

Legislative Research Commission

2011 School Finance Report

Research Report No. 389

Prepared by

Marcia Ford Seiler, Director; Pam Young; Sabrina Olds; Al Alexander;
Ken Chilton, PhD; Brenda Landy; Deborah Nelson, PhD; and Keith White, PhD

2011 School Finance Report

Project Staff

Marcia Ford Seiler, Director
Pam Young
Sabrina Olds
Al Alexander
Ken Chilton, PhD
Brenda Landy
Deborah Nelson, PhD
Keith White, PhD

Research Report No. 389

Legislative Research Commission

Frankfort, Kentucky
lrc.ky.gov

Accepted June 12, 2012, by the
Education Assessment and Accountability Review Subcommittee

Foreword

The Office of Education Accountability (OEA) is statutorily mandated through KRS 7.410 to analyze the level of equity achieved by the Support Education Excellence in Kentucky funding system and whether adequate funds are available to all school districts. Since 1990, OEA has conducted reviews of school finance issues, primarily focusing on the level of equity achieved by the funding system. While the *2007 School Finance Report* analyzed school districts' local and state revenue from fiscal years 1990 through 2006, this report reflects the addition of data for fiscal years 2007 through 2010.

Robert Sherman
Director

Legislative Research Commission
Frankfort, Kentucky
June 2012

Contents

Summary.....	v
Introduction	1
Contents of This Report	2
Methodologies Used To Examine Equity	2
Data Issues.....	2
Quintile Analysis	2
Other Equity Methods.....	3
Coefficient of Variation and Gini Coefficient	3
Geographic Cost Adjustments	4
Inflation Adjustments for Revenue Data	5
Revenue Analysis.....	5
Local and State Revenue.....	5
Local Revenue	11
State Revenue	13
Federal Revenue	15
Total Revenue.....	15
Conclusion.....	19
Works Cited.....	21
Appendix A: Fiscal Year 2010 Wealth Quintiles.....	23
Appendix B: Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5 Using Comparable Wage Index	25
Appendix C: Average Per-pupil Revenues by Wealth Quintile.....	27
Appendix D: Average Per-pupil Revenues by Wealth Quintile, Fiscal Year 1990 Constant Dollars	37

List of Tables

1	Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5 Per-pupil Revenue.....	7
2	Local and State Per-pupil Revenue by Property Wealth Quintile as Percent of Quintile 5 for Select Years.....	9
3	Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5: Comparison of Unadjusted and Comparable Wage Index	10
4	Local Per-pupil Revenue by Property Wealth Quintile Before and After Adding Activity Funds.....	12
5	State Per-pupil Revenue by Property Wealth Quintile Before and After Adding State On-behalf Payments.....	14
6	Total Revenue: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5 Per-pupil Revenue.....	17
7	Total Per-pupil Revenue by Property Wealth Quintile as Percent of Quintile 5 for Select Years.....	19

List of Figures

A Local and State Per-pupil Revenue Equity Gap Compared to 1990 8
B Equity Measures for Local and State Per-pupil Revenue 11
C Total Per-pupil Revenue Equity Gap Compared to 1990 18

Summary

In January 2008, the Office of Education Accountability (OEA) presented the *2007 School Finance Report* to the Education Assessment and Accountability Review Subcommittee. That report primarily focused on school districts' local and state revenues but also included federal revenues for fiscal years 1990 through 2006. This report reflects the addition of data for fiscal years 2007 through 2010.

The report begins with an explanation of the methodologies used to examine equity in school finance. Local and state (combined) revenues are then analyzed. The sources of school district revenue are then disaggregated, and the next three sections of the study discuss local, state, and federal revenues. The final revenue analysis section of the report discusses total district revenue.

The equity of local and state (combined) revenue is examined using the quintile analysis, the coefficient of variation, the Gini Coefficient, and the Comparable Wage Index. OEA's finance reports have historically examined the level of equity among school districts in available revenue through a method in which school districts are placed in five groupings, or quintiles, based on the district's per-pupil local property assessment. The coefficient of variation is a measure of how much variation exists in districts' per-pupil funding. The Gini Coefficient measures the difference between the actual distribution of per-pupil revenue and a perfectly equitable revenue distribution. The Comparable Wage Index is a cost adjustment technique that uses the salaries of college graduates who are not educators to measure regional variations in wages, which can be used by researchers to adjust district-level finance data to make resource comparisons across geographic areas. The equity of total revenue, including local, state, and federal, is examined using the quintile analysis.

While analyzing unadjusted dollars using the quintile analysis, the disparity in local and state (combined) revenue and total revenue between property-rich school districts and property-poor districts is now greater than it was in pre-Kentucky Education Reform Act (KERA) 1990 terms. However, when revenues are adjusted for inflation, the equity gap is less in all years since KERA was enacted.

Two equity measures indicate that Kentucky has met or has been close to meeting equity standards much of the time since KERA was enacted. While the magnitude of the equity gap varies depending on the method used, all methods consistently show that the equity gap for local and state (combined) revenue has been widening in recent years, with a slight narrowing in FY 2009.

The quintile analysis used for total revenue, including local, state, and federal, indicates a slight decrease in the equity gap for fiscal years 2009 and 2010.

The quintile analysis of total revenue also shows that in FY 2010, the unadjusted equity gap was 12 percent above the 1990 level, but the inflation-adjusted equity gap was 34 percent below the 1990 level.

2011 School Finance Report

Introduction

The *2007 School Finance Report* reported revenues through fiscal year 2006. This report reflects the addition of data for fiscal years 2007 through 2010.

In January 2008, the Office of Education Accountability (OEA) presented the *2007 School Finance Report* to the Education Assessment and Accountability Review Subcommittee. That report primarily focused on school districts' local and state revenues but also included federal revenues for fiscal years 1990 through 2006. This report reflects the addition of data for fiscal years 2007 through 2010.

Kentucky school districts received approximately \$223 million in federal State Fiscal Stabilization Funds, which were used to maintain Support Education Excellence in Kentucky (SEEK) funding at the 2009 level. In prior years, state revenues funded this portion of SEEK. Compared to FY 2009, state revenue declined in FY 2010, while federal revenue increased substantially.

There was an unusual appropriation of revenue through the federal American Recovery and Reinvestment Act of 2009, and Kentucky received State Fiscal Stabilization Funds (SFSF) in FY 2010; these funds were to assist in stabilizing local and state budgets to minimize and avoid reductions in education funding. For Kentucky, the funds were used to maintain Support Education Excellence in Kentucky (SEEK) funding at the 2009 level—funding the guaranteed base at \$3,866 per pupil. To accomplish this, SFSF money was used to fill the gap between the amount of state funds appropriated for SEEK and the amount needed to fund the guaranteed base at \$3,866 per pupil. In FY 2010, Kentucky school districts received approximately \$223 million in federal funds. In prior years, state revenues funded this portion of SEEK. Thus, compared to FY 2009, state revenue declined in FY 2010, while federal revenue increased substantially.

The equity gap in actual, unadjusted revenues is now greater than it was in pre-Kentucky Education Reform Act (KERA) 1990 terms. However, the equity gap in inflation-adjusted revenues is less in all years since KERA was enacted.

While analyzing actual, unadjusted revenues received by school districts, the disparity in local and state (combined) revenue and total revenue between property-rich school districts and property-poor districts is now greater than it was in pre-Kentucky Education Reform Act (KERA) 1990 terms. However, when revenues are adjusted for inflation, the equity gap is less in all years since KERA was enacted.

Several methods were used to analyze the equity of local and state (combined) revenue, and all consistently show that the equity gap has been widening over the past several years with a slight narrowing in FY 2009.

Several methods were used to analyze the equity of local and state (combined) revenue. Two methods indicate that Kentucky has met or has been close to meeting equity standards much of the time since KERA was enacted. While the magnitude of the equity gap varies depending on the method used, all methods consistently show that the equity gap for local and state (combined) revenue has been widening in recent years with a slight narrowing in FY 2009. Analysis of total revenue, including local, state, and federal,

indicates a slight decrease in the equity gap for fiscal years 2009 and 2010.

Contents of This Report

The report begins with an explanation of the methodologies used to examine equity in school finance. Local and state (combined) revenues are then analyzed. The sources of school district revenue are then disaggregated, and the next three sections of the study discuss local, state, and federal revenues. The final revenue analysis section of the report discusses total district revenue.

Methodologies Used To Examine Equity

Data Issues

School districts' reported revenues contained multiple coding errors, which have been corrected in this report.

School districts report local, state, and federal revenues on Annual Financial Reports that are submitted to the Kentucky Department of Education. While preparing *Reporting Total Revenues: On-behalf Payments and Local Activity Funds*, OEA staff noted multiple coding errors in reported revenues. This report reflects corrected revenues for fiscal years 2006 through 2010. Thus, the 2006 revenues and on-behalf payments differ from amounts previously reported in the *2007 School Finance Report*.

For the first time, funds received by school districts through activity funds have been incorporated into the revenue analysis.

For the first time, funds received by school districts through activity funds have been incorporated into the revenue analysis in the local revenue section of this report. Activity funds include fees and dues assessed for textbooks, locker rental, parking passes, extracurricular activities, club membership, and courses. While preparing its report on on-behalf payments and local activity funds, OEA staff manually obtained school districts' activity fund revenues by accessing school districts' audit reports for fiscal years 2006 through 2010.

Quintile Analysis

OEA's school finance reports have historically examined the level of equity among school districts in available revenue through a method in which school districts are placed in five groupings or quintiles. Each quintile represents roughly one-fifth of the state's students.

OEA's school finance reports have historically examined the level of equity among school districts in available revenue through a method in which school districts are placed in five groupings, or quintiles, based on the district's per-pupil local property assessment. Each quintile represents roughly one-fifth of the state's students. Quintile 1 contains the state's districts with the lowest per-pupil local property wealth, and Quintile 5 contains the districts with the highest property wealth. Appendix A contains a list of school districts by wealth quintile for FY 2010. Equity is measured by the

average local and state (combined) revenue for each quintile. If over time the difference in per-pupil revenue increases between the wealthiest districts (Quintile 5) and all other districts, it illustrates a widening of the equity gap. If the difference decreases, equity is improving.

OEA continues to use wealth quintiles based on local property assessments because the link between education funding and local wealth was one of the primary policy issues that led to education reform in Kentucky.

There are other ways to study equity. Some argue that differences in per-pupil funding between wealthy and poor school districts should be determined by grouping districts according to how much total funding they receive and not by local property assessments (Bassett). This OEA study used the methodology described above in part to preserve the consistency of OEA's school finance report study designs. In addition, the quintile calculations based on per-pupil local property assessments are supported by the fact that other equity methods reported in OEA's study show findings consistent with the quintile methodology.

Other Equity Methods

Since there is no single best measure of equity in state school finance, OEA's *2005 School Finance Report* presented a detailed discussion of criteria for selecting and reporting equity measures. As noted in that report, because of the lack of consensus on equity measures, most education research recommends reporting the results of more than one analysis. The advantage of reporting multiple measures of equity is that study findings are more robust and clear when all measures show similar results (Commonwealth. Legislative. Office. 2005 5-7).

Two commonly used statistical measures of equity—the coefficient of variation (CV) and the Gini Coefficient—are included in this report. The CV and Gini present overall measures of equity among districts, while the wealth quintiles analyze equity between groups of districts.

Coefficient of Variation and Gini Coefficient. Two commonly used statistical measures of equity—the coefficient of variation (CV) and the Gini Coefficient—are included in this report. The CV is a measure of how much variation exists in districts' per-pupil funding. The Gini measures the difference between the actual distribution of per-pupil revenue and a perfectly equitable revenue distribution. For example, if all school districts receive an equal amount of per-pupil revenue, then districts with 20 percent of the students in Kentucky should receive 20 percent of the funding and districts with 40 percent of the students should receive 40 percent of the funding. The coefficient for both measures generally ranges

between 0 and 1; the closer the value is to 0, the more equitably the revenue is distributed.

The CV and Gini present overall measures of equity among districts, while the wealth quintiles analyze equity between groups of districts. Thus, the measures should show similar trends but should not be expected to be precisely the same.

Geographic Cost Adjustments. When researchers compare educational resources between states or among school districts within one state, geographic cost differences complicate the analysis and can undermine attempts to determine equity levels. To address this, the National Center for Education Statistics (NCES) has been publishing cost adjustment research for more than 25 years. Much of the earlier work used statistical models of teacher salaries and school district characteristics. These cost analyses are complex and can be difficult for the public to understand. They also suffer from a number of methodological problems, including that salary data are only updated by NCES every 4 years (Taylor and Fowler).

The Comparable Wage Index (CWI) uses the salaries of college graduates who are not educators to measure regional variations in wages. The index allows researchers to adjust district-level finance data to make resource comparisons across geographic areas.

NCES published an alternative to its earlier approaches—known as the Comparable Wage Index (CWI)—that uses the salaries of college graduates who are not educators to measure regional variations in wages. The index allows researchers to adjust district-level finance data to make resource comparisons across geographic areas (Taylor and Glander).

According to the researchers who developed the index, the basic premise of the CWI is that all workers—including teachers—demand higher wages in areas with a higher cost of living or with characteristics that make the area less desirable, such as a particularly high crime rate. The index measures the variation in educator pay that is not controllable by school districts by using variations in the earnings of college graduates who are not educators. For example,

if accountants in the Atlanta metro area are paid 5 percent more than the national average accounting wage, Atlanta engineers are paid 5 percent more than the national average engineering wage, Atlanta nurses are paid 5 percent more than the national average nursing wage, and so on, then the CWI predicts that Atlanta teachers should also be paid 5 percent more than the national average teacher wage (Taylor and Glander 3).

Therefore, the index allows district revenues to be compared while taking into account the fact that in some areas of Kentucky,

teachers' wages reflect higher costs of living or other factors that drive up the costs of salaries.

Although NCES has not updated the index since 2005, the CWI has been used in this report to examine the equity of local and state per-pupil revenue by applying the 2005 index to fiscal years 2006 through 2010.

Inflation Adjustments for Revenue Data

When researchers analyze changes in dollars over time, an important consideration is how the purchasing power of those dollars also may have changed. The logic of adjusting financial data for the rate of inflation is that a dollar in 1990 was not worth a dollar in 2010.

When researchers analyze changes in dollars over time, an important consideration is how the purchasing power of those dollars may have changed. The logic of adjusting financial data for the rate of inflation is that a dollar in 1990 was not worth a dollar in 2010 because prices increased in the intervening 20 years: goods that cost \$1 in 1990 cost \$1.67 in 2010 (US. Bureau. "CPI").

Economists do not agree on the best way to adjust for inflation, in part because not all goods or services become more expensive over time. In addition, inflation adjustments do not generally reflect increases in efficiency or service improvements. For example, inflation adjustments for the price of computers account for changes in price but not changes in computing power relative to price (Nordhaus). Nevertheless, there is consensus that inflationary factors should be considered when analyzing revenues or expenditures over time because failure to do so results in comparing units of measurement (in this case, dollars) that are not equal in all years (Hartford 83).

In the sections that follow and in the related appendices, unadjusted revenues (the actual revenues received by school districts) and inflation-adjusted revenues are reported so policy makers can note the difference.

