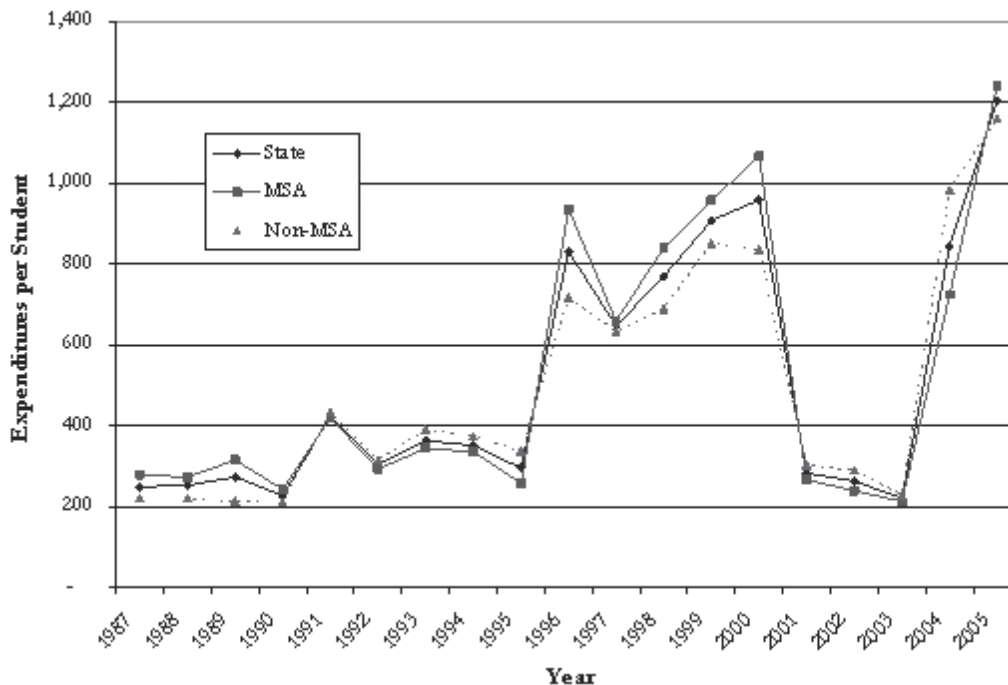
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 2.4C: ADMINISTRATIVE EXPENDITURES PER STUDENT FOR STATE, METROPOLITAN (MSA), AND NONMETROPOLITAN (NON-MSA) AREAS WITHIN KENTUCKY



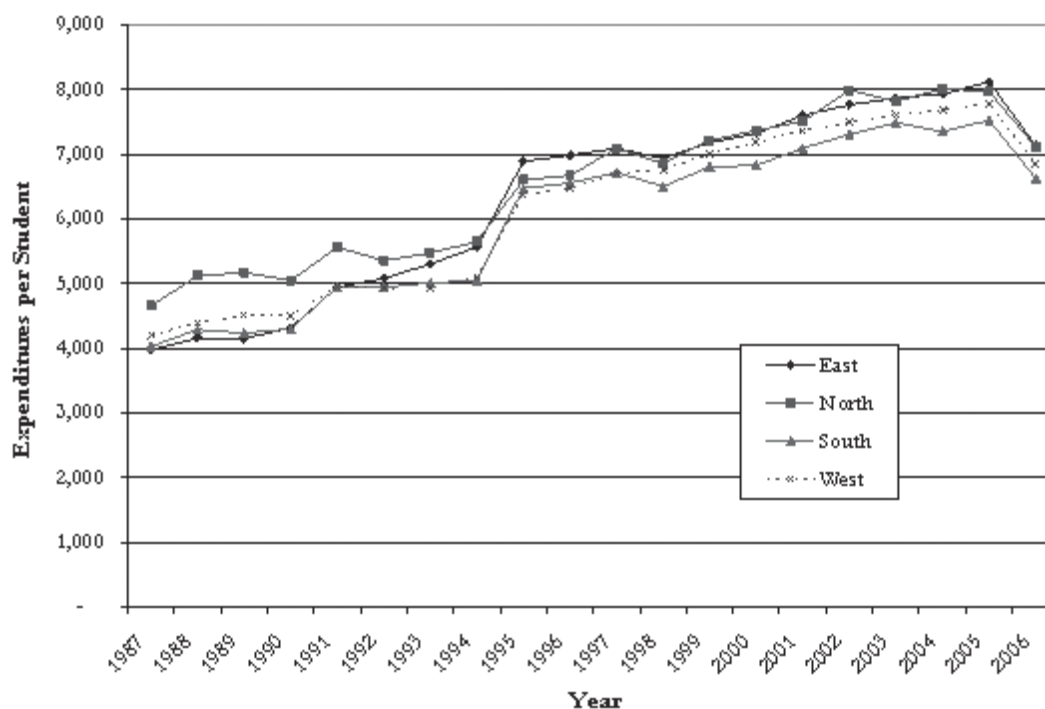
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

**FIGURE 2.4D: CAPITAL EXPENDITURES PER STUDENT FOR STATE, METROPOLITAN (MSA), AND NONMETROPOLITAN (NON-MSA) AREAS WITHIN KENTUCKY**



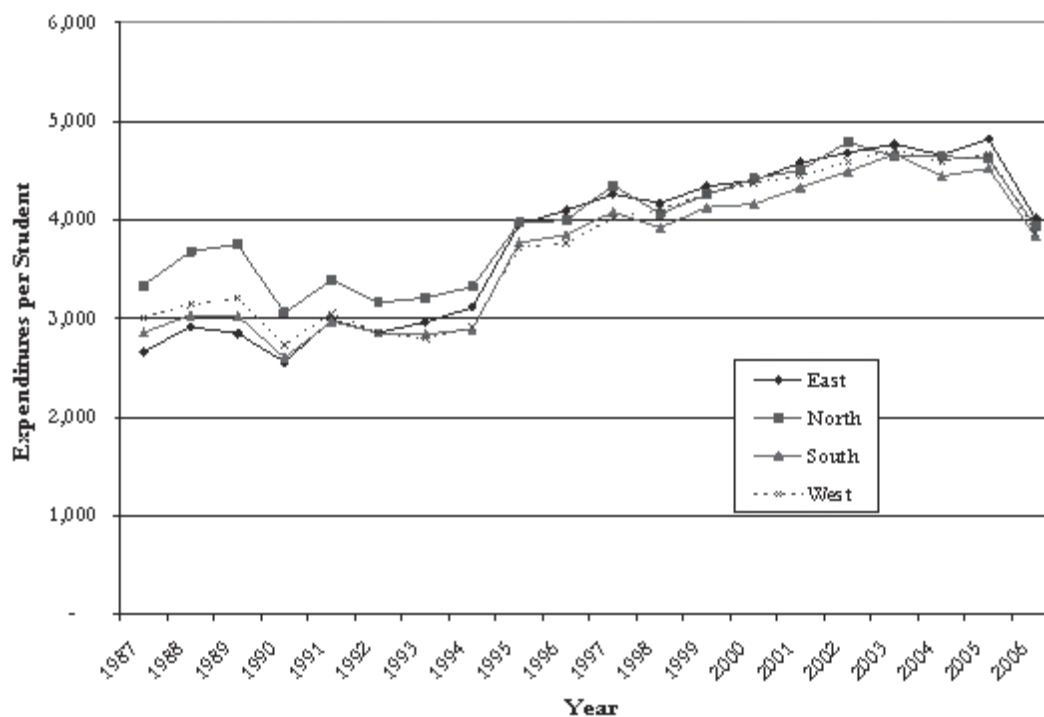
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

**FIGURE 2.5A: TOTAL EXPENDITURES PER STUDENT FOR REGIONS OF KENTUCKY**



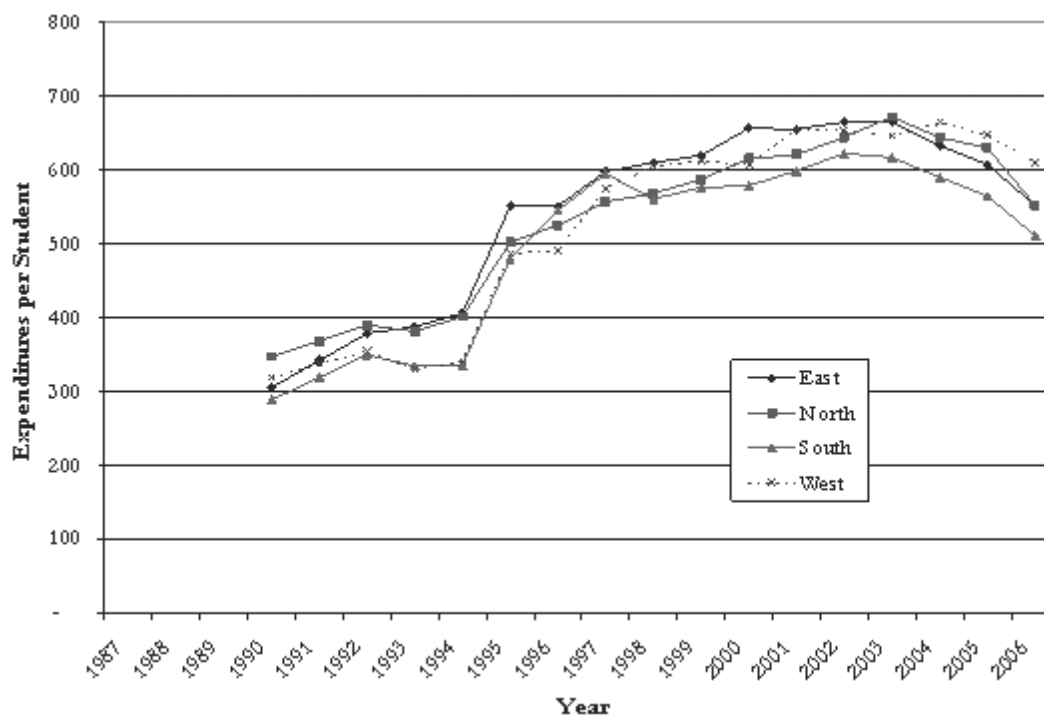
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 2.5B: INSTRUCTIONAL EXPENDITURES PER STUDENT FOR REGIONS OF KENTUCKY