In the sections that follow and in the related appendices, the actual, unadjusted revenues received by school districts and inflation-adjusted revenues are reported for the quintile analysis so policy makers can note the difference. Inflation adjustments are calculated using the Bureau of Labor Statistics' Consumer Price Index.¹

Revenue Analysis

Local and State Revenue

The greatest rate of growth in local and state revenues occurred in the lowest wealth quintile, referred to as Quintile 1.

The gap in local and state per-pupil revenue between the highest wealth quintile and the other wealth quintiles from FY 1990 through

¹ There are other inflation-adjustment indices that could be used; all will present slightly different results. However, the Consumer Price Index (CPI) is a commonly accepted inflation adjuster in education research. OEA has used the CPI in previous reports, and in the interests of consistency, it is used here.

FY 2010 is shown in Appendix C, Figure C.A, along with the percent change in revenues during the 20-year period. The greatest rate of growth in local and state revenues occurred in the lowest wealth quintile. From FY 1990 to FY 2010, local and state revenues increased 175 percent, from \$2,665 to \$7,317, in Quintile 1. During this period, local and state revenues grew by 122 percent, from \$4,223 to \$9,376, in Quintile 5. When adjusted for inflation, local and state revenues increased 61 percent in Quintile 1 and 30 percent in Quintile 5 over the 20-year period. Appendix D reports the results of inflation-adjusted per-pupil revenues.

While Appendix C, Figure C.A illustrates variations in the amount of local and state revenues and reports the amount of revenues received by each quintile over time, Table 1 converts these data to a measure of equity among the wealth quintiles. Local and state per-pupil revenue in FY 1990 was \$4,223 in Quintile 5, compared to \$2,665 in Quintile 1, for a difference of \$1,558. Table 1 reports the differences in funding between Quintile 5 and each of the other quintiles from FY 1990 to FY 2010. Adding Quintile 5's and Quintile 1's difference of \$1,558 to the corresponding differences between Quintile 5 and Quintiles 2 through 4 results in an aggregate difference of \$5,352. As equity improves, the sum of differences between Quintile 5 and Quintiles 1 through 4 will narrow. The FY 1990 figure is the pre-KERA baseline against which the FY 1991 through FY 2010 data will be compared.

Local and state education funding inequity reached a high of \$7,107 in FY 2010, 33 percent above the gap in FY 1990.

Table 1 reports unadjusted and inflation-adjusted (FY 1990 constant dollars) revenues. Panel 1 of the table shows that for unadjusted revenue, the equity gap has been narrower in fiscal years 1991 through 2005 than it was in FY 1990; however, the equity gap has been greater in fiscal years 2006 through 2010 than it was in FY 1990. Over the years, the gap has narrowed and then widened, reaching a high of \$7,107 in FY 2010, 33 percent above the gap in FY 1990. During FY 2010, all quintiles experienced a decline in per-pupil state revenue; however, Quintile 5 experienced a lesser decline than the less wealthy quintiles and also experienced a slightly higher increase in per-pupil local revenues creating an increase in the equity gap.

The inflation-adjusted equity gap reported in Panel 2 of Table 1 is narrower than that shown in Panel 1 for unadjusted dollars.

Panel 2 of Table 1 shows that the inflation-adjusted gap was \$4,164 in FY 2010, a decrease of 22 percent from FY 1990. The inflation-adjusted equity gap reported in Panel 2 is narrower than that shown in Panel 1 for unadjusted revenues. In addition, the year-to-year variations in the gap are smaller in the inflation-adjusted analysis than is evident in Panel 1.

Table 1
Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue
Compared to Quintile 5 Per-pupil Revenue, Fiscal Years 1990-2010

Panel 1: Unadjusted Revenue

Fiscal Year	Quintile 5 Per-pupil Revenue Minus Lower Quintiles' Revenue				Q1-4 Aggregate Difference: Equity Gap	Percent Difference vs. 1990
	Quintile 1	Quintile 2	Quintile 3	Quintile 4		
1990	\$1,558	\$1,432	\$1,340	\$1,022	\$5,352	N/A
1991	1,142	1,087	1,034	883	4,147	-23%
1992	901	1,005	932	842	3,679	-31
1993	921	1,019	1,027	895	3,862	-28
1994	795	923	924	839	3,480	-35
1995	847	962	992	928	3,729	-30
1996	900	1,006	1,026	935	3,867	-28
1997	726	851	907	926	3,410	-36
1998	1,047	1,170	1,253	1,198	4,669	-13
1999	1,188	1,253	1,287	1,276	5,004	-6
2000	1,146	1,244	1,219	1,238	4,847	-9
2001	1,171	1,250	1,275	1,219	4,915	-8
2002	1,228	1,292	1,201	1,313	5,034	-6
2003	1,204	1,186	1,136	1,199	4,726	-12
2004	1,216	1,246	1,090	1,089	4,642	-13
2005	1,376	1,367	1,227	1,187	5,157	-4
2006	1,645	1,571	1,405	1,260	5,881	10
2007	1,681	1,653	1,520	1,353	6,206	16
2008	1,755	1,689	1,620	1,559	6,624	24
2009	1,654	1,559	1,454	1,407	6,074	13
2010	2,058	1,830	1,671	1,548	7,107	33

Panel 2: Inflation-adjusted Revenue (FY 1990 Constant Dollars)

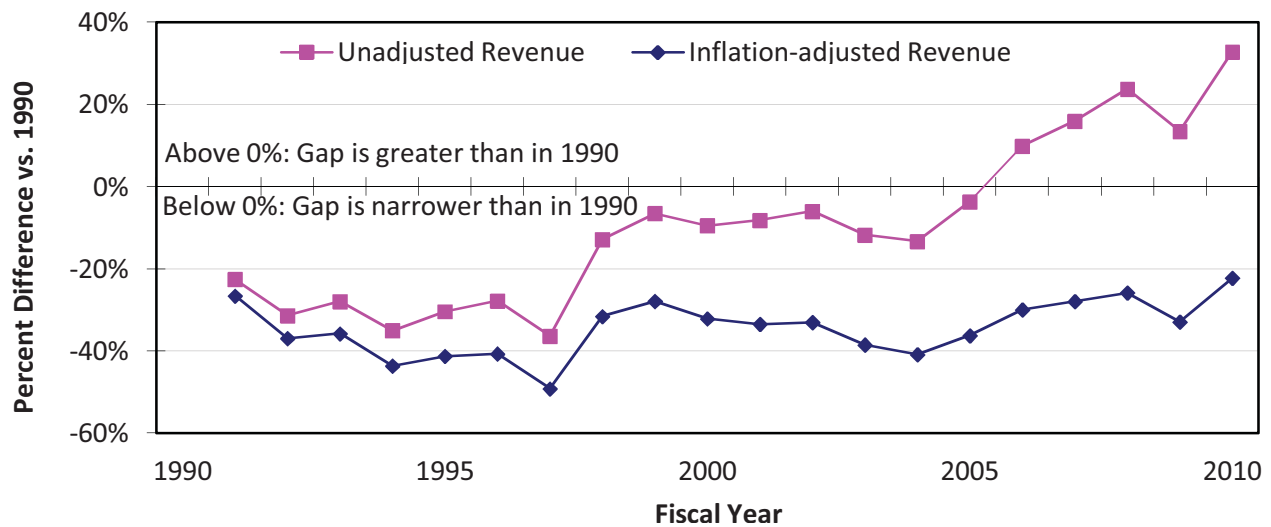
Fiscal Year	Quintile 5 Per-pupil Revenue Minus Lower Quintiles' Revenue				Q1-4 Aggregate Difference: Equity Gap	Percent Difference vs. 1990
	Quintile 1	Quintile 2	Quintile 3	Quintile 4		
1990	\$1,558	\$1,432	\$1,340	\$1,022	\$5,352	N/A
1991	1,082	1,031	981	838	3,932	-27%
1992	827	923	857	773	3,380	-37
1993	821	908	915	798	3,441	-36
1994	690	801	802	728	3,022	-44
1995	715	812	837	783	3,148	-41
1996	739	827	843	769	3,178	-41
1997	580	680	725	740	2,725	-49
1998	822	919	984	940	3,665	-32
1999	917	967	994	985	3,862	-28
2000	860	933	915	928	3,635	-32
2001	849	907	925	884	3,564	-33
2002	875	921	856	936	3,587	-33
2003	840	827	792	836	3,295	-38
2004	830	850	744	743	3,167	-41
2005	912	905	812	786	3,416	-36
2006	1,050	1,002	897	804	3,752	-30
2007	1,045	1,028	945	841	3,860	-28
2008	1,053	1,013	971	935	3,973	-26
2009	978	922	860	832	3,593	-33
2010	1,206	1,072	979	907	4,164	-22

Note: N/A means not applicable.

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics.

Figure A illustrates the local and state equity gap in relation to the 1990 level in both unadjusted and inflation-adjusted revenues as numerically shown in the last column of Panels 1 and 2 in Table 1. Both unadjusted and inflation-adjusted trends show the equity gap widening in recent years, with a slight narrowing in FY 2009. However, unlike the unadjusted gap, the inflation-adjusted gap remained narrower than the 1990 level for all years.

Figure A
Local and State Per-pupil Revenue Equity Gap Compared to 1990



Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics.

After education reform, revenues for Quintiles 1 through 4 ranged between 78 percent and 85 percent of the revenue received by Quintile 5 for fiscal years 1995, 2000, 2005, and 2010.

Prior to education reform in 1990, the equity gap was apparent between the property-poor and property-rich districts. As Table 2 reflects, Quintiles 1 through 4 received between 63 percent and 76 percent of the local and state revenues received by the highest wealth quintile in FY 1990. After reform, revenues for Quintiles 1 through 4 ranged between 78 percent and 85 percent of the revenue received by Quintile 5 for fiscal years 1995, 2000, 2005, and 2010.

Table 2
Local and State Per-pupil Revenue by Property Wealth Quintile
as Percent of Quintile 5 for Select Years

Quintile	FY 1990	% of Q5	FY 1995	% of Q5	FY 2000	% of Q5	FY 2005	% of Q5	FY 2010	% of Q5
Q1 - Lowest	\$2,665	63	\$4,644	85	\$5,800	83	\$6,588	83	\$7,317	78
Q2	2,792	66	4,530	82	5,703	82	6,598	83	7,546	80
Q3	2,884	68	4,500	82	5,727	82	6,738	85	7,705	82
Q4	3,201	76	4,564	83	5,708	82	6,777	85	7,828	83
Q5 - Highest	4,223	100	5,492	100	6,946	100	7,964	100	9,376	100

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Table 3 uses the Comparable Wage Index for FY 1997 through FY 2010 to convert the equity gap analysis presented in Table 1 to cost-adjusted dollars. Fiscal year 1997 is the baseline against which FY 1998 through FY 2010 data are compared. Similar to the analysis shown in Table 1, Table 3 illustrates the aggregate differences of local and state (combined) revenue of Quintiles 1 through 4, compared to the revenue of districts in Quintile 5. To assist in interpreting the table, both unadjusted and CWI-adjusted data are shown.

The cost index results show much smaller differences between quintiles than is seen in the unadjusted equity analysis. However, the trend is essentially the same for both the unadjusted and CWI data and shows that the equity gap has narrowed and widened over the years.

As Table 3 illustrates, using the cost index results show much smaller differences between quintiles than is seen in the unadjusted equity analysis. The percent change in revenue over time, compared to the FY 1997 base year, is much more volatile in the cost-adjusted revenue analysis than in unadjusted revenue. However, the trend in revenue equity among the quintiles is essentially the same for both the unadjusted and CWI data and shows that the equity gap has narrowed and widened over the years.

Table 3
Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5: Comparison of Unadjusted and Comparable Wage Index Fiscal Years 1997-2010

Fiscal Year	Unadjusted Q1-4 Aggregate Difference: Equity Gap	% Difference Compared to 1997	CWI Adjusted Q1-4 Aggregate Difference: Equity Gap*	% Difference Compared to 1997
1997	\$3,410	N/A	\$701	N/A
1998	4,669	37%	2,028	189%
1999	5,004	47	2,291	227
2000	4,847	42	1,396	99
2001	4,915	44	1,646	135
2002	5,034	48	1,787	155
2003	4,726	39	1,261	80
2004	4,642	36	985	41
2005	5,157	51	1,466	109
2006	5,881	72	1,941	177
2007	6,206	82	2,102	200
2008	6,624	94	2,193	213
2009	6,074	78	1,737	148
2010	7,107	108	2,975	324

Note: N/A means not applicable.

*Appendix B contains the differences between Quintiles 1-4 and Quintile 5 for FY 1997-FY 2010.

Sources: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education; US. Dept. of Ed.

Some experts suggest a standard of 0.1 or less for the CV and 0.05 or less for the Gini coefficient. Kentucky did not meet the standards for equity before KERA but has met or has been close to meeting the standards much of the time since KERA was enacted.

Figure B reports changes in the equity of per-pupil local and state revenue as measured by the coefficient of variation and the Gini Coefficient. In interpreting the CV and Gini measures of equity, values closer to zero show greater equity. There is no consensus regarding how low each measure must be to indicate equity. Some experts suggest a standard of 0.1 or less for the CV and 0.05 or less for the Gini coefficient (Odden).

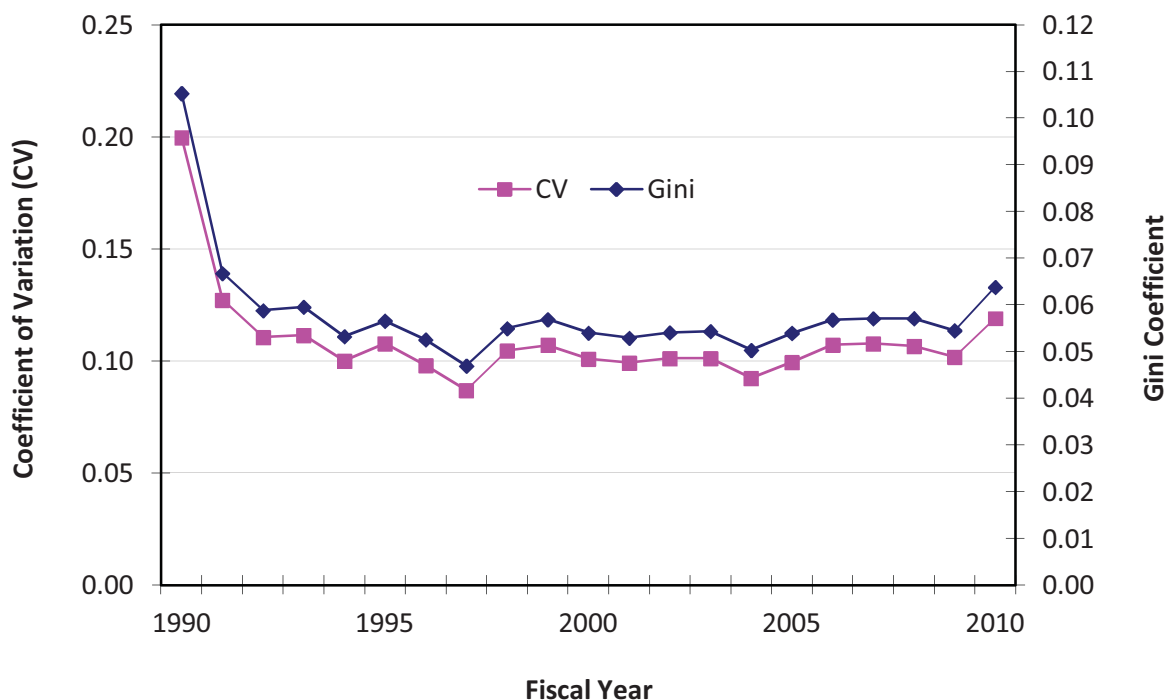
As Figure B shows, Kentucky did not meet the standards for equity before KERA but has met or has been close to meeting the standards much of the time since KERA was enacted. Most states have CVs greater than 0.1 and Gini coefficients ranging between 0.1 and 0.2 (Odden).

All three methods of examining equity—wealth quintiles, Gini Coefficient, and CV—reveal similar patterns.

Differences between the CV and the Gini should not be interpreted as one showing more equity than the other because they are based on different units of measurement. However, as Figure B shows, the relationship between the two is similar, and a comparison of Figure A with the last column of Table 1 shows that all three

methods of examining equity—wealth quintiles, Gini Coefficient, and CV—reveal similar patterns. Equity improved significantly after education reform and continued to improve slightly for 6 years but then remained relatively constant, with slight fluctuations. The equity gap widened in 2005 through 2008, narrowed slightly in 2009, and then increased in FY 2010.

Figure B
Equity Measures for Local and State Per-pupil Revenue, Fiscal Years 1990-2010



Note: The coefficient generally ranges between 0 and 1; the closer the value is to 0, the more equitably the revenue is distributed.

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Local Revenue

In absolute terms, local revenue grew the most—\$4,187 per pupil—in the highest wealth quintile from FY 1990 to FY 2010. Local revenue grew the least—\$1,368 per pupil—in the lowest wealth quintile for the same period.

To analyze the revenue gap in further detail, local revenue is analyzed separately from state revenue. As shown in Appendix C, Figure C.B, local revenue grew the most in absolute terms in the highest wealth quintile—\$4,187 per pupil—increasing from \$2,103 per pupil in FY 1990 to \$6,290 in FY 2010. For the same period, local revenue grew the least—\$1,368 per pupil—in the lowest wealth quintile, increasing from \$355 per pupil to \$1,723. However, the lowest wealth quintile experienced the greatest rate of change, increasing 386 percent over the 20-year period. Appendix D, Figure D.B reports these changes in constant 1990

dollars. When adjusted for inflation, Quintile 1 grew by \$655, or 184 percent and Quintile 5 grew by \$1,582, for a 75 percent increase over the 20-year period.

Table 4 reflects increases to district revenue when activity funds are included in local revenue for fiscal years 2006 through 2010. Each of the quintiles receives 5 percent to 17 percent more local revenue per pupil when activity funds are included.

Table 4
Local Per-pupil Revenue by Property Wealth Quintile
Before and After Adding Activity Funds, Fiscal Years 2006-2 010

Quintile	Without Activity Funds	With Activity Funds	Difference	Percent Change
FY 2006				
Q1 - Lowest	\$1,434	\$1,666	\$232	16%
Q2	2,085	2,374	289	14
Q3	2,691	2,950	259	10
Q4	3,581	3,917	335	9
Q5 - Highest	5,507	5,805	298	5
FY 2007				
Q1 - Lowest	\$1,634	\$1,908	\$274	17%
Q2	2,237	2,521	284	13
Q3	2,838	3,109	271	10
Q4	3,773	4,129	356	9
Q5 - Highest	5,861	6,168	307	5
FY 2008				
Q1 - Lowest	\$1,707	\$1,979	\$272	16%
Q2	2,406	2,684	278	12
Q3	2,999	3,307	308	10
Q4	3,839	4,217	378	10
Q5 - Highest	6,188	6,506	318	5
FY 2009				
Q1 - Lowest	\$1,688	\$1,962	\$274	16%
Q2	2,500	2,791	291	12
Q3	3,094	3,376	282	9
Q4	3,963	4,317	354	9
Q5 - Highest	6,150	6,451	301	5
FY 2010				
Q1 - Lowest	\$1,723	\$2,002	\$279	16%
Q2	2,598	2,870	272	10
Q3	3,174	3,482	308	10
Q4	4,014	4,432	418	10
Q5 - Highest	6,290	6,602	312	5

Note: Activity funds include fees and dues assessed for textbooks, locker rental, parking passes, extracurricular activities, club membership, and courses.

Source: Staff calculations based on data provided by the Kentucky Department of Education.

State Revenue

In absolute terms, state revenue grew the most—\$3,284 per pupil—in the lowest wealth quintile from FY 1990 to FY 2010. State revenue grew the least—\$966 per pupil—in the highest wealth quintile for the same period.

Per-pupil state revenue by wealth quintile from FY 1990 to FY 2010 is depicted in Appendix C, Figure C.C. State revenue grew the most in the lowest wealth quintile, increasing \$3,284 per pupil from \$2,310 in FY 1990 to \$5,594 in FY 2010. State revenue grew the least in the highest wealth quintile, increasing \$966 per pupil from \$2,120 to \$3,086 for the same period. This relationship is also evident when the data are adjusted for inflation, although the magnitude of dollar gains is less. As Appendix D, Figure D.C reports, in constant 1990 dollars, state revenue for Quintile 1 grew 42 percent from 1990 to 2010, while Quintile 5 state revenue fell by 15 percent, from \$2,120 to \$1,808 during this period.

The General Assembly appropriates funds to the Kentucky Department of Education for expenditures the department makes on behalf of school districts. These are commonly referred to as on-behalf payments. These items include vocational schools, teacher retirement, health insurance, and life insurance. These payments have not been reflected in OEA's funding analysis thus far because school districts were not required to account for these funds until FY 2004. Table 5 reflects changes to district revenue when on-behalf payments are included for fiscal years 2006 through 2010, the years for which corrections were made and additional items such as the School Facilities Construction Commission's debt service payments and technology software payments were identified as on-behalf payments by OEA staff.

Quintiles 1 through 4 received 29 percent to 38 percent more revenue per pupil in fiscal years 2006 through 2009 when on-behalf payments are included, while Quintile 5 received an additional 47 percent to 49 percent for the same period. In FY 2010, Quintiles 1 through 4 received 35 percent to 43 percent more from on-behalf payments, and Quintile 5 received 57 percent more revenue than seen in unadjusted revenues. In absolute terms, Quintile 1 experienced the greatest increase from the addition of on-behalf payments in all five fiscal years.

Table 5
State Per-pupil Revenue by Property Wealth Quintile
Before and After Adding State On-behalf Payments, Fiscal Years 2006-2010

Quintile	Without On-behalf Payments	With On-behalf Payments	Difference	Percent Change
FY 2006				
Q1 - Lowest	\$5,530	\$7,144	\$1,615	29%
Q2	4,953	6,532	1,580	32
Q3	4,513	5,952	1,439	32
Q4	3,767	5,153	1,385	37
Q5 - Highest	3,101	4,555	1,454	47
FY 2007				
Q1 - Lowest	\$5,707	\$7,402	\$1,695	30%
Q2	5,132	6,777	1,645	32
Q3	4,664	6,170	1,505	32
Q4	3,897	5,338	1,442	37
Q5 - Highest	3,161	4,692	1,531	48
FY 2008				
Q1 - Lowest	\$6,167	\$8,053	\$1,886	31%
Q2	5,534	7,304	1,770	32
Q3	5,012	6,717	1,705	34
Q4	4,231	5,760	1,529	36
Q5 - Highest	3,442	5,084	1,642	48
FY 2009				
Q1 - Lowest	\$6,223	\$8,164	\$1,941	31%
Q2	5,505	7,315	1,810	33
Q3	5,016	6,703	1,687	34
Q4	4,195	5,774	1,579	38
Q5 - Highest	3,414	5,094	1,680	49
FY 2010				
Q1 - Lowest	\$5,594	\$7,542	\$1,947	35%
Q2	4,948	6,787	1,839	37
Q3	4,531	6,310	1,779	39
Q4	3,814	5,436	1,622	43
Q5 - Highest	3,086	4,860	1,774	57

Note: On-behalf payments are expenditures the Kentucky Department of Education makes with general fund appropriations. This spending covers expenses that might otherwise be paid for directly by school districts, such as vocational schools, teacher retirement, health insurance, and life insurance.

Source: Staff calculations based on data provided by the Kentucky Department of Education.

Federal Revenue

In absolute terms, federal revenue grew the most—\$2,008 per pupil—in the lowest wealth quintile from FY 1990 to FY 2010. Federal revenue grew the least—\$1,144 per pupil—in Quintile 4 for the same period.

Although this analysis focuses primarily on school districts' local and state funding because those are the funding sources that can be impacted through state policymaking, analysis of education funding is incomplete without discussion of the federal funds received by school districts. This is especially true for FY 2010 with the receipt of federal funds through SFSF used to maintain SEEK at the 2009 level. Appendix C, Figure C.D depicts the federal funds received by quintiles from FY 1990 through FY 2010. Federal revenue grew the most in Quintile 1, increasing \$2,008 per pupil from \$540 in FY 1990 to \$2,548 in FY 2010. Federal revenue grew the least in Quintile 4, increasing \$1,144 per pupil from \$292 to \$1,436 for the same period.

When adjusted for inflation, the patterns of growth in federal revenue are similar to those reported for unadjusted dollars. As reported in Appendix D, Figure D.D, in constant 1990 dollars, Quintile 1 grew by \$953, or 177 percent; while Quintile 4 grew the least, increasing by \$550, or 189 percent, over the 20-year period.

Total Revenue

The gap is actually wider between Quintiles 5 and Quintiles 3 (some years) and 4 when federal revenue is included.

Appendix C, Figure C.E reflects total revenue (local, state, and federal) and illustrates how the addition of federal funds helps reduce the equity gap between Quintile 5 and Quintiles 1, 2, and 3 (some years). The gap is wider between Quintile 5 and Quintiles 3 (some years) and 4 when federal revenue is included because of the relatively lower amount of federal funds received by these districts.

In an analysis similar to Table 1 containing local and state revenue, Table 6 converts the total per-pupil revenue data presented in Appendix C, Figure C.E to a measure of equity among the wealth quintiles and repeats both actual and inflation-adjusted revenue amounts. Total per-pupil revenue for Quintile 5 was \$4,585 in 1990, compared to \$3,205 in Quintile 1, for a difference of \$1,380. Table 6 reports differences in total per-pupil funding between Quintile 5 and each of the other quintiles from FY 1990 through FY 2010. Adding Quintile 5's and Quintile 1's difference of \$1,380 to the corresponding differences in funding between Quintile 5 and Quintiles 2 through 4 results in an aggregate difference of \$5,241 in FY 1990. As equity improves, the sum of differences between Quintile 5 and Quintiles 1 through 4—the equity gap—will narrow. The FY 1990 figure is the pre-KERA

baseline against which the FY 1991 through FY 2010 equity gap data will be compared.

The equity gap has been narrower in fiscal years 1991 through 2005 than it was in FY 1990; however, the equity gap has been greater in fiscal years 2006 through 2010 than it was in FY 1990.

As is the case when only local and state revenue is considered (see Table 1), Panel 1 of Table 6 shows that for unadjusted total revenue, the equity gap has been narrower in fiscal years 1991 through 2005 than it was in FY 1990; however, the equity gap has been greater in fiscal years 2006 through 2010 than it was in FY 1990. Although still higher than the 1990 level, the equity gap decreased slightly in fiscal years 2009 and 2010. In FY 2009, Quintile 5 experienced a decline in per-pupil total revenue because of declines in both local and state per-pupil revenues, while the less wealthy quintiles experienced small increases in overall per-pupil total revenue. In FY 2010, Quintiles 1 through 3 experienced greater increases in per-pupil total revenue than did Quintile 5 largely due to substantial increases in federal revenues from receipt of SFSF.

The inflation-adjusted equity gap calculated in Panel 2 of Table 6 shows greater success in reaching equity and a more consistent narrowing of the gap over time than is evident in the unadjusted revenue analysis presented in Panel 1 of Table 6.

Table 6
Total Revenue: Difference in Quintiles 1-4 Per-pupil Revenue
Compared to Quintile 5 Per-pupil Revenue, Fiscal Years 1990-2010

Panel 1: Unadjusted Revenue

Fiscal Year	Quintile 5 Per-pupil Revenue Minus Lower Quintiles' Revenue				Q1-4 Aggregate Difference: Equity Gap	Percent Difference vs. 1990
	Quintile 1	Quintile 2	Quintile 3	Quintile 4		
1990	\$1,380	\$1,391	\$1,378	\$1,092	\$5,241	N/A
1991	1,043	1,139	1,144	1,050	4,376	-16%
1992	711	1,017	1,006	963	3,697	-29
1993	726	985	1,063	1,041	3,816	-27
1994	699	957	1,081	1,039	3,776	-28
1995	650	902	1,037	1,042	3,631	-31
1996	712	1,011	1,138	1,094	3,956	-25
1997	416	771	948	1,078	3,212	-39
1998	865	1,139	1,318	1,397	4,719	-10
1999	885	1,136	1,253	1,388	4,661	-11
2000	875	1,164	1,230	1,465	4,734	-10
2001	833	1,113	1,261	1,403	4,610	-12
2002	825	1,138	1,138	1,508	4,609	-12
2003	711	949	1,008	1,368	4,036	-23
2004	790	1,179	1,046	1,451	4,466	-15
2005	976	1,322	1,247	1,583	5,128	-2
2006	1,296	1,519	1,511	1,601	5,928	13
2007	1,276	1,533	1,586	1,632	6,028	15
2008	1,431	1,541	1,669	1,870	6,510	24
2009	1,277	1,403	1,494	1,770	5,943	13
2010	1,231	1,402	1,405	1,833	5,871	12

Panel 2: Inflation-adjusted Revenue (FY 1990 Constant Dollars)

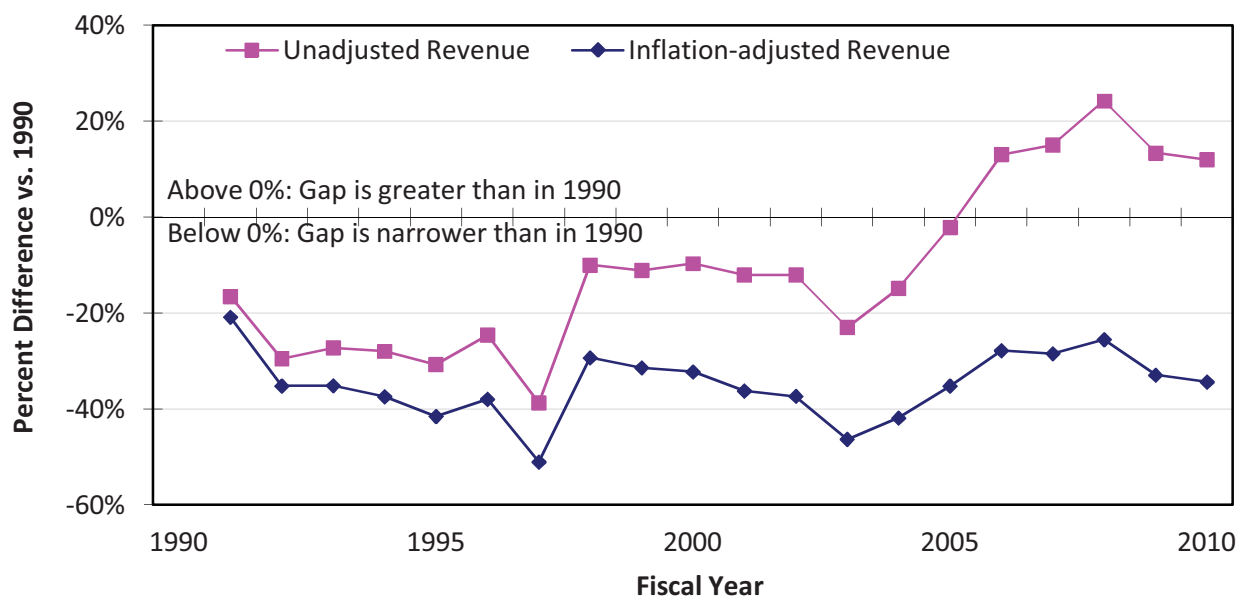
Fiscal Year	Quintile 5 Per-pupil Revenue Minus Lower Quintiles' Revenue				Q1-4 Aggregate Difference: Equity Gap	Percent Difference vs. 1990
	Quintile 1	Quintile 2	Quintile 3	Quintile 4		
1990	\$1,380	\$1,391	\$1,378	\$1,092	\$5,241	N/A
1991	989	1,080	1,085	996	4,149	-21%
1992	654	934	\$924	885	3,397	-35
1993	647	878	\$947	928	3,399	-35
1994	607	831	\$939	902	3,279	-37
1995	549	762	\$875	880	3,065	-42
1996	586	831	\$935	899	3,251	-38
1997	333	616	\$757	861	2,567	-51
1998	679	894	1,035	1,096	3,705	-29
1999	683	876	\$967	1,071	3,597	-31
2000	656	873	\$922	1,099	3,551	-32
2001	604	807	\$914	1,018	3,343	-36
2002	588	811	\$811	1,075	3,284	-37
2003	496	662	\$703	954	2,814	-46
2004	539	805	\$714	990	3,047	-42
2005	647	875	\$826	1,048	3,396	-35
2006	827	969	\$964	1,022	3,783	-28
2007	794	954	\$986	1,015	3,749	-28
2008	858	924	1,001	1,121	3,905	-25
2009	755	830	\$884	1,047	3,516	-33
2010	721	821	\$823	1,074	3,440	-34

Note: N/A means not applicable.