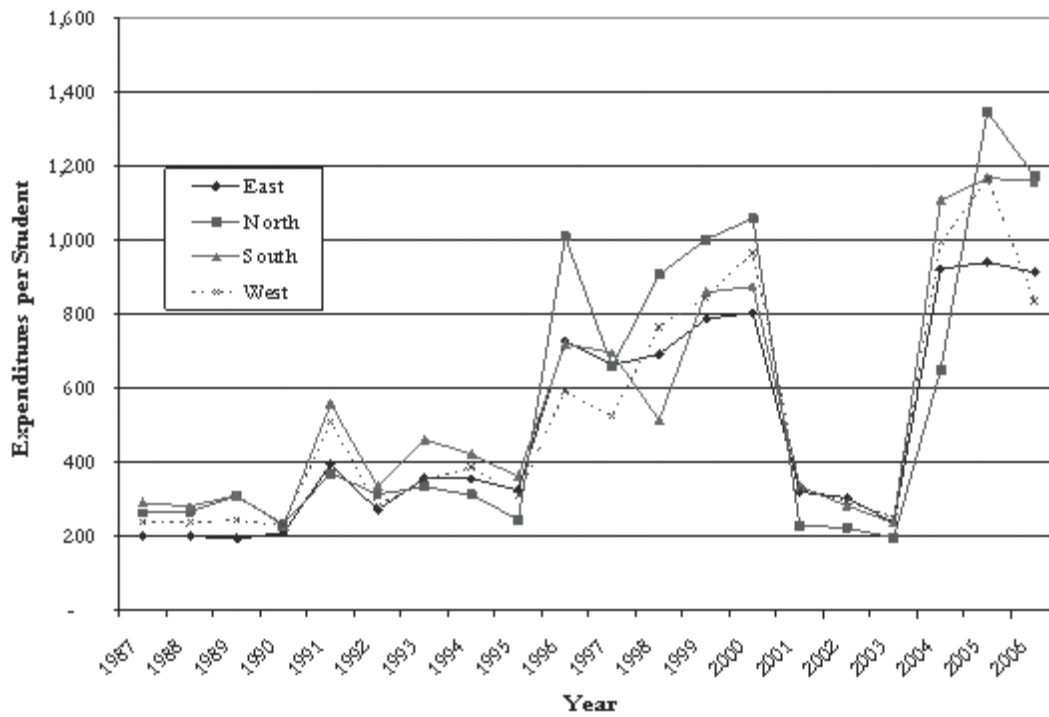
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 2.5C: ADMINISTRATIVE SPENDING PER STUDENT FOR REGIONS OF KENTUCKY



Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 2.5D: CAPITAL EXPENDITURES PER STUDENT FOR REGIONS OF KENTUCKY



Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

TABLE 3.1: REVENUE PER STUDENT AND SHARE OF TOTAL REVENUE, U.S. AND KENTUCKY

Year	Revenue Per Student						Share of Total Revenue			
	U.S.			Kentucky			U.S.		Kentucky	
	Local	State	Federal	Local	State	Federal	Local	State	Local	State
1988	3,457	3,656	515	714	2,010	359	45.3	47.9	23.2	65.2
1989	3,889	3,807	550	734	2,270	333	47.2	46.2	22.0	68.0
1990	4,064	3,865	557	810	2,370	340	47.9	45.5	23.0	67.3
1991	4,090	3,937	563	944	2,690	383	47.6	45.8	23.5	67.0
1992	4,095	3,906	598	961	2,810	424	47.6	45.4	22.9	67.0
1993	4,067	3,960	636	977	2,860	430	46.9	45.7	22.9	67.0
1994	4,111	3,997	637	1,030	2,850	446	47.0	45.7	23.8	65.9
1995	4,088	4,136	620	1,060	2,810	396	46.2	46.8	24.8	65.9
1996	4,039	4,207	601	1,180	2,920	373	45.7	47.6	26.4	65.3
1997	4,099	4,293	621	1,320	2,980	439	45.5	47.6	27.9	62.9
1998	4,193	4,437	688	1,390	3,000	465	45.0	47.6	28.6	61.8
1999	4,190	4,717	736	1,470	3,130	469	43.5	48.9	29.0	61.7
2000	4,174	4,917	799	1,490	3,090	510	42.2	49.7	29.3	60.7
2001	4,404	5,190	707	1,540	3,070	509	42.8	50.4	30.1	60.0
2002	4,497	5,323	806	1,560	3,120	551	42.3	50.1	29.8	59.6
2003	4,551	5,239	993	1,600	3,080	555	42.2	48.6	30.6	58.8
2004	4,728	5,238	1,083	1,660	3,090	659	42.8	47.4	30.7	57.1
2005	4,793	5,343	1,104	1,720	3,140	679	42.6	47.5	31.1	56.7
2006	4,964	5,614	1,012	1,840	3,380	691	42.8	48.4	31.1	57.2

Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

**TABLE 3.2A: EXPENDITURES PER STUDENT BY FUNCTION, U.S.**

Year	Total	Current	Instruction	Administration	Compensation	Capital	Construction
1987		7,050	4,377				
1988		7,203	4,499				
1989	8,322	7,500	4,561	658	5,906	601	140
1990	8,616	7,671	4,596	695	6,091	689	171
1991	8,777	7,774	4,670	694	6,184	729	193
1992	8,800	7,767	4,708	685	6,365	720	319
1993	8,782	7,777	4,737	671	6,414	700	353
1994	8,867	7,845	4,779	671	6,458	721	371
1995	8,961	7,907	4,865	663	6,498	755	382
1996	9,015	7,883	4,848	658	6,458	836	468
1997	9,189	7,989	4,929	659	6,514	900	506
1998	9,457	8,201	5,035	661	6,630	940	528
1999	9,797	8,460	5,179	678	6,798	1,014	564
2000	10,045	8,658	5,277	694	6,951	1,050	655
2001	10,440	8,983	5,474	709	7,179	1,094	730
2002	10,868	9,318	5,692	740	7,488	1,192	787
2003	11,024	9,498	5,796	747	7,629	1,132	794
2004	11,152	9,641	5,894	756	7,718	1,109	764
2005	11,305	9,794	5,958	775	7,822	1,091	780
2006	11,606	10,067	6,087	788	7,994	1,138	796

*Source: Authors' calculations based on Common Core of Data, U.S. Department of Education*

**TABLE 3.2B: EXPENDITURES PER STUDENT AS PERCENTAGE OF TOTAL EXPENDITURES, BY FUNCTION, U.S.**

Year	Current	Instruction	Administration	Compensation	Capital	Construction
1989	90.1	54.8	7.9	71.0	7.2	1.7
1990	89.0	53.3	8.1	70.7	8.0	2.0
1991	88.6	53.2	7.9	70.5	8.3	2.2
1992	88.3	53.5	7.8	72.3	8.2	3.6
1993	88.6	53.9	7.6	73.0	8.0	4.0
1994	88.5	53.9	7.6	72.8	8.1	4.2
1995	88.2	54.3	7.4	72.5	8.4	4.3
1996	87.4	53.8	7.3	71.6	9.3	5.2
1997	86.9	53.6	7.2	70.9	9.8	5.5
1998	86.7	53.2	7.0	70.1	9.9	5.6
1999	86.3	52.9	6.9	69.4	10.4	5.8
2000	86.2	52.5	6.9	69.2	10.5	6.5
2001	86.0	52.4	6.8	68.8	10.5	7.0
2002	85.7	52.4	6.8	68.9	11.0	7.2
2003	86.2	52.6	6.8	69.2	10.3	7.2
2004	86.4	52.9	6.8	69.2	9.9	6.8
2005	86.6	52.7	6.9	69.2	9.7	6.9
2006	86.7	52.4	6.8	68.9	9.8	6.9

*Source: Authors' calculations based on Common Core of Data, U.S. Department of Education*

**TABLE 3.3A: EXPENDITURES PER STUDENT, BY FUNCTION, KENTUCKY**

Year	Total	Current	Instruction	Administration	Compensation	Capital	Construction
1987		4,851	3,548				
1988		5,131	3,805				
1989	5,851	5,442	3,314	541	4,547	282	8
1990	6,152	5,777	3,449	567	4,732	247	7
1991	6,939	6,444	3,838	640	5,265	345	13
1992	7,299	6,780	4,154	676	5,765	359	10
1993	7,368	6,797	4,125	688	5,850	416	97
1994	7,506	6,948	4,161	712	5,851	401	87
1995	7,454	6,901	4,127	714	5,820	388	70
1996	7,746	7,125	4,364	720	6,067	417	85
1997	8,065	7,447	4,523	704	6,311	388	80
1998	8,163	7,575	4,632	632	6,359	343	73
1999	8,512	7,866	4,787	679	6,575	382	74
2000	8,579	7,943	4,850	694	6,673	365	53
2001	8,756	8,166	5,004	710	6,869	339	57
2002	9,035	8,445	5,182	726	7,120	315	42
2003	9,017	8,468	5,168	729	7,168	257	41
2004	9,748	8,512	5,156	684	7,227	924	630
2005	10,315	8,649	5,195	671	7,314	1,320	995
2006	10,493	8,975	5,340	690	7,597	1,161	843

*Source: Authors' calculations based on Common Core of Data, U.S. Department of Education*