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics.

Figure C illustrates the equity gap for total revenue in relation to the 1990 level in both unadjusted and inflation-adjusted revenues as numerically shown in the last column of Panels 1 and 2 in Table 6. Both unadjusted and inflation-adjusted trends show the equity gap widening in recent years, with a slight narrowing in fiscal years 2009 and 2010. However, unlike the unadjusted gap, the inflation-adjusted gap remained narrower than the 1990 level for all years.

Figure C
Total Per-pupil Revenue Equity Gap Compared to 1990



Source: Staff compilation of Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics.

As reflected in Table 7, Quintiles 1 through 3 received approximately 70 percent of the total revenue received by Quintile 5 in FY 1990. Quintile 4 received approximately 76 percent of the total revenue received by Quintile 5. By FY 2010, Quintiles 1 through 4 received between 83 percent and 89 percent of the total revenue received by Quintile 5. Quintile 4 received slightly less revenue than the other quintiles because it received less federal revenue.

Table 7
Total Per-pupil Revenue by Property Wealth Quintile
as Percent of Quintile 5 for Select Years

Quintile	FY 1990	% of Q5	FY 1995	% of Q5	FY 2000	% of Q5	FY 2005	% of Q5	FY 2010	% of Q5
Q1 - Lowest	\$3,205	70	\$5,370	89	\$6,785	89	\$8,111	89	\$9,865	89
Q2	3,193	70	5,117	85	6,497	85	7,766	85	9,694	87
Q3	3,207	70	4,983	83	6,431	84	7,841	86	9,691	87
Q4	3,493	76	4,978	83	6,195	81	7,505	83	9,263	83
Q5 - Highest	4,585	100	6,020	100	7,661	100	9,087	100	11,096	100

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky of Education.

Conclusion

This report analyzes disparities in equity among school districts by examining the amount of per-pupil funding received by districts. The analysis focuses on local and state revenues because those are subject to state legislative and regulatory policy, but federal revenue is also reported to provide a more complete picture of school district finance in the Commonwealth.

The equity gap in actual, unadjusted revenues is now greater than it was in pre-KERA 1990 terms. However, the equity gap in inflation-adjusted revenues is less in all years since KERA was enacted.

As in prior finance reports, OEA continues to use wealth quintiles to analyze the equity gap. While analyzing unadjusted dollars using the quintile analysis, the disparity in local and state (combined) revenue and total revenue between property-rich school districts and property-poor districts is now greater than it was in pre-KERA 1990 terms. However, when revenues are adjusted for inflation, the equity gap is less in all years since KERA was enacted.

Several methods were used to analyze the equity of local and state revenue, and all consistently show that the equity gap has been widening over the past several years with a slight narrowing in FY 2009.

Because the review of previous research on equity in education finance concluded that there is no consensus on the best way to measure equity, this analysis employs additional equity methods to analyze local and state revenue. Three other methods were used to analyze the equity of local and state (combined) revenue—coefficient of variation, Gini Coefficient, and Comparable Wage Index. Based on the CV and Gini analyses, Kentucky has met or has been close to meeting equity standards much of the time since KERA was enacted.

While the magnitude of the equity gap varies depending on the method used, all methods consistently show that the equity gap for local and state revenue has been widening in recent years, with a slight narrowing in FY 2009.

The quintile analysis used for total revenue indicates a slight decrease in the equity gap for fiscal years 2009 and 2010.

The quintile analysis used for total revenue, including local, state, and federal, indicates a slight decrease in the equity gap for fiscal years 2009 and 2010.

The quintile analysis of total revenue also shows that in FY 2010, the unadjusted equity gap was 12 percent above the 1990 level, but the inflation-adjusted equity gap was 34 percent below the 1990 level.

Works Cited

Bassett, Fred. Email to Kentucky school superintendents. June 28, 2005.

Commonwealth of Kentucky. Legislative Research Commission. Office of Education Accountability. *2005 School Finance Report*. Report No. 335. Frankfort: LRC, 2006.

Hartford, Tim. *The Undercover Economist*. New York, NY: Oxford Univ. Press, Inc. 2006.

Nordhaus, William. "Inflation Theory and Policy." *American Economic Review*. May 1976.

Odden, A.R., and L.O. Picus. *School finance: A policy perspective*. 4th Edition. Boston: McGraw-Hill Higher Education, 2008.

Taylor, L.L., and W.J. Fowler, Jr. *A Comparable Wage Approach to Geographic Cost Adjustment* (NCES 2006-321). US Department of Education. Washington, DC: National Center for Education Statistics. 2006. <<http://nces.ed.gov/pubs2006/2006321.pdf>> (accessed Dec. 28, 2007).

Taylor, L.L., and M. Glander. *Documentation for the NCES Comparable Wage Index Data File* (EFSC 2006-865). US Department of Education. Washington, DC: National Center for Education Statistics. 2006. <<http://nces.ed.gov/pubs2006/2006865.pdf>> (accessed Dec. 28, 2007).

United States. Bureau of Labor Statistics. "CPI Inflation Calculator." <<http://data.bls.gov/cgi-bin/cpicalc.pl>> (accessed Dec. 5, 2011).

---. Bureau of Labor Statistics. "Table Containing History of CPI-U U.S. All Items Indexes and Annual Percent Changes From 1913 to Present." <<ftp://ftp.bls.gov/pub/special.requests/cpi/cpi.txt>> (accessed Nov. 18, 2011).

---. Department of Education. Institute of Education Sciences. National Center for Education Statistics. "Comparable Wage Index Data Files and Documentation." <<http://nces.ed.gov/edfin/adjustments.asp>> (assessed Nov. 26, 2007).

Appendix A

Fiscal Year 2010 Wealth Quintiles

Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Adair Co.	Ashland Ind.	Anderson Co.	Bardstown Ind.	Anchorage Ind.
Allen Co.	Barren Co.	Ballard Co.	Beechwood Ind.	Boone Co.
Augusta Ind.	Bowling Green Ind.	Bourbon Co.	Bellevue Ind.	Campbell Co.
Barbourville Ind.	Breckinridge Co.	Boyd Co.	Burgin Ind.	Fayette Co.
Bath Co.	Christian Co.	Boyle Co.	Calloway Co.	Jefferson Co.
Bell Co.	Crittenden Co.	Bullitt Co.	Clark Co.	Lyon Co.
Berea Ind.	Cumberland Co.	Campbellsville Ind.	Danville Ind.	
Bracken Co.	Elizabethtown Ind.	Carroll Co.	Fort Thomas Ind.	
Breathitt Co.	Floyd Co.	Caverna Ind.	Franklin Co.	
Butler Co.	Frankfort Ind.	Covington Ind.	Jessamine Co.	
Caldwell Co.	Gallatin Co.	Daviess Co.	Kenton Co.	
Carlisle Co.	Garrard Co.	Erlanger-Elsmere Ind.	Knott Co.	
Carter Co.	Grant Co.	Fulton Co.	Livingston Co.	
Casey Co.	Graves Co.	Glasgow Ind.	Mason Co.	
Clay Co.	Grayson Co.	Hardin Co.	McCracken Co.	
Clinton Co.	Hancock Co.	Henderson Co.	Newport Ind.	
Cloverport Ind.	Harlan Co.	Leslie Co.	Oldham Co.	
Corbin Ind.	Harrison Co.	Madison Co.	Scott Co.	
Dawson Springs Ind.	Henry Co.	Marshall Co.	Shelby Co.	
Dayton Ind.	Hickman Co.	Mercer Co.	Somerset Ind.	
East Bernstadt Ind.	Hopkins Co.	Murray Ind.	Southgate Ind.	
Edmonson Co.	Laurel Co.	Nelson Co.	Warren Co.	
Elliott Co.	Lawrence Co.	Paducah Ind.	Woodford Co.	
Eminence Ind.	Letcher Co.	Perry Co.		
Estill Co.	Marion Co.	Pike Co.		
Fairview Ind.	Martin Co.	Pikeville Ind.		
Fleming Co.	McLean Co.	Pulaski Co.		
Fulton Ind.	Middlesboro Ind.	Rowan Co.		
Green Co.	Montgomery Co.	Silver Grove Ind.		
Greenup Co.	Muhlenberg Co.	Simpson Co.		
Harlan Ind.	Owen Co.	Spencer Co.		
Hart Co.	Owensboro Ind.	Trigg Co.		

Fiscal Year 2010 Wealth Quintiles (Continued)

Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Hazard Ind.	Paintsville Ind.			
Jackson Co.	Paris Ind.			
Jackson Ind.	Russell Co.			
Jenkins Ind.	Russell Ind.			
Johnson Co.	Taylor Co.			
Knox Co.	Trimble Co.			
LaRue Co.	Union Co.			
Lee Co.	Walton Verona Ind.			
Lewis Co.	Washington Co.			
Lincoln Co.	Wayne Co.			
Logan Co.	Webster Co.			
Ludlow Ind.				
Magoffin Co.				
Mayfield Ind.				
McCreary Co.				
Meade Co.				
Menifee Co.				
Metcalfe Co.				
Monroe Co.				
Monticello Ind.				
Morgan Co.				
Nicholas Co.				
Ohio Co.				
Owsley Co.				
Pendleton Co.				
Pineville Ind.				
Powell Co.				
Raceland Ind.				
Robertson Co.				
Rockcastle Co.				
Russellville Ind.				
Science Hill Ind.				
Todd Co.				
West Point Ind.				
Whitley Co.				
Williamsburg Ind.				
Williamstown Ind.				
Wolfe Co.				

Source: Staff calculations based on data provided by the Kentucky Department of Education.

Appendix B

Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5 Using Comparable Wage Index

Fiscal Year	Quintile 5 Per-pupil Revenue Minus Lower Quintiles' Revenue				Q1-4 Aggregate Difference: Equity Gap	Percent Difference Compared to 1997
	Quintile 1	Quintile 2	Quintile 3	Quintile 4		
1997	(\$312)	\$101	\$314	\$598	\$701	N/A
1998	24	478	650	876	2,028	189%
1999	138	518	675	960	2,291	227
2000	(63)	265	427	768	1,396	99
2001	(62)	384	520	803	1,646	135
2002	(57)	467	420	957	1,787	155
2003	(79)	227	354	759	1,261	80
2004	(186)	336	110	725	985	41
2005	(60)	340	341	845	1,466	109
2006	164	489	417	871	1,941	177
2007	112	482	565	943	2,102	200
2008	149	465	420	1,159	2,193	213
2009	62	282	438	955	1,737	148
2010	589	664	620	1,102	2,975	324

Note: N/A means not applicable.

Sources: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education; US. Dept. of Ed.

Appendix C

Average Per-pupil Revenues by Wealth Quintile

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 1990							
1	115,074	\$71,665	\$355	\$2,310	\$540	\$2,665	\$3,205
2	114,190	105,467	549	2,243	401	2,792	3,193
3	118,119	138,954	687	2,197	323	2,884	3,207
4	106,632	179,714	1,038	2,163	292	3,201	3,493
5	121,119	280,727	2,103	2,120	361	4,223	4,585
Statewide	575,134	\$156,255	\$956	\$2,206	\$384	\$3,163	\$3,547
FY 1991							
1	112,587	\$78,561	\$481	\$3,006	\$577	\$3,487	\$4,063
2	115,851	114,895	695	2,846	426	3,541	3,967
3	112,858	148,272	919	2,675	368	3,594	3,962
4	113,154	194,504	1,280	2,465	311	3,745	4,056
5	118,398	308,585	2,280	2,349	478	4,628	5,106
Statewide	572,848	\$170,087	\$1,140	\$2,666	\$432	\$3,806	\$4,238
FY 1992							
1	115,196	\$82,965	\$585	\$3,344	\$681	\$3,930	\$4,611
2	115,319	120,827	810	3,016	480	3,826	4,306
3	117,366	156,687	1,073	2,825	419	3,898	4,317
4	105,660	204,520	1,379	2,610	371	3,989	4,359
5	122,849	310,508	2,367	2,463	492	4,830	5,323
Statewide	576,389	\$176,332	\$1,255	\$2,851	\$490	\$4,105	\$4,596
FY 1993							
1	115,975	\$87,359	\$591	\$3,478	\$693	\$4,069	\$4,761
2	116,562	126,068	835	3,136	531	3,971	4,502
3	112,531	161,312	1,035	2,929	461	3,963	4,424
4	116,281	215,672	1,409	2,686	351	4,095	4,446
5	120,705	324,663	2,518	2,472	497	4,990	5,487
Statewide	582,054	\$184,254	\$1,288	\$2,936	\$507	\$4,225	\$4,732
FY 1994							
1	117,389	\$95,407	\$690	\$3,613	\$697	\$4,303	\$5,000
2	115,073	133,898	903	3,272	567	4,175	4,742
3	115,901	170,188	1,142	3,032	444	4,174	4,618
4	112,221	227,847	1,521	2,738	401	4,259	4,660
5	121,719	332,361	2,587	2,511	601	5,098	5,699
Statewide	582,303	\$192,952	\$1,379	\$3,031	\$544	\$4,410	\$4,954
FY 1995							
1	115,477	\$104,767	\$779	\$3,865	\$725	\$4,644	\$5,370
2	114,974	146,018	1,012	3,518	588	4,530	5,117
3	117,044	185,496	1,260	3,240	483	4,500	4,983
4	112,117	249,159	1,759	2,805	414	4,564	4,978
5	121,110	360,085	2,896	2,596	528	5,492	6,020
Statewide	580,722	\$210,329	\$1,553	\$3,201	\$548	\$4,754	\$5,302

Average Per-pupil Revenues by Wealth Quintile (Continued)

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 1996							
1	114,936	\$113,902	\$859	\$3,963	\$753	\$4,822	\$5,575
2	114,767	158,720	1,137	3,579	561	4,716	5,276
3	116,275	203,231	1,375	3,321	454	4,696	5,150
4	109,635	273,034	1,898	2,888	407	4,787	5,194
5	120,298	383,316	3,102	2,620	566	5,722	6,288
Statewide	575,912	\$227,438	\$1,685	\$3,272	\$549	\$4,957	\$5,506
FY 1997							
1	114,764	\$119,513	\$1,025	\$4,228	\$861	\$5,253	\$6,114
2	115,076	169,753	1,316	3,812	632	5,128	5,760
3	115,470	214,715	1,533	3,539	511	5,072	5,583
4	109,368	293,622	2,063	2,991	400	5,053	5,453
5	120,576	412,182	3,352	2,627	551	5,979	6,530
Statewide	575,254	\$243,120	\$1,870	\$3,436	\$592	\$5,306	\$5,898
FY 1998							
1	114,752	\$125,180	\$1,011	\$4,271	\$822	\$5,282	\$6,104
2	115,626	181,230	1,377	3,782	671	5,159	5,830
3	113,668	225,941	1,563	3,513	575	5,075	5,650
4	108,988	313,937	2,168	2,963	441	5,131	5,572
5	121,188	430,946	3,597	2,732	640	6,329	6,969
Statewide	574,222	\$256,770	\$1,959	\$3,449	\$632	\$5,409	\$6,041
FY 1999							
1	114,990	\$130,435	\$1,064	\$4,598	\$887	\$5,662	\$6,549
2	113,775	188,977	1,514	4,084	701	5,598	6,299
3	113,861	239,224	1,709	3,854	619	5,563	6,182
4	108,784	327,102	2,324	3,250	473	5,574	6,047
5	121,348	452,967	3,951	2,899	584	6,850	7,435
Statewide	572,758	\$269,377	\$2,133	\$3,732	\$654	\$5,865	\$6,519
FY 2000							
1	114,448	\$143,590	\$1,114	\$4,686	\$985	\$5,800	\$6,785
2	113,317	208,156	1,520	4,183	794	5,703	6,497
3	112,430	260,192	1,864	3,863	704	5,727	6,431
4	108,383	352,757	2,458	3,250	487	5,708	6,195
5	122,455	486,063	4,034	2,913	714	6,946	7,661
Statewide	571,034	\$292,502	\$2,223	\$3,771	\$739	\$5,995	\$6,734
FY 2001							
1	114,195	\$153,977	\$1,170	\$4,932	\$1,063	\$6,101	\$7,165
2	111,715	221,926	1,654	4,368	862	6,022	6,884
3	112,480	280,527	1,965	4,032	739	5,997	6,737
4	108,976	377,408	2,645	3,408	540	6,054	6,594
5	121,700	535,780	4,380	2,893	725	7,272	7,997
Statewide	569,067	\$316,769	\$2,391	\$3,915	\$787	\$6,306	\$7,094

Average Per-pupil Revenues by Wealth Quintile (Continued)

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 2002							
1	114,041	\$161,895	\$1,180	\$4,876	\$1,177	\$6,057	\$7,234
2	116,524	237,360	1,658	4,335	928	5,993	6,921
3	114,370	302,893	2,110	3,974	837	6,084	6,921
4	101,433	399,610	2,666	3,306	579	5,972	6,551
5	122,891	566,707	4,464	2,821	774	7,285	8,059
Statewide	569,258	\$335,418	\$2,439	\$3,861	\$864	\$6,299	\$7,163
FY 2003							
1	115,726	\$171,127	\$1,219	\$5,061	\$1,299	\$6,280	\$7,579
2	113,809	245,680	1,703	4,595	1,042	6,298	7,340
3	117,672	314,484	2,223	4,126	933	6,349	7,282
4	95,793	408,650	2,820	3,465	636	6,285	6,921
5	129,458	573,484	4,558	2,927	805	7,484	8,290
Statewide	572,458	\$346,153	\$2,545	\$4,026	\$950	\$6,571	\$7,521
FY 2004							
1	115,301	\$177,559	\$1,279	\$5,146	\$1,458	\$6,425	\$7,883
2	113,950	254,559	1,805	4,589	1,099	6,395	7,494
3	115,073	326,282	2,318	4,233	1,076	6,551	7,627
4	99,127	433,074	3,114	3,438	670	6,552	7,222
5	130,179	603,593	4,800	2,841	1,032	7,641	8,673
Statewide	573,630	\$363,528	\$2,708	\$4,034	\$1,077	\$6,742	\$7,819
FY 2005							
1	117,487	\$187,290	\$1,361	\$5,227	\$1,523	\$6,588	\$8,111
2	111,624	268,348	1,944	4,654	1,168	6,598	7,766
3	116,500	336,898	2,425	4,312	1,103	6,738	7,841
4	99,773	445,536	3,244	3,533	727	6,777	7,505
5	131,921	622,859	5,053	2,911	1,123	7,964	9,087
Statewide	577,306	\$377,318	\$2,858	\$4,110	\$1,141	\$6,967	\$8,108
FY 2006							
1	116,559	\$199,856	\$1,434	\$5,530	\$1,535	\$6,963	\$8,498
2	115,122	287,430	2,085	4,953	1,238	7,038	8,275
3	119,507	358,991	2,691	4,513	1,080	7,203	8,283
4	97,738	471,913	3,581	3,767	844	7,349	8,193
5	133,346	654,044	5,507	3,101	1,186	8,608	9,794
Statewide	582,272	\$399,511	\$3,114	\$4,355	\$1,187	\$7,469	\$8,655
FY 2007							
1	119,498	\$208,884	\$1,634	\$5,707	\$1,530	\$7,342	\$8,872
2	118,786	299,566	2,237	5,132	1,246	7,369	8,615
3	117,856	377,753	2,838	4,664	1,060	7,503	8,563
4	96,165	498,418	3,773	3,897	846	7,670	8,516
5	134,560	684,934	5,861	3,161	1,126	9,022	10,148
Statewide	586,864	\$417,747	\$3,318	\$4,501	\$1,174	\$7,819	\$8,992

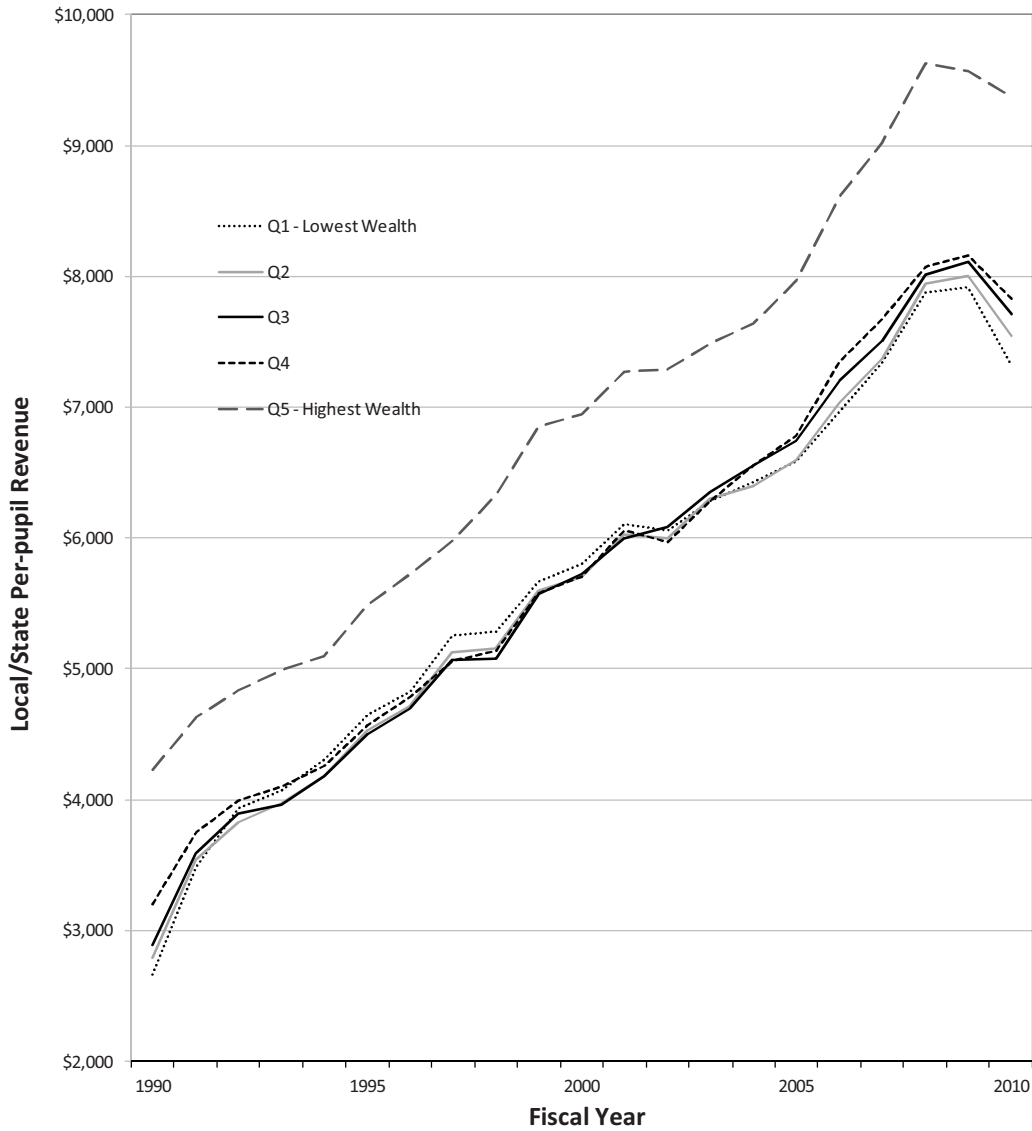
Average Per-pupil Revenues by Wealth Quintile (Continued)

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 2008							
1	117,536	\$221,464	\$1,707	\$6,167	\$1,504	\$7,874	\$9,378
2	116,818	319,240	2,406	5,534	1,328	7,940	9,269
3	113,269	401,815	2,999	5,012	1,130	8,010	9,140
4	104,359	521,370	3,839	4,231	870	8,070	8,940
5	135,736	725,114	6,188	3,442	1,180	9,630	10,809
Statewide	587,717	\$445,230	\$3,508	\$4,846	\$1,210	\$8,354	\$9,563
FY 2009							
1	117,084	\$232,762	\$1,688	\$6,223	\$1,578	\$7,910	\$9,488
2	119,941	339,055	2,500	5,505	1,357	8,005	9,362
3	117,776	426,525	3,094	5,016	1,161	8,110	9,271
4	96,180	553,789	3,963	4,195	838	8,158	8,995
5	138,867	746,361	6,150	3,414	1,201	9,564	10,765
Statewide	589,847	\$466,327	\$3,555	\$4,844	\$1,240	\$8,399	\$9,640
FY 2010							
1	116,029	\$240,463	\$1,723	\$5,594	\$2,548	\$7,317	\$9,865
2	117,105	348,339	2,598	4,948	2,148	7,546	9,694
3	120,899	437,074	3,174	4,531	1,986	7,705	9,691
4	95,016	561,246	4,014	3,814	1,436	7,828	9,263
5	138,664	753,715	6,290	3,086	1,720	9,376	11,096
Statewide	587,714	\$475,360	\$3,644	\$4,367	\$1,978	\$8,011	\$9,988

Note: ADA is Average Daily Attendance.

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education.

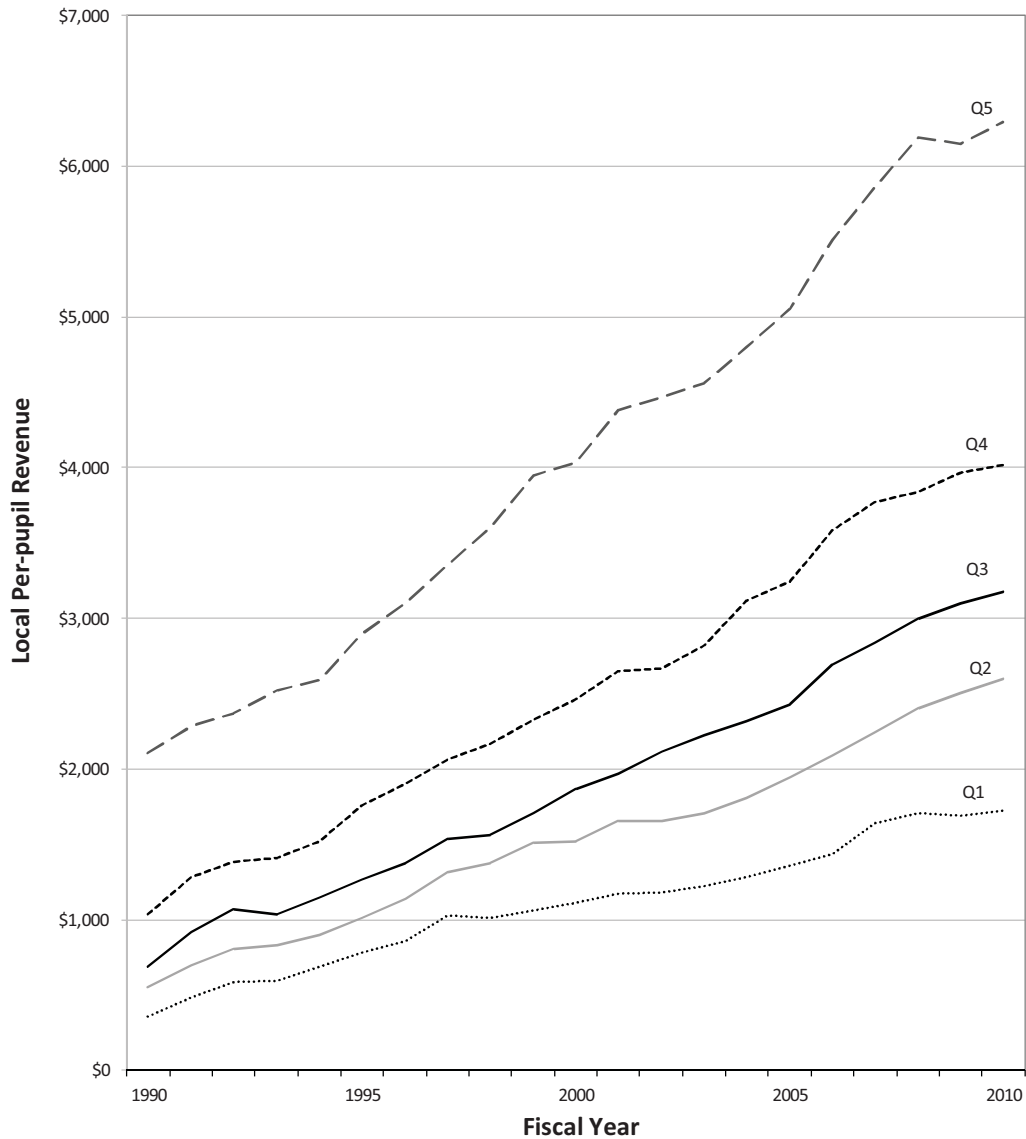
Figure C.A
Local and State Per-pupil Revenue by Wealth Quintile, Fiscal Years 1990-2010



Quintile	FY 1990	FY 2010	Difference	% Difference
1	\$2,665	\$7,317	\$4,652	175%
2	2,792	7,546	4,754	170
3	2,884	7,705	4,821	167
4	3,201	7,828	4,626	145
5	4,223	9,376	5,152	122
Statewide	\$3,163	\$8,011	\$4,848	153%

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education.