**TABLE 3.3B: EXPENDITURES PER STUDENT AS PERCENTAGE OF TOTAL EXPENDITURES, BY FUNCTION, KENTUCKY**

Year	Current	Instruction	Administration	Compensation	Capital	Construction
1989	93.0	56.6	9.2	77.7	4.8	0.1
1990	93.9	56.1	9.2	76.9	4.0	0.1
1991	92.9	55.3	9.2	75.9	5.0	0.2
1992	92.9	56.9	9.3	79.0	4.9	0.1
1993	92.3	56.0	9.3	79.4	5.7	1.3
1994	92.6	55.4	9.5	77.9	5.3	1.2
1995	92.6	55.4	9.6	78.1	5.2	0.9
1996	92.0	56.3	9.3	78.3	5.4	1.1
1997	92.3	56.1	8.7	78.2	4.8	1.0
1998	92.8	56.7	7.7	77.9	4.2	0.9
1999	92.4	56.2	8.0	77.2	4.5	0.9
2000	92.6	56.5	8.1	77.8	4.3	0.6
2001	93.3	57.1	8.1	78.4	3.9	0.6
2002	93.5	57.4	8.0	78.8	3.5	0.5
2003	93.9	57.3	8.1	79.5	2.9	0.5
2004	87.3	52.9	7.0	74.1	9.5	6.5
2005	83.9	50.4	6.5	70.9	12.8	9.6
2006	85.5	50.9	6.6	72.4	11.1	8.0

*Source: Authors' calculations based on Common Core of Data, U.S. Department of Education*

TABLE 3.4: PUPIL-TEACHER RATIOS FOR THE U.S. AND KENTUCKY

Year	U.S.	Kentucky
1987	17.4	18.6
1988	17.2	18.2
1989	17.0	17.8
1990	16.9	17.7
1991	16.9	17.3
1992	16.9	17.2
1993	16.9	17.3
1994	16.9	17.6
1995	16.8	17.0
1996	16.8	16.9
1997	16.7	16.7
1998	16.5	16.5
1999	16.1	16.1
2000	15.7	15.4
2001	15.6	16.8
2002	15.4	16.2
2003	15.5	16.3
2004	15.5	16.1
2005	15.4	16.3
2006	15.2	16.0

Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

TABLE 3.5A: LOCAL, STATE, AND FEDERAL REVENUE AS PERCENTAGE OF TOTAL REVENUE, EAST SOUTH CENTRAL STATES

Year	Local Revenue			State Revenue			Federal Revenue					
	Alabama	Kentucky	Mississippi	Tennessee	Alabama	Kentucky	Mississippi	Tennessee	Alabama	Kentucky	Mississippi	Tennessee
1988	22.4	23.2	24.5	45.1	64.4	65.3	65.6	44.3	11.8	11.7	9.9	10.4
1989	27.7	22.0	26.4	43.8	61.7	68.0	57.3	46.0	10.7	10.0	16.1	9.1
1990	28.7	23.0	28.3	44.5	59.9	67.3	56.2	45.9	11.2	9.7	15.5	9.0
1991	28.6	23.5	29.1	45.1	60.1	67.1	54.0	45.3	11.1	9.6	16.6	9.8
1992	29.8	22.9	29.5	47.3	58.8	66.9	53.5	42.1	11.4	10.1	17.0	10.5
1993	30.2	22.9	29.3	44.2	58.2	67.0	53.4	45.6	11.6	10.1	17.1	10.4
1994	29.6	23.8	29.1	43.6	59.2	66.0	54.3	46.9	11.1	10.3	16.3	9.5
1995	29.2	24.9	28.7	43.6	60.9	66.0	56.5	47.5	9.7	9.3	14.8	8.9
1996	29.5	26.3	28.6	43.5	61.2	65.2	57.9	48.0	9.2	8.3	13.7	8.6
1997	27.1	27.8	30.6	43.0	63.2	62.9	55.7	48.6	9.6	9.3	14.0	8.5
1998	27.7	28.7	30.5	43.4	62.5	61.9	55.6	47.7	9.4	9.6	14.1	8.8
1999	29.0	29.0	31.1	44.0	61.7	61.7	54.7	47.3	9.1	9.3	13.9	8.8
2000	28.2	29.3	30.1	45.2	62.1	60.7	56.3	45.8	9.1	10.0	13.7	9.0
2001	30.5	30.1	30.9	46.5	59.8	60.0	55.5	44.4	9.4	9.9	13.8	9.2
2002	30.6	29.9	30.8	47.0	58.7	59.8	54.0	43.7	10.4	10.6	15.0	9.5
2003	30.7	30.5	30.9	46.1	57.6	58.8	53.8	43.9	11.6	10.6	15.4	10.0
2004	31.8	30.7	29.6	46.4	55.6	57.1	54.7	42.8	12.2	12.2	15.4	10.8
2005	31.6	31.0	30.1	45.4	55.5	56.6	54.1	43.2	12.0	12.2	15.9	11.4
2006	30.9	31.1	28.3	46.4	55.9	57.2	51.1	42.5	12.0	11.7	20.8	11.2

Source: Authors' calculations based on Common Core of Data, U.S. Department of Education



TABLE 3.5B: LOCAL, STATE, AND FEDERAL REVENUE AS PERCENTAGE OF TOTAL REVENUE, WEST SOUTH CENTRAL STATES

Year	Local Revenue				State Revenue				Federal Revenue			
	Arkansas	Louisiana	Oklahoma	Texas	Arkansas	Louisiana	Oklahoma	Texas	Arkansas	Louisiana	Oklahoma	Texas
1988	32.5	33.4	25.4	47.7	56.6	55.2	65.7	44.2	11.0	11.2	6.0	7.8
1989	33.9	36.7	36.4	49.3	55.9	52.7	56.0	43.4	9.7	10.5	5.5	7.5
1990	33.3	35.1	35.3	49.8	56.7	54.8	56.9	41.9	9.6	10.0	5.6	7.3
1991	31.9	35.7	32.8	48.5	58.3	54.4	60.4	43.9	9.8	10.1	4.8	6.6
1992	29.1	34.4	31.1	49.8	59.8	54.8	62.3	43.6	10.8	10.8	4.6	6.6
1993	33.1	34.4	30.9	22.8	56.9	53.8	60.0	40.1	9.6	11.8	7.1	7.5
1994	33.4	34.8	30.8	51.0	57.7	52.9	58.9	40.3	8.8	12.2	8.6	8.1
1995	32.5	36.0	29.4	51.7	58.4	52.1	59.3	40.2	9.2	11.9	9.4	7.7
1996	31.3	37.7	29.5	49.6	60.1	50.4	59.3	42.8	8.5	12.2	9.3	7.2
1997	32.0	38.2	27.6	51.4	60.1	50.3	62.3	40.4	7.9	11.7	8.3	7.7
1998	31.5	38.2	28.0	47.8	57.6	50.5	61.6	44.1	10.8	11.3	8.6	7.6
1999	31.8	38.2	28.6	48.9	58.0	50.4	60.2	42.4	10.2	11.5	9.1	8.4
2000	30.8	39.2	29.8	46.9	60.1	49.6	58.5	44.2	8.8	11.5	10.0	8.6
2001	30.9	39.1	28.8	48.8	59.4	49.4	59.0	42.2	9.3	11.5	10.2	8.7
2002	33.7	38.3	29.5	49.6	55.7	49.2	56.7	40.8	10.8	12.5	11.9	9.3
2003	32.9	37.7	30.4	48.9	55.2	49.0	54.7	40.8	11.7	13.2	12.7	9.9
2004	34.0	37.7	30.6	50.4	53.2	48.7	54.3	38.7	12.7	13.5	12.9	10.8
2005	30.5	38.6	30.9	52.8	58.2	47.6	53.4	35.9	11.1	13.9	13.7	11.2
2006	31.8	38.2	31.1	53.9	56.8	43.3	53.3	33.8	11.3	18.5	13.4	12.0

Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

**TABLE 3.6A: EXPENDITURES PER STUDENT BY FUNCTION, EAST SOUTH CENTRAL STATES**

Year	Current				Instructional				Administrative				Capital			
	AL	KY	MS	TN	AL	KY	MS	TN	AL	KY	MS	TN	AL	KY	MS	TN
1987	4,566	4,851	4,170	5,017	2,906	3,548	2,589	3,507								
1988	4,631	5,131	4,342	5,229	2,949	3,805	2,737	3,709								
1989	5,197	5,442	4,651	5,676	3,222	3,314	2,948	3,609	448	541	423	464	532	282	400	362
1990	5,132	5,777	4,772	5,651	3,195	3,449	3,026	3,652	443	567	447	466	530	247	342	424
1991	5,368	6,444	4,717	5,597	3,344	3,838	2,959	3,450	460	640	442	431	426	345	350	372
1992	5,196	6,780	4,663	5,305	3,226	4,154	2,914	3,376	439	676	426	416	341	359	399	432
1993	5,247	6,797	4,719	5,571	3,264	4,125	2,939	3,386	429	688	413	458	417	416	385	442
1994	5,491	6,948	4,979	5,644	3,434	4,161	3,077	3,629	444	712	440	449	467	401	466	490
1995	5,827	6,901	5,397	5,805	3,671	4,127	3,364	3,748	474	714	455	444	476	388	531	648
1996	6,060	7,125	5,461	5,844	3,801	4,364	3,403	3,727	492	720	465	454	547	417	636	727
1997	6,159	7,447	5,417	6,294	3,774	4,523	3,324	4,081	542	704	469	467	742	388	649	729
1998	6,389	7,575	5,658	6,522	3,903	4,632	3,470	4,241	565	632	493	471	818	343	873	732
1999	6,670	7,866	5,895	6,681	4,127	4,787	3,558	4,368	587	679	514	475	892	382	1,201	965
2000	6,742	7,943	6,270	6,834	4,161	4,850	3,828	4,456	600	694	546	486	1,076	365	864	1,031
2001	6,889	8,166	6,300	6,953	4,248	5,004	3,806	4,479	601	710	555	494	842	339	554	1,213
2002	7,090	8,445	6,409	7,257	4,342	5,182	3,860	4,732	619	726	578	515	795	315	484	1,014
2003	7,277	8,468	6,778	7,312	4,404	5,168	4,056	4,700	645	729	605	537	679	257	500	826
2004	7,270	8,512	7,045	7,520	4,367	5,156	4,225	4,818	637	684	620	543	684	924	517	693
2005	7,545	8,649	7,220	7,666	4,468	5,195	4,314	4,949	658	671	630	571	751	1,320	447	557
2006	7,980	8,975	7,699	7,580	4,667	5,340	4,550	4,873	709	690	647	574	936	1,161	524	627