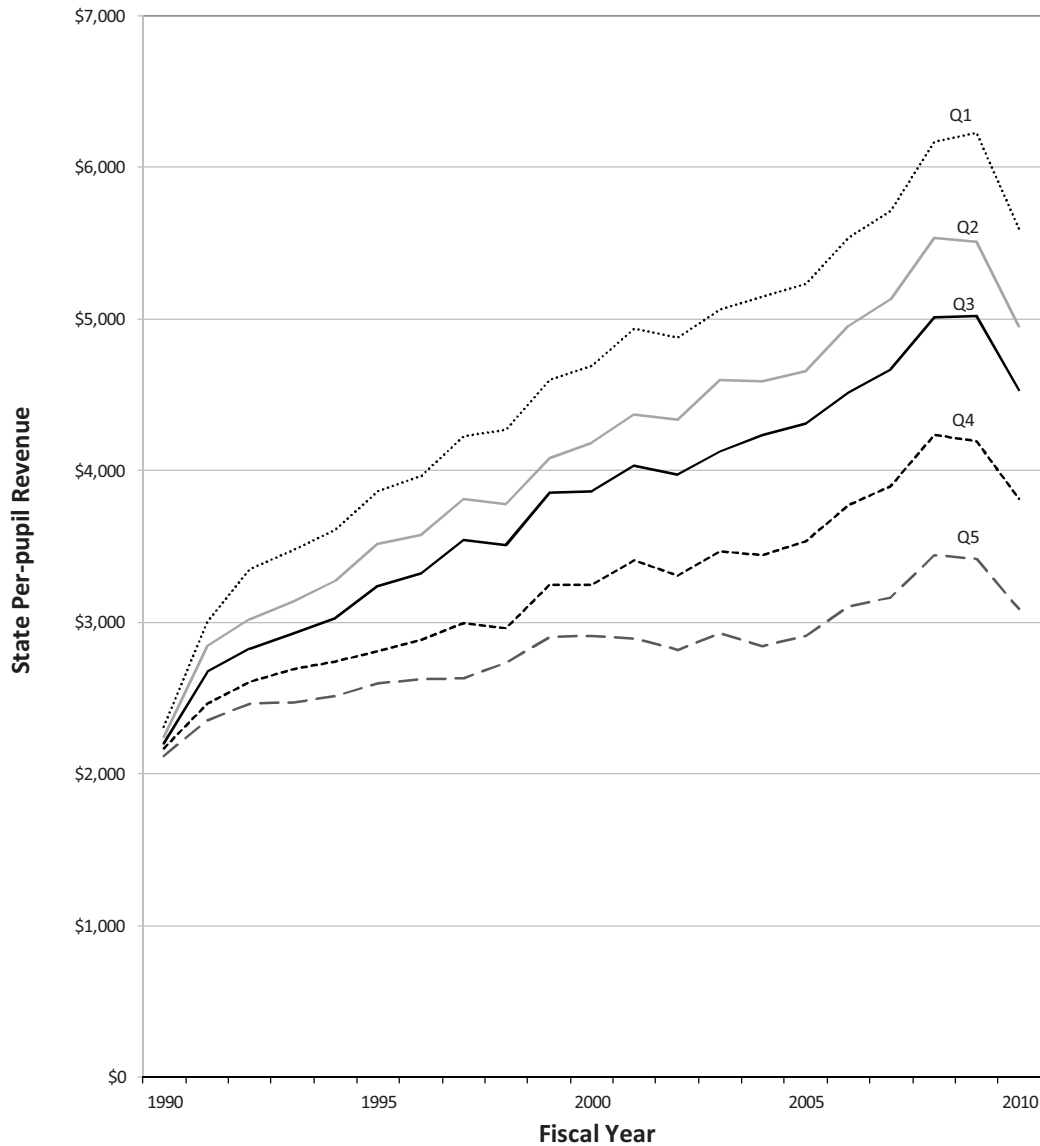
Figure C.B
Local Per-pupil Revenue by Wealth Quintile, Fiscal Years 1990-2010



Quintile	FY 1990	FY 2010	Difference	% Difference
1	\$355	\$1,723	\$ 1,368	386%
2	549	2,598	2,048	373
3	687	3,174	2,487	362
4	1,038	4,014	2,976	287
5	2,103	6,290	4,187	199
Statewide	\$956	\$3,644	\$2,687	281%

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education.

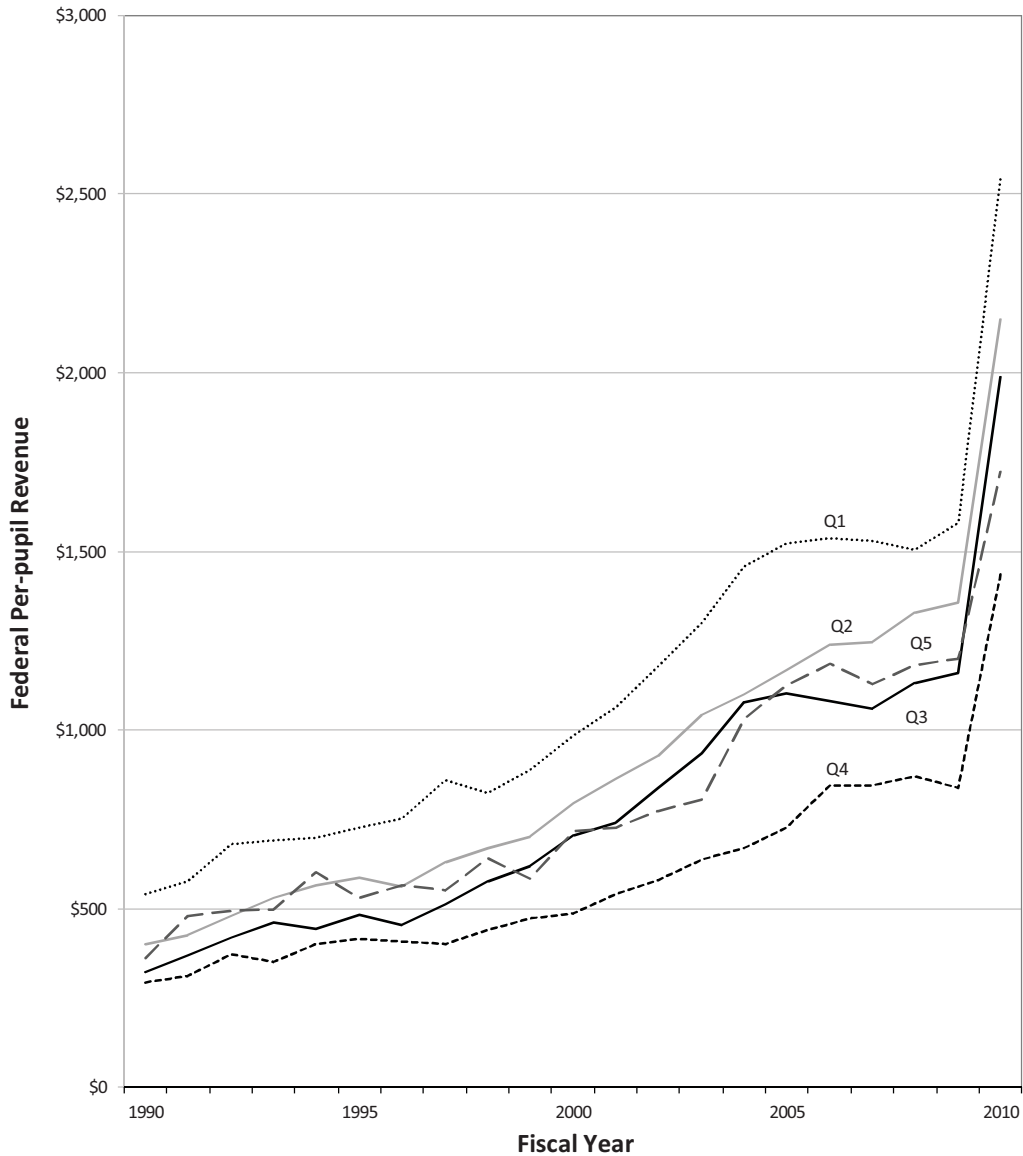
Figure C.C
State Per-pupil Revenue by Wealth Quintile, Fiscal Years 1990-2010



Quintile	FY 1990	FY 2010	Difference	% Difference
1	\$2,310	\$5,594	\$3,284	142%
2	2,243	4,948	2,706	121
3	2,197	4,531	2,334	106
4	2,163	3,814	1,651	76
5	2,120	3,086	966	46
Statewide	\$2,206	\$4,367	\$2,161	98%

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education.

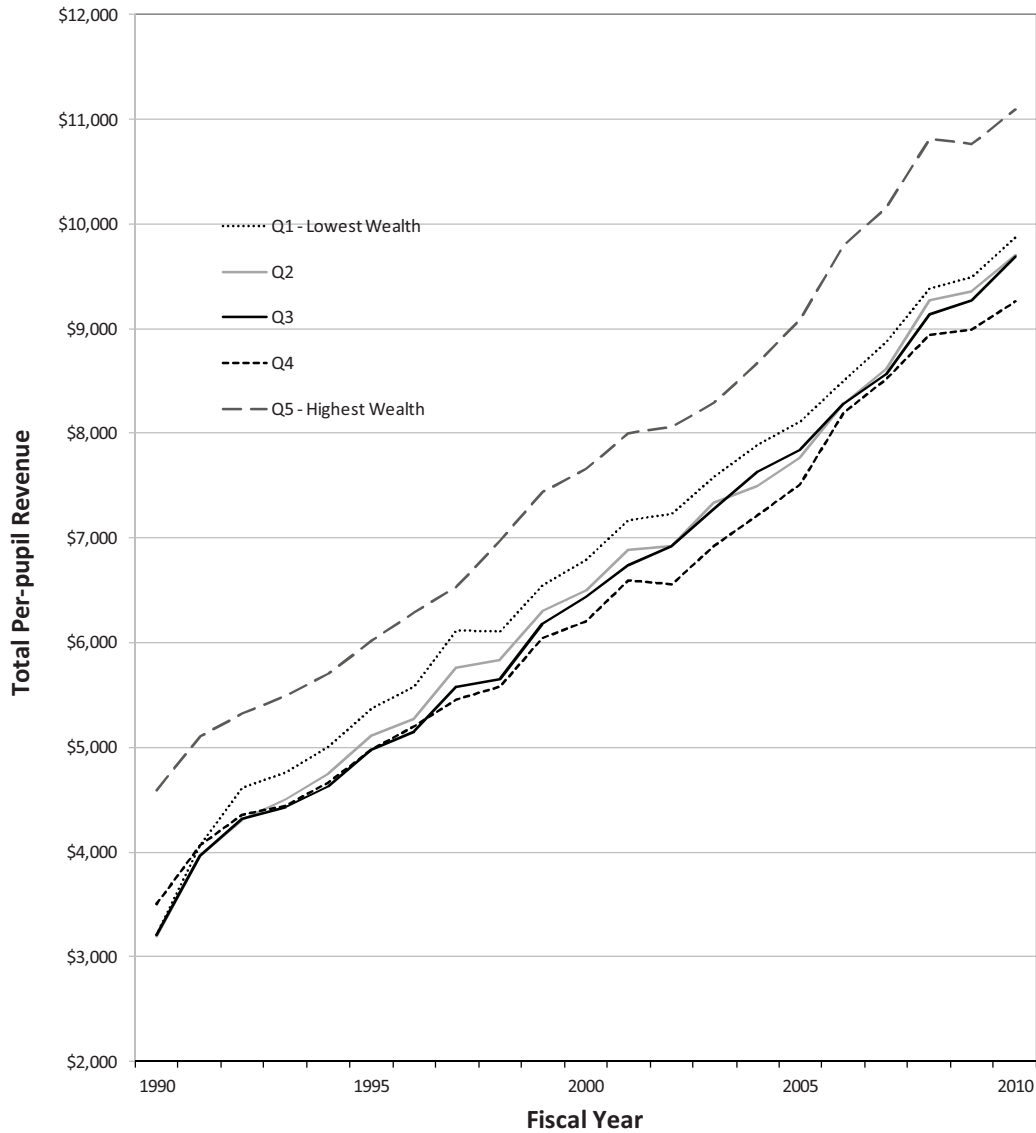
Figure C.D
Federal Per-pupil Revenue by Wealth Quintile, Fiscal Years 1990-2010



Quintile	FY 1990	FY 2010	Difference	% Difference
1	\$540	\$2,548	\$2,008	372%
2	401	2,148	1,747	435
3	323	1,986	1,663	515
4	292	1,436	1,144	392
5	361	1,720	1,359	376
Statewide	\$384	\$1,978	\$1,594	415%

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Figure C.E
Total Per-pupil Revenue by Wealth Quintile, Fiscal Years 1990-2010



Quintile	FY 1990	FY 2010	Difference	% Difference
1	\$3,205	\$9,865	\$6,660	208%
2	3,193	9,694	6,501	204
3	3,207	9,691	6,484	202
4	3,493	9,263	5,771	165
5	4,585	11,096	6,512	142
Statewide	\$3,547	\$9,988	\$6,442	182%

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Appendix D

Average Per-pupil Revenues by Wealth Quintile, Fiscal Year 1990 Constant Dollars

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 1990							
1	115,074	\$71,665	\$355	\$2,310	\$540	\$2,665	\$3,205
2	114,190	105,467	549	2,243	401	2,792	3,193
3	118,119	138,954	687	2,197	323	2,884	3,207
4	106,632	179,714	1,038	2,163	292	3,201	3,493
5	121,119	280,727	2,103	2,120	361	4,223	4,585
Statewide	575,134	\$156,255	\$956	\$2,206	\$384	\$3,163	\$3,547
FY 1991							
1	112,587	\$74,488	\$456	\$2,850	\$547	\$3,306	\$3,853
2	115,851	108,939	659	2,698	404	3,357	3,761
3	112,858	140,586	872	2,537	349	3,408	3,757
4	113,154	184,422	1,213	2,338	295	3,551	3,846
5	118,398	292,590	2,162	2,227	453	4,389	4,842
Statewide	572,848	\$161,271	\$1,081	\$2,528	\$410	\$3,609	\$4,018
FY 1992							
1	115,196	\$76,222	\$538	\$3,073	\$626	\$3,610	\$4,236
2	115,319	111,006	744	2,771	441	3,515	3,956
3	117,366	143,952	986	2,596	385	3,581	3,966
4	105,660	187,897	1,267	2,398	340	3,665	4,005
5	122,849	285,271	2,175	2,263	452	4,438	4,890
Statewide	576,389	\$162,000	\$1,153	\$2,619	\$450	\$3,772	\$4,222
FY 1993							
1	115,975	\$77,828	\$526	\$3,099	\$617	\$3,625	\$4,242
2	116,562	112,313	744	2,794	473	3,537	4,011
3	112,531	143,712	922	2,609	410	3,531	3,941
4	116,281	192,141	1,255	2,393	313	3,648	3,961
5	120,705	289,241	2,243	2,202	443	4,446	4,889
Statewide	582,054	\$164,151	\$1,148	\$2,616	\$451	\$3,764	\$4,215
FY 1994							
1	117,389	\$82,852	\$599	\$3,138	\$605	\$3,737	\$4,342
2	115,073	116,278	784	2,842	492	3,626	4,118
3	115,901	147,792	992	2,633	386	3,625	4,010
4	112,221	197,863	1,321	2,378	348	3,699	4,047
5	121,719	288,623	2,247	2,180	522	4,427	4,949
Statewide	582,303	\$167,560	\$1,197	\$2,632	\$472	\$3,829	\$4,302
FY 1995							
1	115,477	\$88,444	\$658	\$3,263	\$612	\$3,921	\$4,533
2	114,974	123,269	854	2,970	496	3,824	4,320
3	117,044	156,596	1,064	2,735	408	3,799	4,207
4	112,117	210,340	1,485	2,368	350	3,853	4,202
5	121,110	303,984	2,445	2,192	446	4,636	5,082
Statewide	580,722	\$177,560	\$1,311	\$2,702	\$463	\$4,013	\$4,476

Average Per-pupil Revenues by Wealth Quintile (Continued)
Fiscal Year 1990 Constant Dollars

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 1996							
1	114,936	\$93,610	\$706	\$3,257	\$619	\$3,963	\$4,582
2	114,767	130,443	934	2,941	461	3,875	4,336
3	116,275	167,025	1,130	2,729	373	3,859	4,232
4	109,635	224,392	1,560	2,374	334	3,934	4,268
5	120,298	315,026	2,549	2,153	465	4,703	5,168
Statewide	575,912	\$186,919	\$1,385	\$2,689	\$451	\$4,074	\$4,525
FY 1997							
1	114,764	\$95,496	\$819	\$3,379	\$688	\$4,198	\$4,885
2	115,076	135,641	1,051	3,046	505	4,097	4,602
3	115,470	171,567	1,225	2,828	408	4,053	4,461
4	109,368	234,617	1,648	2,390	319	4,038	4,357
5	120,576	329,352	2,678	2,099	440	4,778	5,218
Statewide	575,254	\$194,264	\$1,494	\$2,745	\$473	\$4,240	\$4,713
FY 1998							
1	114,752	\$98,273	\$794	\$3,353	\$646	\$4,146	\$4,792
2	115,626	142,274	1,081	2,969	527	4,050	4,576
3	113,668	177,375	1,227	2,758	451	3,984	4,436
4	108,988	246,456	1,702	2,326	346	4,028	4,375
5	121,188	338,313	2,824	2,144	502	4,968	5,471
Statewide	574,222	\$201,576	\$1,538	\$2,708	\$496	\$4,246	\$4,742
FY 1999							
1	114,990	\$100,655	\$821	\$3,548	\$685	\$4,369	\$5,054
2	113,775	145,831	1,169	3,151	541	4,320	4,861
3	113,861	184,606	1,319	2,974	478	4,293	4,771
4	108,784	252,421	1,794	2,508	365	4,301	4,667
5	121,348	349,549	3,049	2,237	451	5,286	5,737
Statewide	572,758	\$207,875	\$1,646	\$2,880	\$505	\$4,526	\$5,030
FY 2000							
1	114,448	\$107,698	\$836	\$3,515	\$739	\$4,350	\$5,089
2	113,317	156,125	1,140	3,137	596	4,277	4,873
3	112,430	195,154	1,398	2,897	528	4,295	4,823
4	108,383	264,581	1,844	2,438	365	4,281	4,647
5	122,455	364,565	3,025	2,185	536	5,210	5,746
Statewide	571,034	\$219,387	\$1,668	\$2,829	\$555	\$4,496	\$5,051
FY 2001							
1	114,195	\$111,663	\$848	\$3,576	\$771	\$4,425	\$5,196
2	111,715	160,939	1,199	3,168	625	4,367	4,992
3	112,480	203,436	1,425	2,924	536	4,349	4,885
4	108,976	273,693	1,918	2,472	392	4,390	4,782
5	121,700	388,543	3,176	2,098	526	5,274	5,800
Statewide	569,067	\$229,718	\$1,734	\$2,839	\$571	\$4,573	\$5,144

Average Per-pupil Revenues by Wealth Quintile (Continued)
Fiscal Year 1990 Constant Dollars

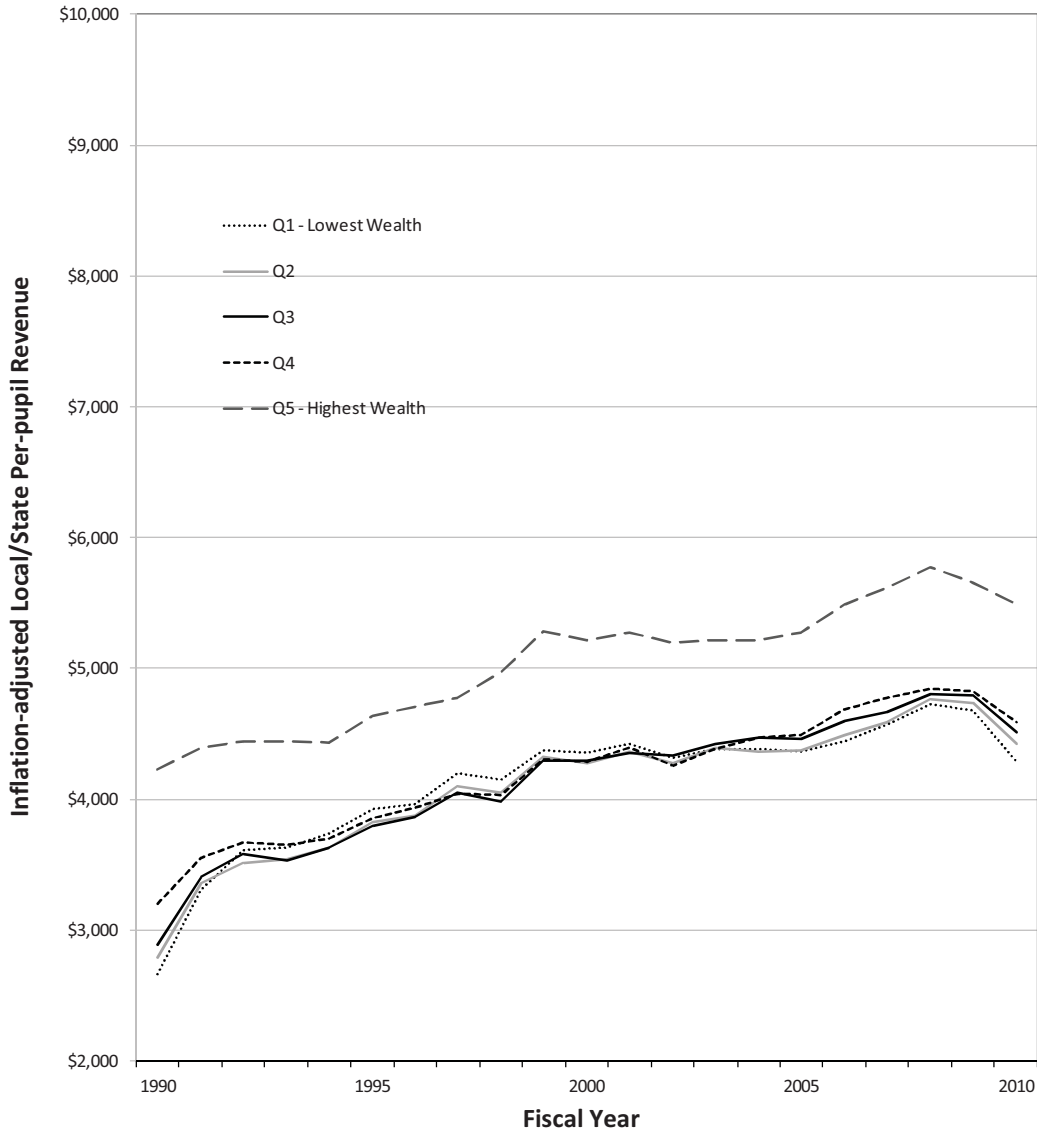
Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 2002							
1	114,041	\$115,362	\$841	\$3,475	\$839	\$4,316	\$5,155
2	116,524	169,137	1,181	3,089	661	4,270	4,932
3	114,370	215,834	1,504	2,832	596	4,335	4,932
4	101,433	284,752	1,900	2,356	413	4,256	4,668
5	122,891	403,821	3,181	2,010	552	5,191	5,743
Statewide	569,258	\$239,011	\$1,738	\$2,751	\$616	\$4,489	\$5,104
FY 2003							
1	115,726	\$119,318	\$850	\$3,529	\$906	\$4,379	\$5,285
2	113,809	171,300	1,188	3,204	727	4,391	5,118
3	117,672	219,274	1,550	2,877	651	4,427	5,077
4	95,793	284,931	1,966	2,416	444	4,382	4,826
5	129,458	399,861	3,178	2,041	561	5,219	5,780
Statewide	572,458	\$241,355	\$1,774	\$2,807	\$663	\$4,582	\$5,244
FY 2004							
1	115,301	\$121,153	\$872	\$3,511	\$995	\$4,384	\$5,379
2	113,950	173,692	1,232	3,131	750	4,363	5,113
3	115,073	222,630	1,581	2,888	734	4,470	5,204
4	99,127	295,497	2,124	2,346	457	4,470	4,928
5	130,179	411,846	3,275	1,939	704	5,214	5,918
Statewide	573,630	\$248,044	\$1,848	\$2,753	\$735	\$4,600	\$5,335
FY 2005							
1	117,487	\$124,059	\$902	\$3,462	\$1,009	\$4,364	\$5,373
2	111,624	177,751	1,288	3,082	774	4,370	5,144
3	116,500	223,158	1,607	2,856	731	4,463	5,194
4	99,773	295,120	2,149	2,340	482	4,489	4,971
5	131,921	412,577	3,347	1,928	744	5,276	6,019
Statewide	577,306	\$249,932	\$1,893	\$2,722	\$756	\$4,615	\$5,371
FY 2006							
1	116,559	\$127,526	\$915	\$3,528	\$979	\$4,443	\$5,422
2	115,122	183,407	1,330	3,160	790	4,491	5,280
3	119,507	229,069	1,717	2,879	689	4,596	5,285
4	97,738	301,124	2,285	2,404	539	4,689	5,228
5	133,346	417,340	3,514	1,979	757	5,493	6,250
Statewide	582,272	\$254,925	\$1,987	\$2,779	\$757	\$4,766	\$5,523
FY 2007							
1	119,498	\$129,927	\$1,016	\$3,550	\$952	\$4,566	\$5,518
2	118,786	186,332	1,391	3,192	775	4,584	5,358
3	117,856	234,965	1,765	2,901	659	4,667	5,326
4	96,165	310,019	2,347	2,424	526	4,770	5,297
5	134,560	426,033	3,646	1,966	700	5,612	6,312
Statewide	586,864	\$259,841	\$2,064	\$2,800	\$730	\$4,863	\$5,593

Average Per-pupil Revenues by Wealth Quintile (Continued)
Fiscal Year 1990 Constant Dollars

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 2008							
1	117,536	\$132,830	\$1,024	\$3,699	\$902	\$4,723	\$5,625
2	116,818	191,474	1,443	3,319	797	4,762	5,559
3	113,269	241,001	1,799	3,006	678	4,804	5,482
4	104,359	312,708	2,302	2,538	522	4,840	5,362
5	135,736	434,910	3,711	2,064	708	5,776	6,483
Statewide	587,717	\$267,041	\$2,104	\$2,906	\$725	\$5,010	\$5,736
FY 2009							
1	117,084	\$137,684	\$998	\$3,681	\$933	\$4,679	\$5,613
2	119,941	200,559	1,479	3,256	803	4,735	5,538
3	117,776	252,300	1,830	2,967	687	4,797	5,484
4	96,180	327,579	2,344	2,482	495	4,826	5,321
5	138,867	441,490	3,638	2,020	710	5,658	6,368
Statewide	589,847	\$275,843	\$2,103	\$2,865	\$734	\$4,968	\$5,702
FY 2010							
1	116,029	\$140,876	\$1,010	\$3,277	\$1,493	\$4,287	\$5,779
2	117,105	204,076	1,522	2,899	1,259	4,421	5,679
3	120,899	256,061	1,860	2,654	1,164	4,514	5,677
4	95,016	328,808	2,352	2,234	841	4,586	5,427
5	138,664	441,566	3,685	1,808	1,008	5,493	6,501
Statewide	587,714	\$278,491	\$2,135	\$2,558	\$1,159	\$4,693	\$5,852

Note: Revenues have been adjusted for inflation using 1990 constant dollars. ADA is average daily attendance.
Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics.

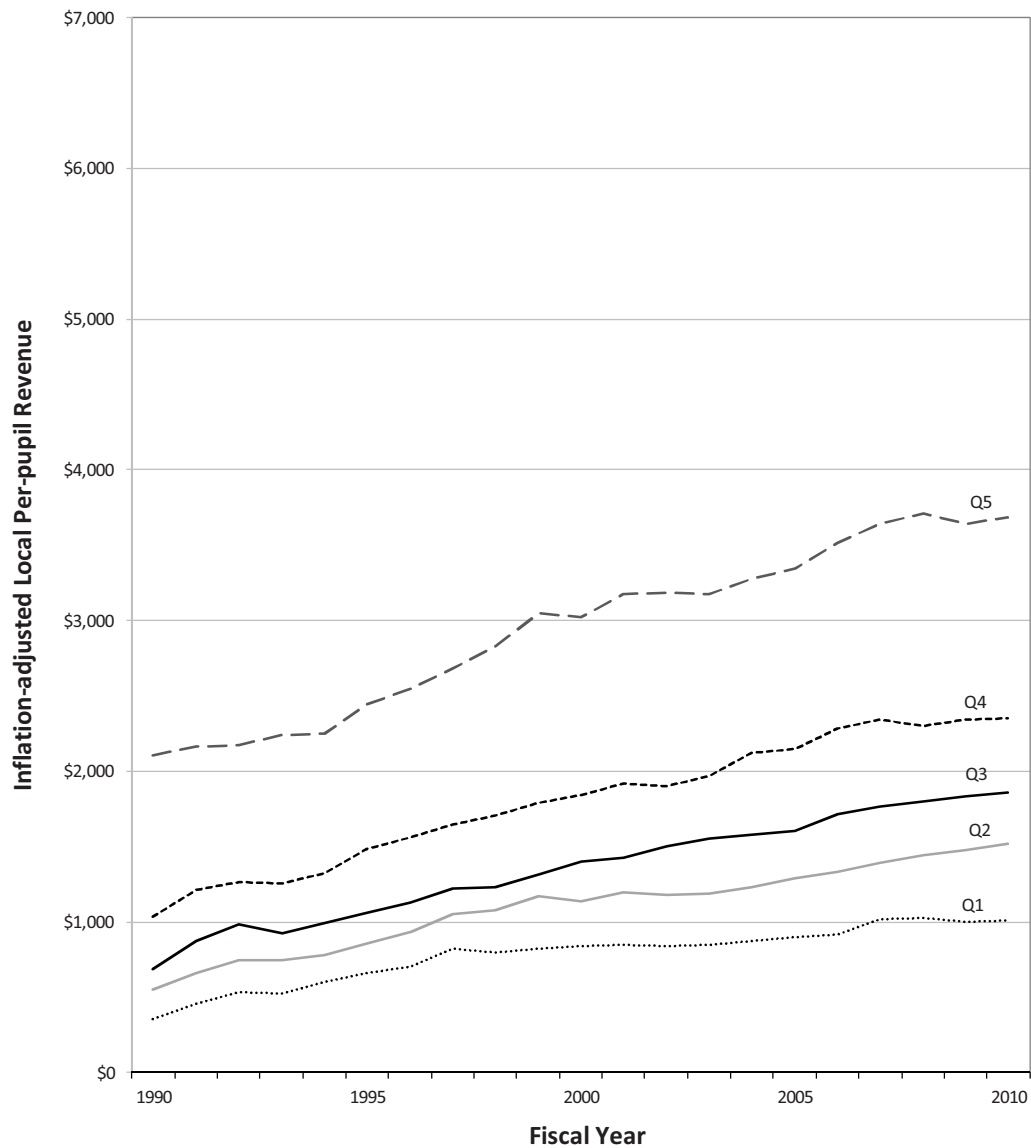
Figure D.A
Local and State Per-pupil Revenue by Wealth Quintile
Fiscal Years 1990-2010
FY 1990 Constant Dollars



Quintile	FY 1990	FY 2010	Difference	% Difference
1	\$2,665	\$4,287	\$1,622	61%
2	2,792	4,421	1,629	58
3	2,884	4,514	1,630	57
4	3,201	4,586	1,385	43
5	4,223	5,493	1,269	30
Statewide	\$3,163	\$4,693	\$1,530	48%

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics.