*Source: Authors' calculations based on Common Core of Data, U.S. Department of Education*

TABLE 3.6B: EXPENDITURES PER STUDENT BY FUNCTION, WEST SOUTH CENTRAL STATES

Year	Current			Instructional			Administrative			Capital		
	AR	LA	OK	TX	AR	LA	OK	TX	AR	LA	OK	TX
1987	4850	5447	5500	6051	1987	4850	5447	5500				
1988	5094	5348	5271	6148	3142	3057	3612	3710				
1989	5321	5393	5494	6303	3159	3120	3450	3820	489	471	542	658
1990	5375	6021	5411	6402	3192	3517	3394	3879	498	507	536	648
1991	5476	6211	5688	6570	3157	3611	3527	3970	494	521	526	661
1992	5792	6254	5857	6656	3490	3747	3517	4007	515	496	605	684
1993	5754	6178	6077	6516	3613	3681	3583	3831	507	495	613	656
1994	5823	6148	6440	6663	3648	3655	3779	3951	516	476	624	673
1995	5898	6297	6410	6908	3602	3753	3855	4227	563	491	616	645
1996	6052	6409	6271	7033	3775	3795	3758	4317	547	501	607	646
1997	6080	6532	6469	7204	3790	3890	3866	4439	563	511	619	656
1998	6182	6980	6665	7309	3920	4184	3951	4489	355	551	632	549
1999	6284	7284	6878	7456	4027	4401	4129	4511	354	556	606	547
2000	6589	7324	6755	7928	4007	4412	3907	4826	618	563	611	583
2001	6764	7459	7351	8012	4131	4495	4254	4843	647	582	600	572
2002	7482	7913	7476	8183	4610	4837	4321	4942	683	615	624	591
2003	7649	8208	7165	8452	4674	4984	4149	5101	679	638	586	602
2004	7798	8374	7043	8230	4733	5059	3997	4965	685	649	591	589
2005	8509	8555	7315	8066	5177	5128	4156	4814	725	664	609	579
2006	8748	8568	7449	8085	5266	4996	4222	4808	721	653	617	575

Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

**TABLE 3.7A: PUPIL-TEACHER RATIOS FOR EAST CENTRAL SOUTH STATES**

Year	Alabama	Kentucky	Mississippi	Tennessee
1987	19.8	18.6	19.0	19.9
1988	19.3	18.2	18.8	19.6
1989	18.7	17.8	18.4	19.3
1990	18.1	17.7	18.2	19.1
1991	19.9	17.3	17.9	19.2
1992	17.8	17.2	17.9	19.4
1993	17.4	17.3	18.2	19.6
1994	17.1	17.6	17.8	18.8
1995	17.2	17.0	17.5	18.6
1996	16.9	16.9	17.5	16.7
1997	16.6	16.7	17.2	16.5
1998	16.3	16.5	17.1	16.5
1999	15.7	16.1	16.1	15.3
2000	15.2	15.4	16.3	15.1
2001	15.4	16.8	16.1	15.9
2002	15.8	16.2	15.8	15.8
2003	15.7	16.3	15.6	15.8
2004	12.6	16.1	15.1	15.7
2005	14.2	16.3	15.8	15.7
2006	12.8	16.0	15.7	16.0

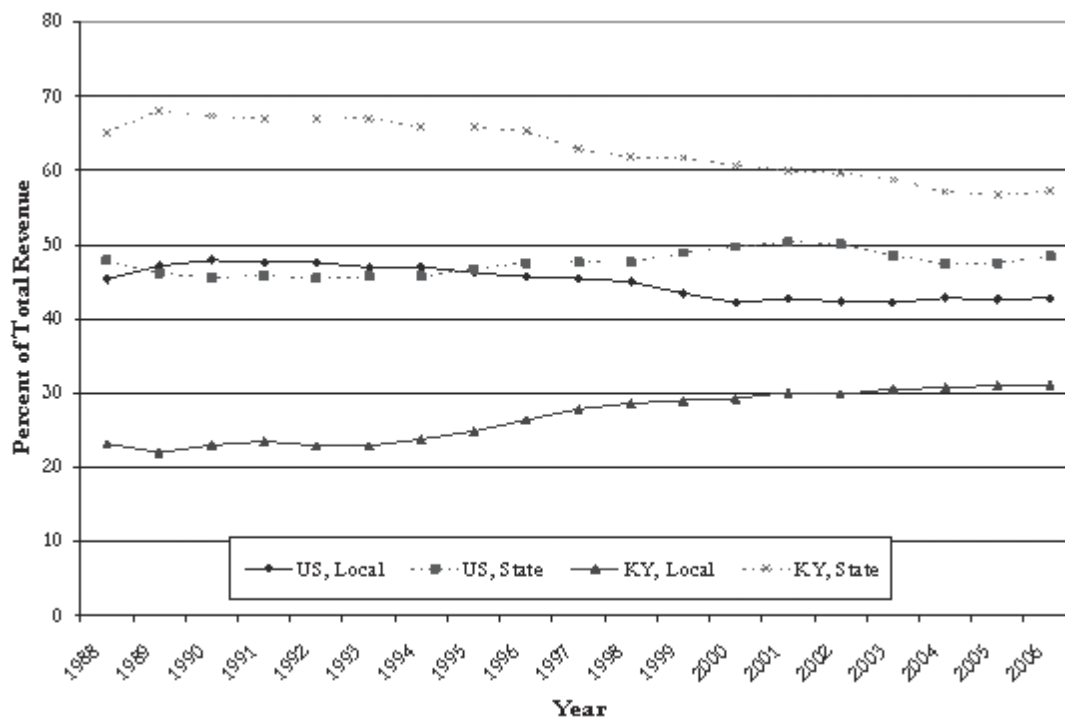
*Source: Authors' calculations based on Common Core of Data, U.S. Department of Education*

**TABLE 3.7B: PUPIL-TEACHER RATIOS FOR WEST CENTRAL SOUTH STATES**

Year	Arkansas	Louisiana	Oklahoma	Texas
1987	17.5	18.5	16.9	17.2
1988	17.1	18.5	16.9	17.3
1989	15.7	18.2	16.5	16.7
1990	17.0	17.6	16.2	16.7
1991	16.8	17.3	15.6	15.4
1992	17.0	17.2	15.6	15.8
1993	17.0	17.0	15.5	16.1
1994	17.1	17.1	15.5	16.0
1995	17.1	16.8	15.5	15.7
1996	17.1	17.0	15.7	15.6
1997	17.1	16.8	15.7	15.5
1998	17.0	16.0	15.5	15.3
1999	16.2	15.6	15.4	15.2
2000	14.4	15.1	15.1	14.9
2001	14.1	14.9	15.1	14.8
2002	13.6	14.6	14.9	14.7
2003	14.9	14.6	15.4	14.8
2004	14.7	14.4	16.0	15.0
2005	14.8	14.7	15.6	15.0
2006	14.4	14.7	15.2	15.0

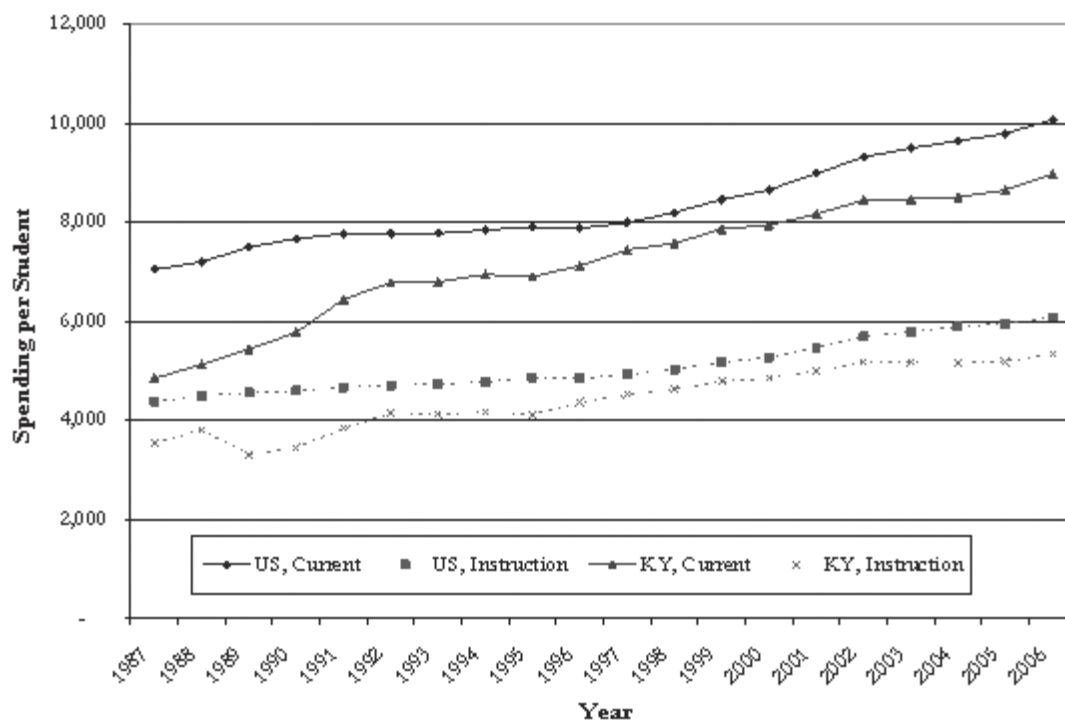
*Source: Authors' calculations based on Common Core of Data, U.S. Department of Education*

**FIGURE 3.1: STATE AND LOCAL SHARES OF TOTAL REVENUE, U.S. AND KENTUCKY**



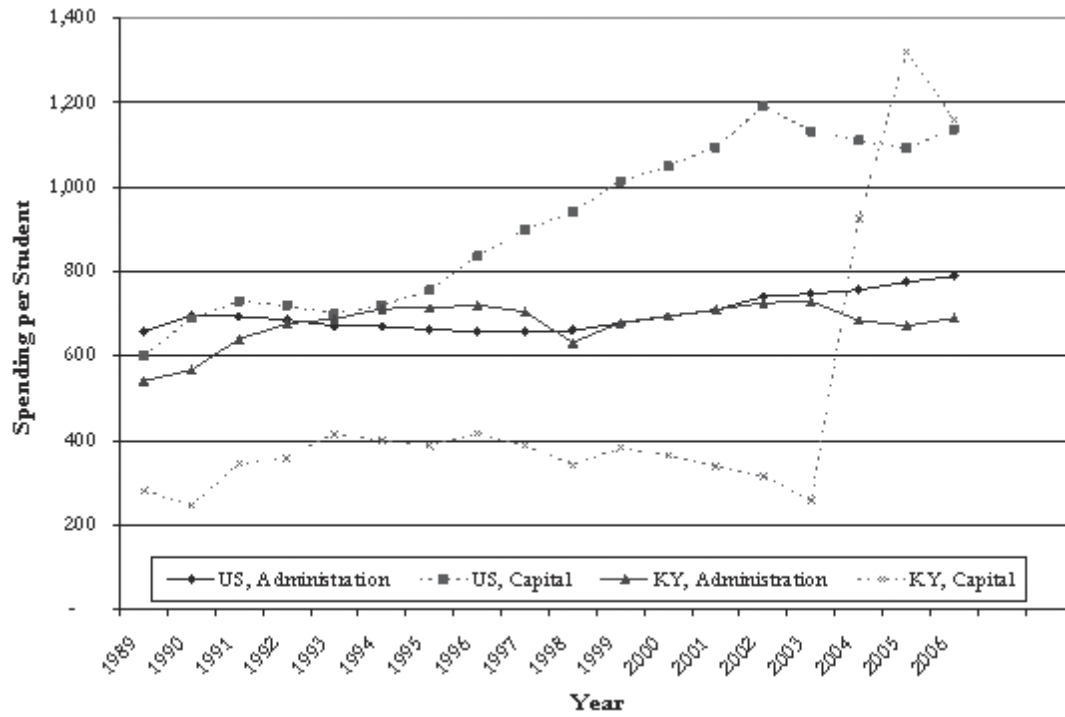
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

**FIGURE 3.2: CURRENT AND INSTRUCTIONAL SPENDING PER STUDENT, U.S. AND KENTUCKY**



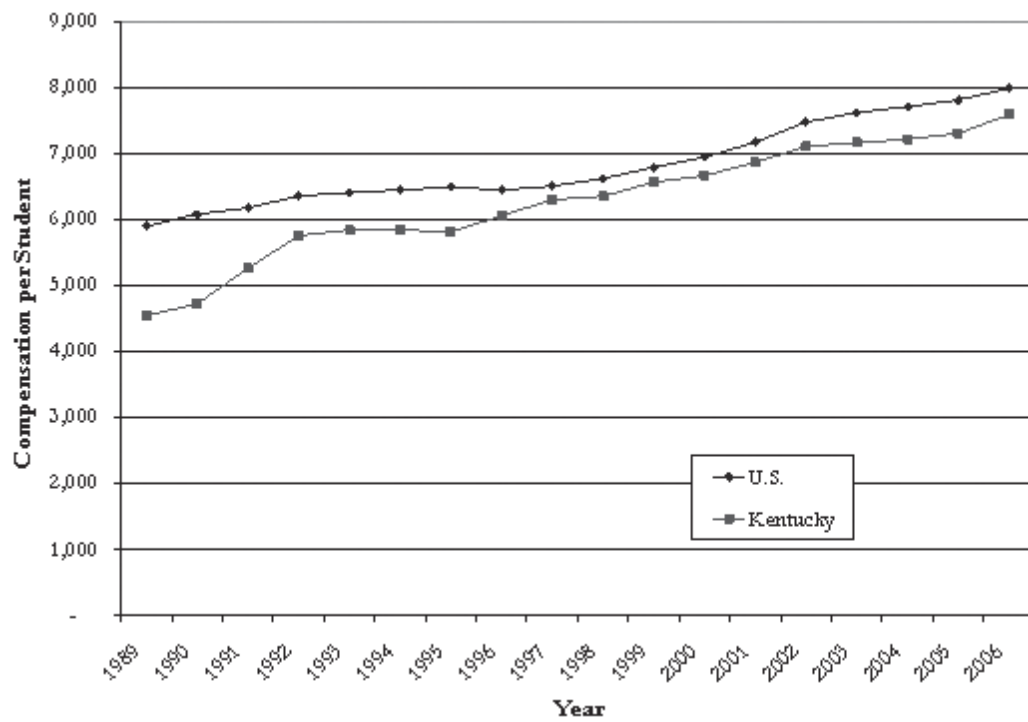
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.3: ADMINISTRATIVE AND CAPITAL EXPENDITURES PER STUDENT, U.S. AND KENTUCKY



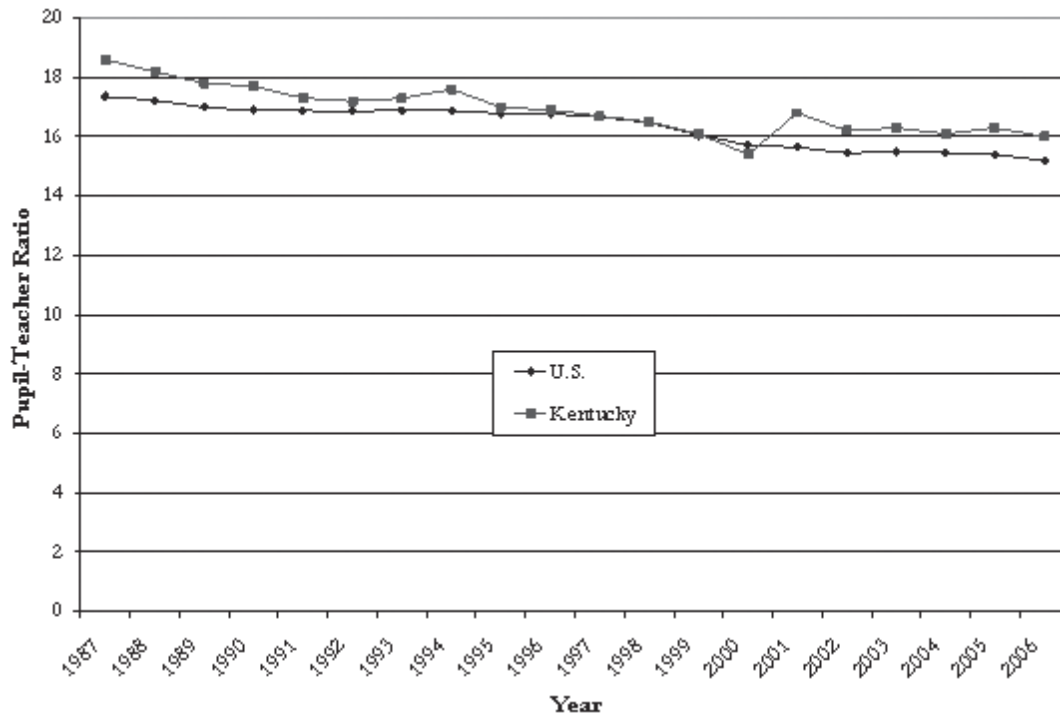
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.4: COMPENSATION PER STUDENT, U.S. AND KENTUCKY



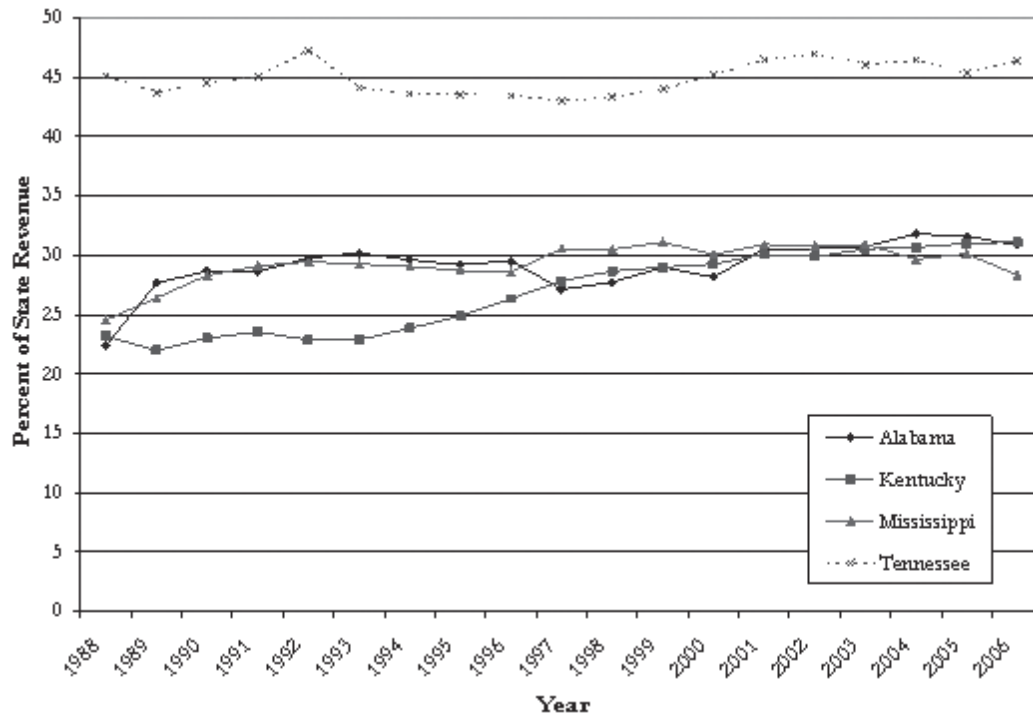
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.5: PUPIL-TEACHER RATIOS, U.S. AND KENTUCKY