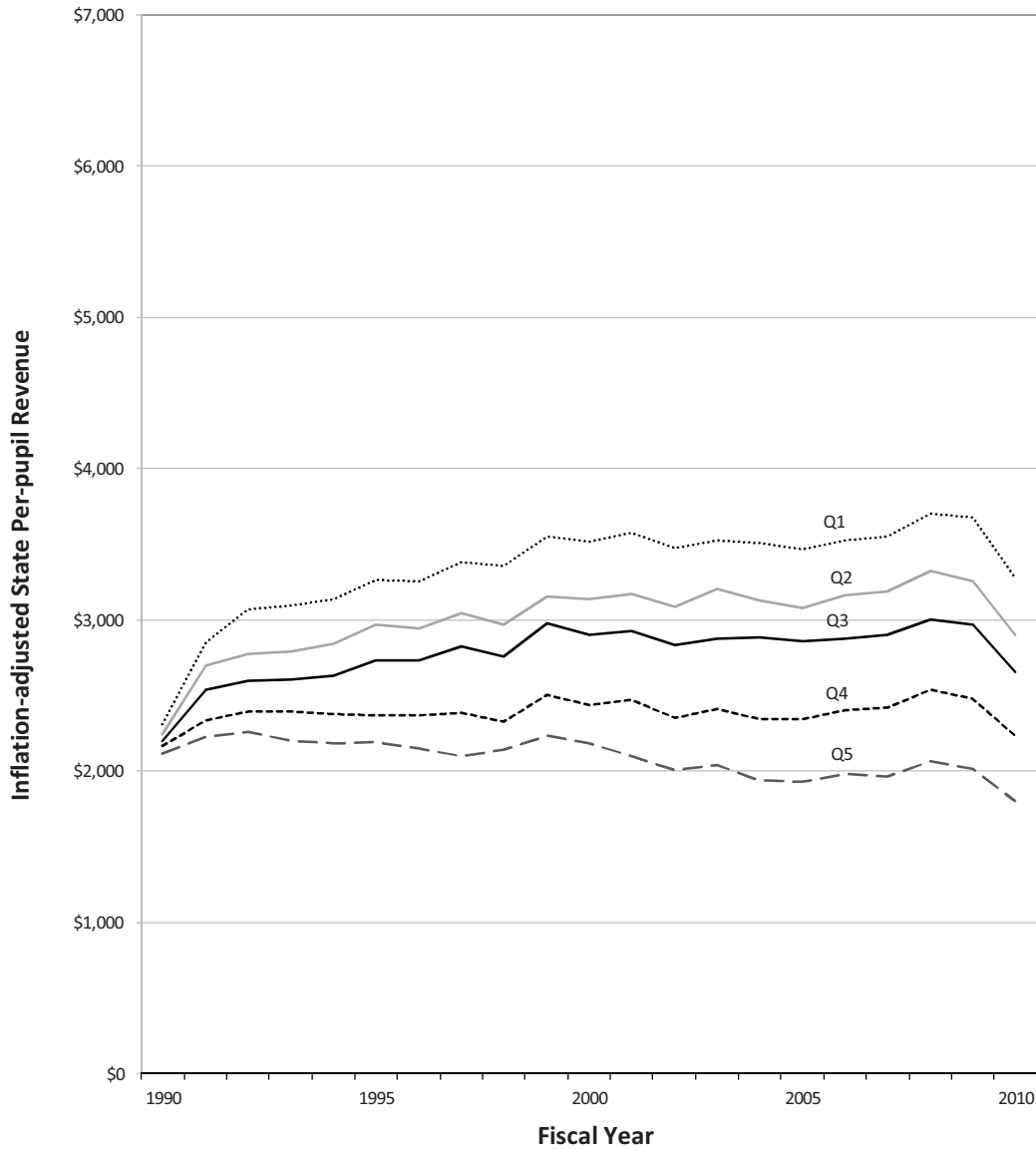
Figure D.B
Local Per-pupil Revenue by Wealth Quintile
Fiscal Years 1990-2010
FY 1990 Constant Dollars



Quintile	FY 1990	FY 2010	Difference	% Difference
1	\$355	\$1,010	\$655	184%
2	549	1,522	973	177
3	687	1,860	1,173	171
4	1,038	2,352	1,314	127
5	2,103	3,685	1,582	75
Statewide	\$956	\$2,135	\$1,178	123%

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics.

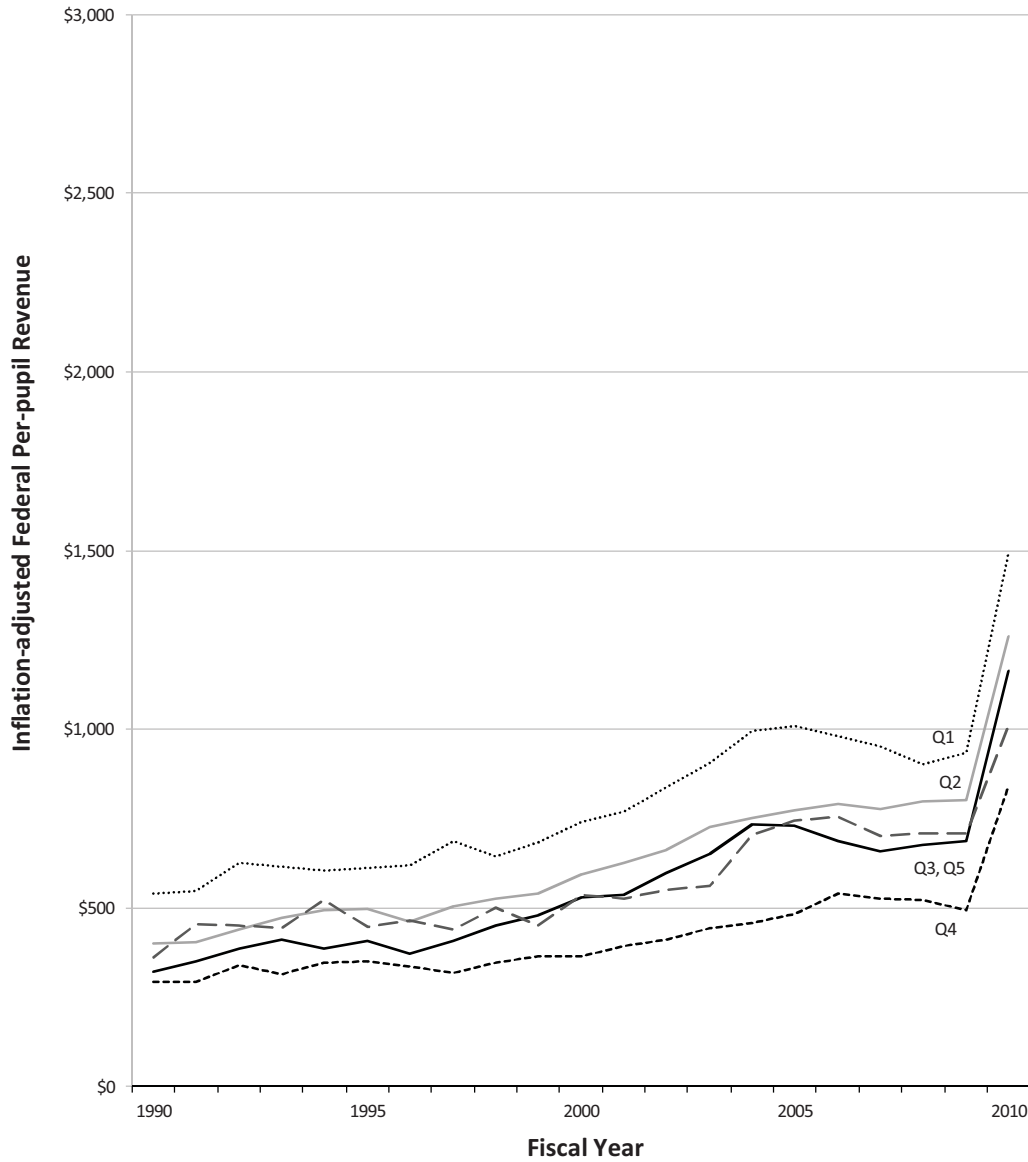
Figure D.C
State Per-pupil Revenue by Wealth Quintile
Fiscal Years 1990-2010
FY 1990 Constant Dollars



Quintile	FY 1990	FY 2010	Difference	% Difference
1	\$2,310	\$3,277	\$967	42%
2	2,243	2,899	656	29
3	2,197	2,654	457	21
4	2,163	2,234	71	3
5	2,120	1,808	(312)	-15
Statewide	\$2,206	\$2,558	\$352	16%

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics.

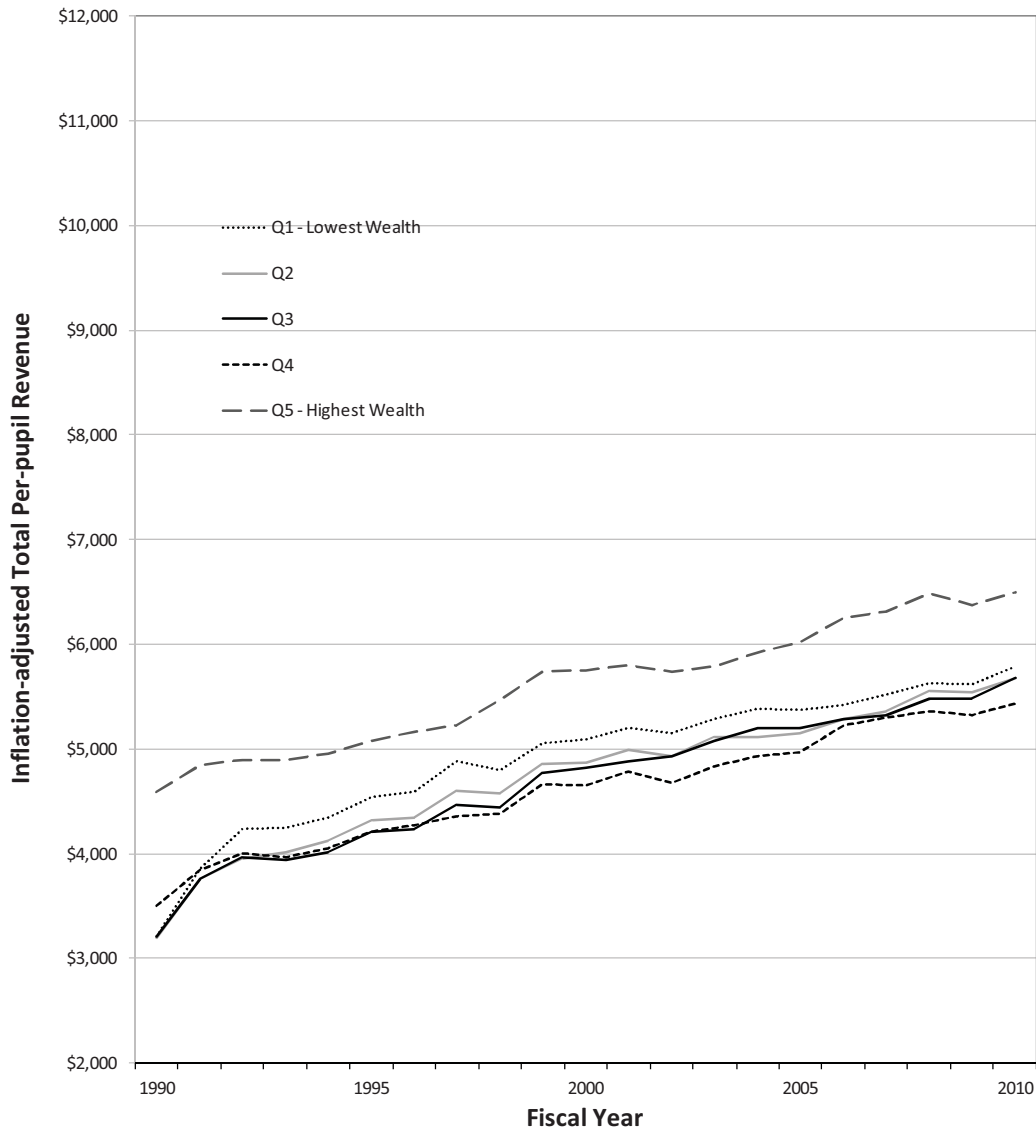
Figure D.D
Federal Per-pupil Revenue by Wealth Quintile
Fiscal Years 1990-2010
FY 1990 Constant Dollars



Quintile	FY 1990	FY 2010	Difference	% Difference
1	\$540	\$1,493	\$953	177%
2	401	1,259	857	214
3	323	1,164	841	260
4	292	841	550	189
5	361	1,008	647	179
Statewide	\$384	\$1,159	\$774	202%

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics.

Figure D.E
Total Per-pupil Revenue by Wealth Quintile
Fiscal Years 1990-2010
FY 1990 Constant Dollars



Quintile	FY 1990	FY 2010	Difference	% Difference
1	\$3,205	\$5,779	\$2,575	80%
2	3,193	5,679	2,486	78
3	3,207	5,677	2,471	77
4	3,493	5,427	1,934	55
5	4,585	6,501	1,916	42
Statewide	\$3,547	\$5,852	\$2,305	65%

Source: Staff compilation of final Support Education Excellence in Kentucky calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics.