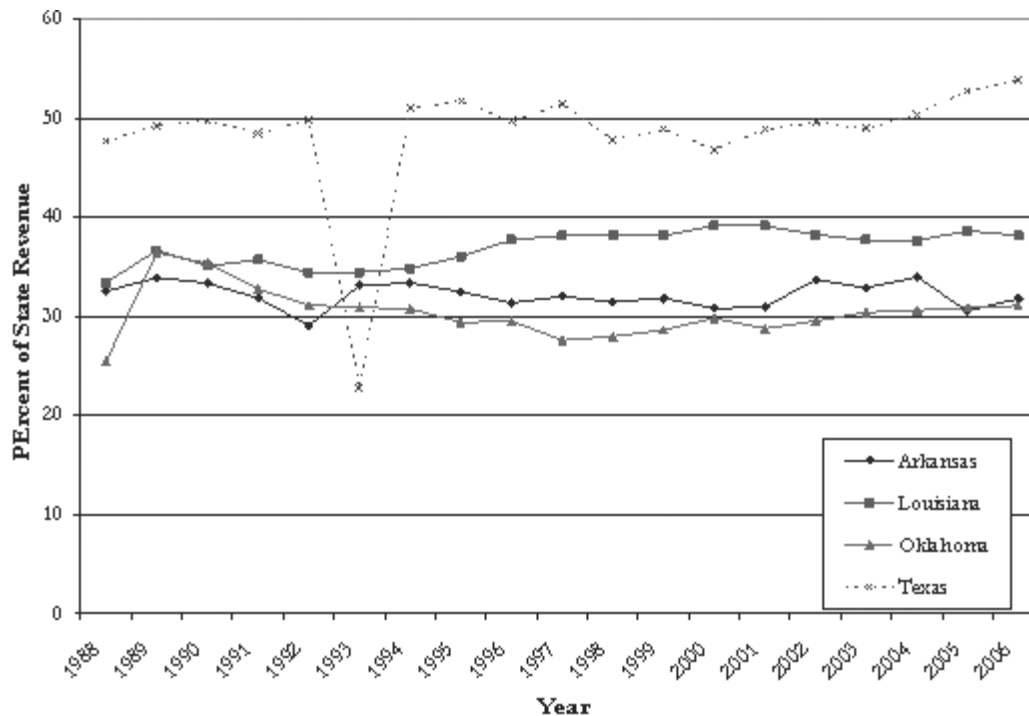
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.6A: LOCAL REVENUE AS A PERCENTAGE OF TOTAL REVENUE, EAST SOUTH CENTRAL STATES



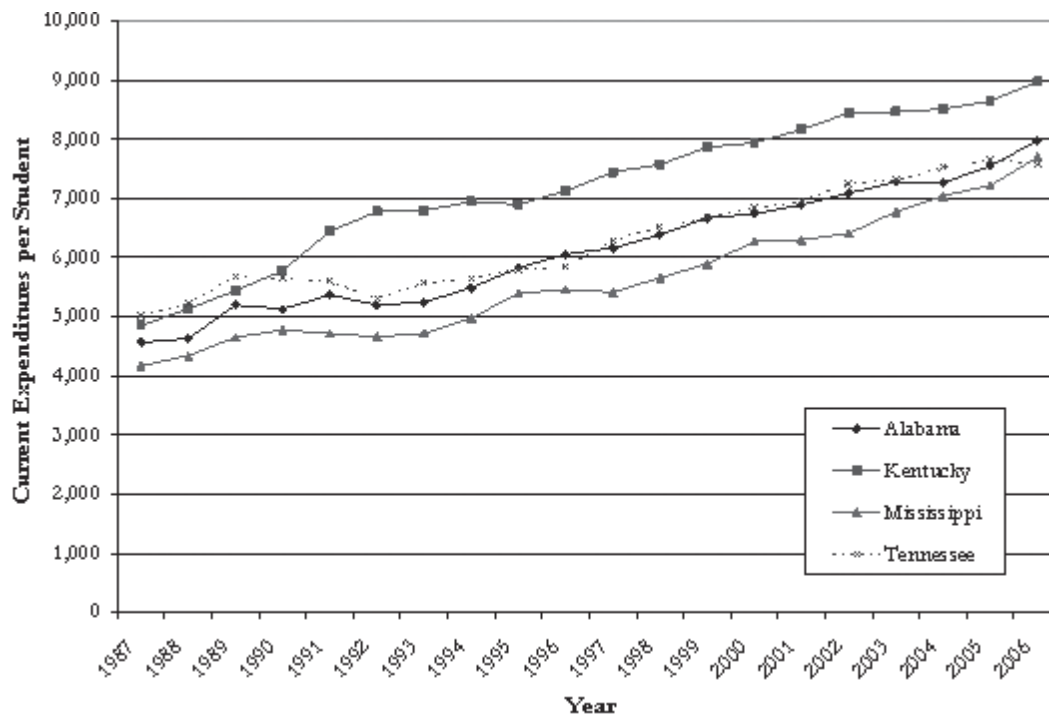
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

**FIGURE 3.6B: LOCAL REVENUE AS A PERCENTAGE OF TOTAL REVENUE, WEST SOUTH CENTRAL STATES**



Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

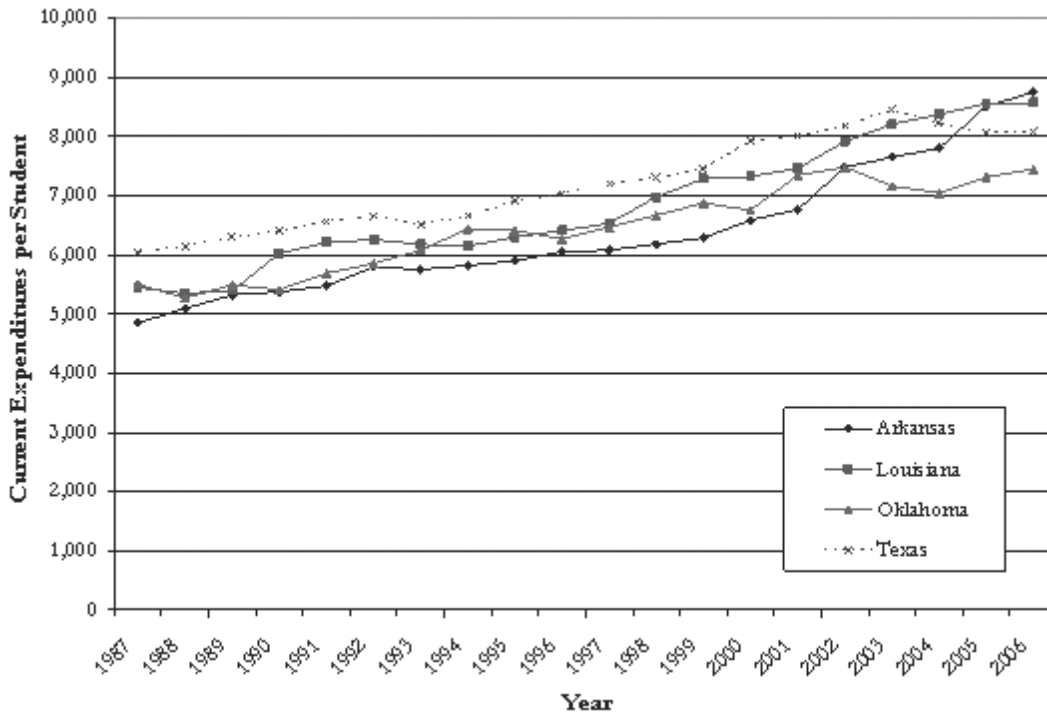
**FIGURE 3.7A: CURRENT EXPENDITURES PER STUDENT, EAST SOUTH CENTRAL STATES**



Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

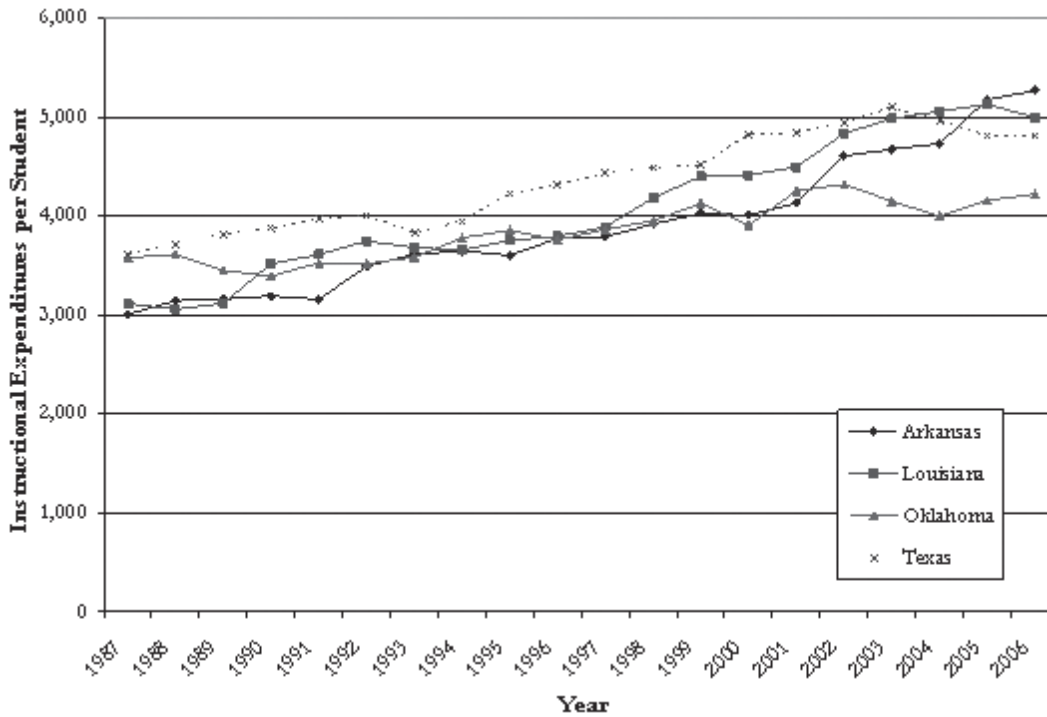


FIGURE 3.7B: CURRENT EXPENDITURES PER STUDENT, WEST SOUTH CENTRAL STATES



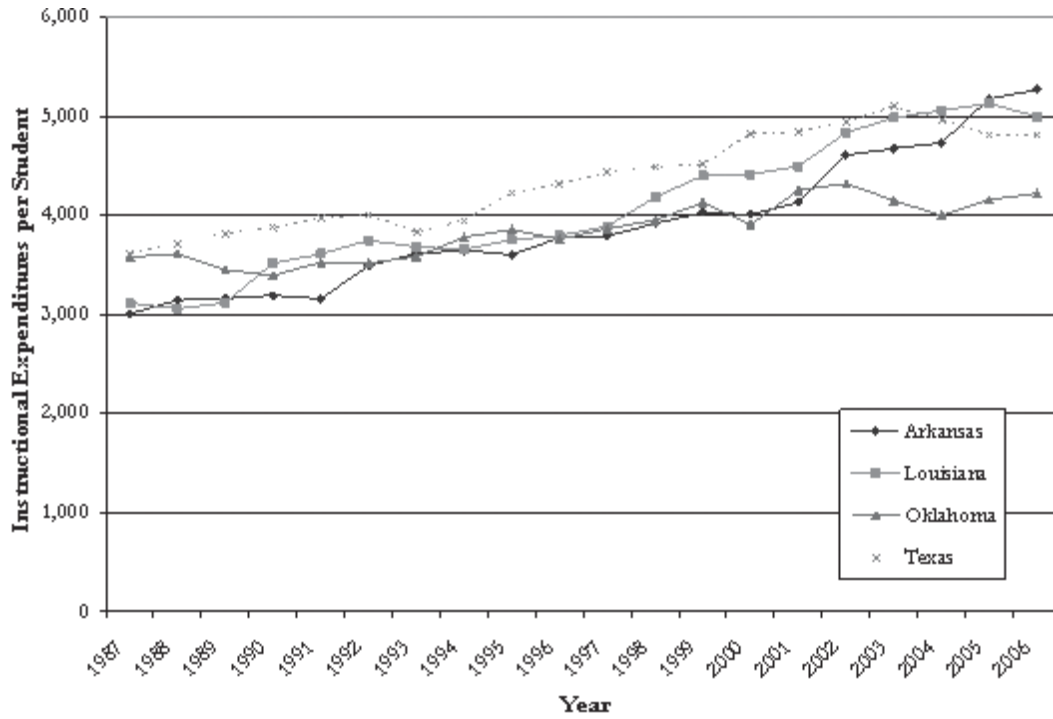
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.8A: INSTRUCTIONAL EXPENDITURES PER STUDENT, EAST SOUTH CENTRAL STATES



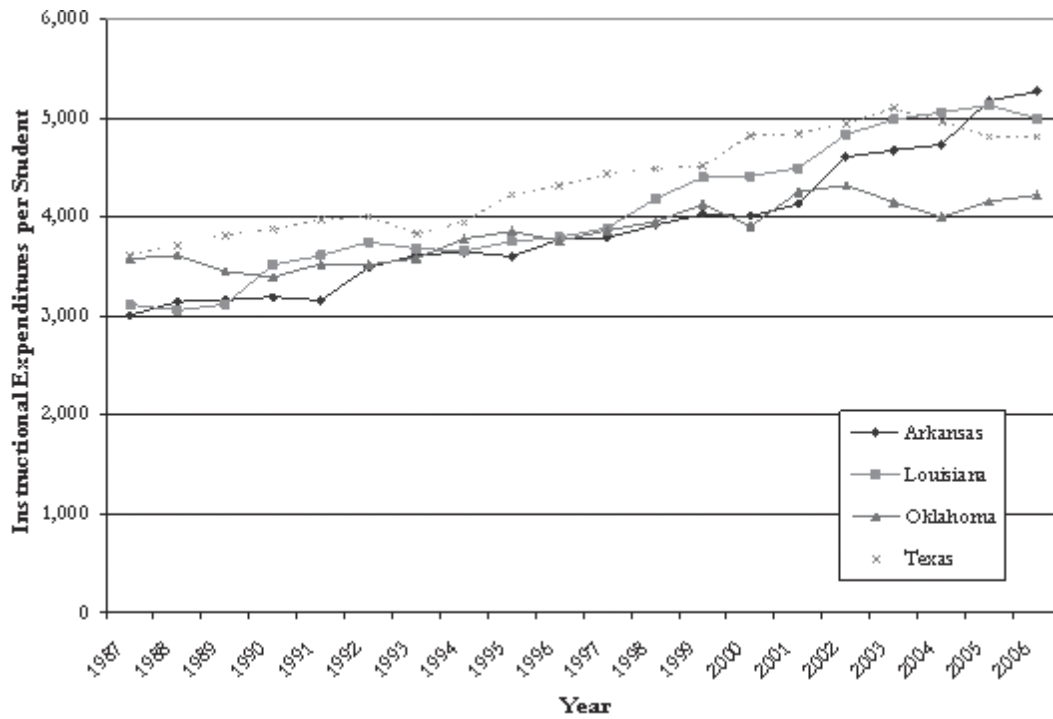
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.8B: INSTRUCTIONAL EXPENDITURES PER STUDENT, WEST SOUTH CENTRAL STATES



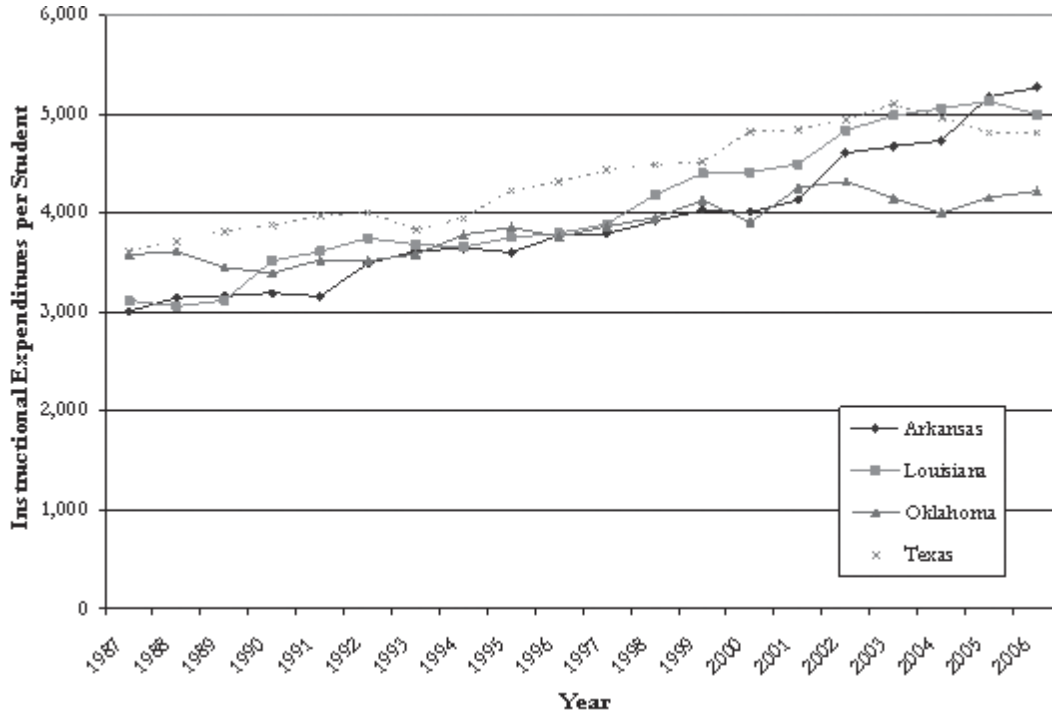
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.9A: ADMINISTRATIVE EXPENDITURES PER STUDENT, EAST SOUTH CENTRAL STATES



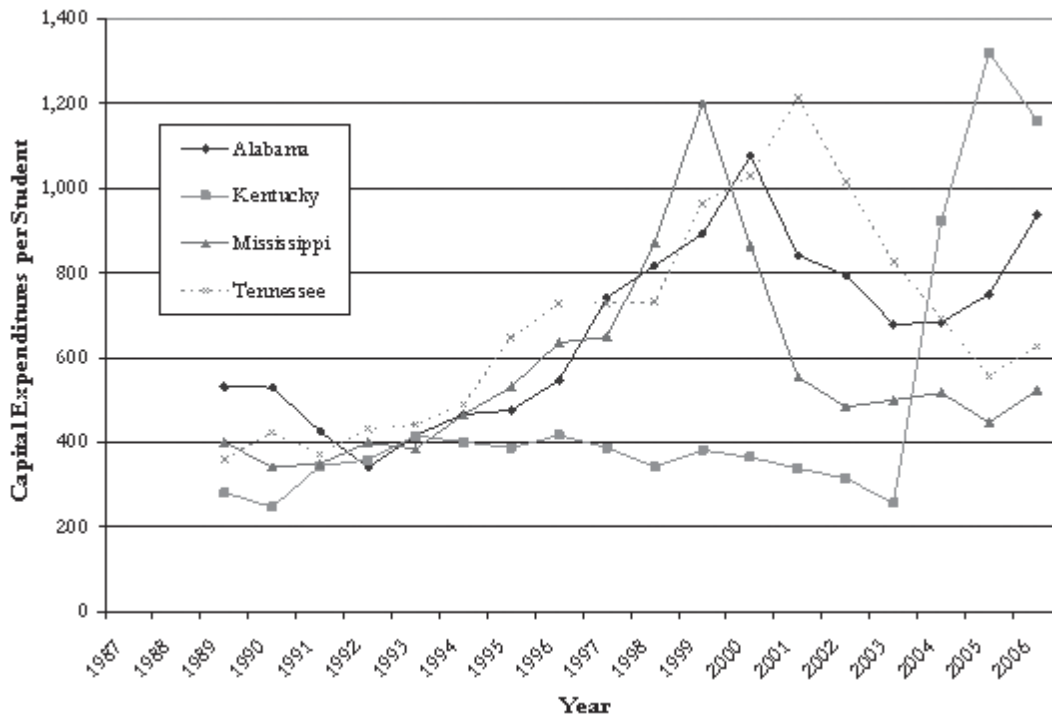
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.9B: ADMINISTRATIVE EXPENDITURES PER STUDENT, WEST SOUTH CENTRAL STATES



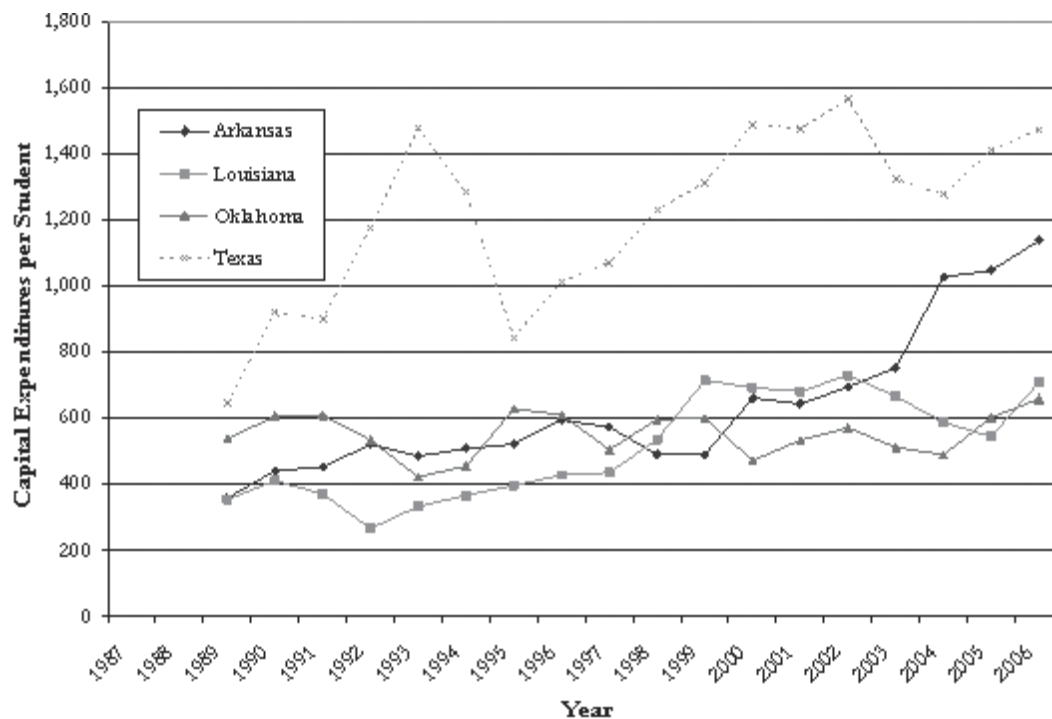
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.10A: CAPITAL EXPENDITURES PER STUDENT, EAST SOUTH CENTRAL STATES



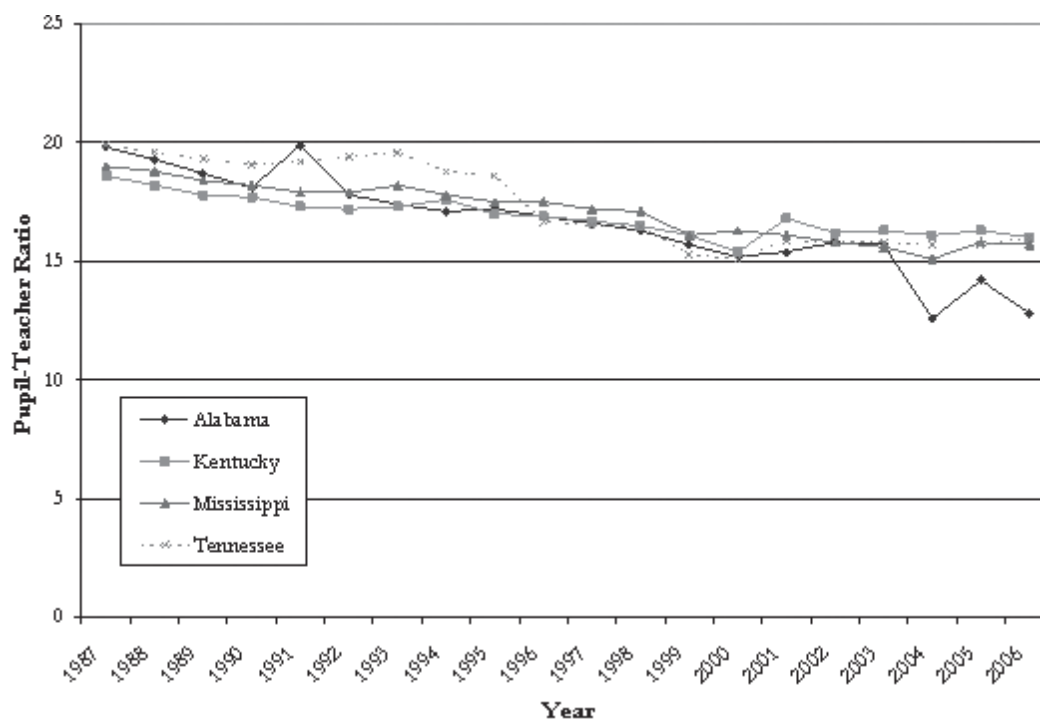
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.10B: CAPITAL EXPENDITURES PER STUDENT, WEST SOUTH CENTRAL STATES



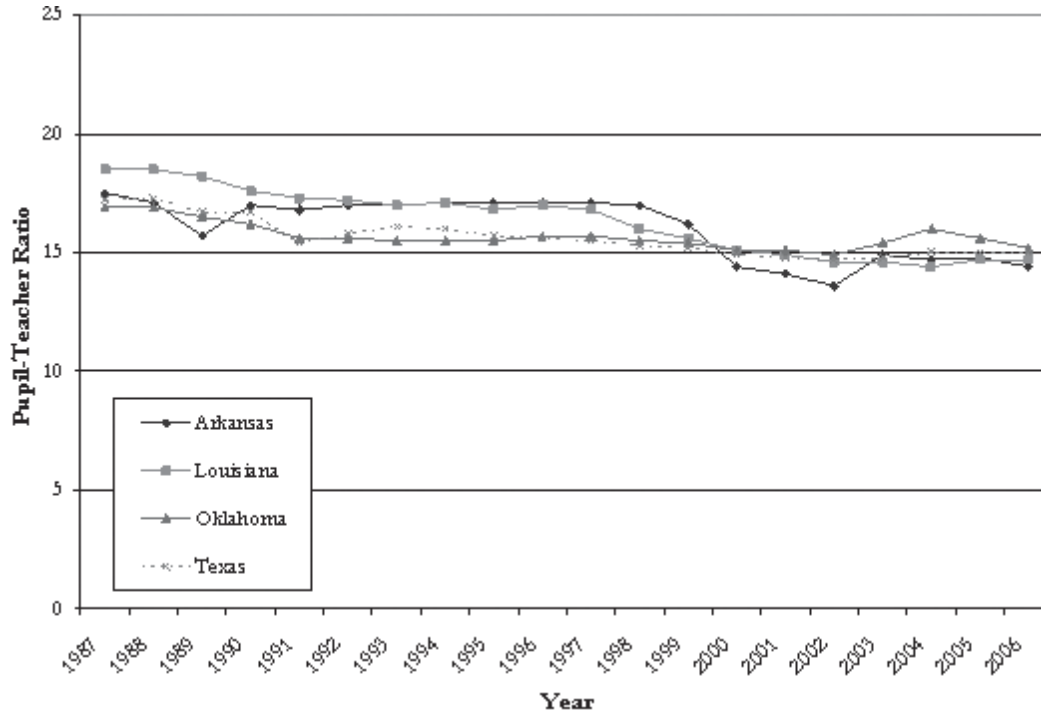
Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.11A: PUPIL-TEACHER RATIOS, EAST SOUTH CENTRAL STATES



Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

FIGURE 3.11B: PUPIL-TEACHER RATIOS, WEST SOUTH CENTRAL STATES



Source: Authors' calculations based on Common Core of Data, U.S. Department of Education

## References

<sup>1</sup> Hoyt, William H., "An Evaluation of the Kentucky Education Reform Act," in Kentucky Annual Economic Report, 1999, Center for Business and Economic Research, University of Kentucky, Lexington, KY, 1999.

<sup>2</sup> Troske, Kenneth R., "Changes in Educational Spending in Kentucky Since KERA and HB1," in Kentucky Annual Economic Report, 2008, Center for Business and Economic Research, University of Kentucky, Lexington, KY, 2008.

## Endnotes

<sup>1</sup> This discussion borrows heavily from Hoyt (1999).

<sup>2</sup> The Mill Rate is the tax per dollar of assessed value of property. The rate is expressed in "mills", where one mill is one-tenth of a cent (\$0.001)

<sup>3</sup> These descriptions of expenditure and revenue categories are based on the descriptions found in our source of data, the CCD.

<sup>4</sup> Note that the line labeled "state" in the figure now refers to the amount of local revenue per student in the state of Kentucky. Thus, the "state" label refers to the state of Kentucky, not to the source of funding - the source of funding in the figure is local.



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