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Will Jolly wjolly@utk.edu

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The Impact of the Recession on Education Funding in the U.S. and Mississippi $\label{eq:Will Jolly} Will \ Jolly$

Thesis Advisor: Dr. Murray

Major: Finance

Abstract

The recession of the late 2000's had a severe effect on the global economy, as witnessed by numerous economic indicators. We often hear of stock markets falling and businesses going bankrupt during hard economic times, but what happens to other stakeholders in the economy, such as public school districts? This paper examines the effects on the economy and education funding in the U.S. Since this author is soon to be teaching in a public school district in Mississippi, this paper uses Mississippi as a case study to examine economic effects, revenue collections, and expenditures in a specific state. To explore this topic, this author analyzes data from numerous government reports on state and national economic indicators, state revenue and expenditure reports, and federal aid reports.

In investigating the data from these various sources, this paper concludes that although total elementary and secondary education expenditures and expenditures per pupil increased during the recession, many states cut state funding for education and replaced it with primarily federal funds and some local funds. Mississippi was no different, as federal funding increased significantly and state funding decreased, causing Mississippi's elementary and secondary education finance plan to receive less money per pupil during the recession.

The global economic downturn that began in 2007 affected nearly everyone across the world in some way. Securities prices tumbled, housing bubbles burst, jobs were lost, and budgets were slashed. In the U.S., researchers reported the typical indicators and symptoms of a recession such as unemployment rates, gross national product, and real income. Newspapers filled their headlines with the stories of bankruptcies of Wall Street giants Lehman Brothers and Washington Mutual. Businesses and homes in what were once thriving communities were boarded up in cities across the country. In February of 2009, near the lowest point of the recession, Congress passed the American Recovery and Reinvestment Act of 2009, which provided an unprecedented \$787 billion in funding for various government programs that aimed to help stimulate the economy. However, many economic indicators have yet to return to their pre-recession levels. These facts paint a clear picture of the dire state of the economy during the recession, but there are many other effects that would be interesting to investigate. This paper focuses on the recession's impact on K-12 education funding in the U.S. In particular, the author chooses Mississippi as a case study to explore the specific nuances of the effects of the recession on the state's ability and willingness to fund K-12 education. In order to examine this topic, this paper will give a brief history of education finance in the U.S., discuss the current funding models in the U.S. and Mississippi, analyze the economic effects of the recession, and investigate the recession's impact on education funding in the U.S. and Mississippi.

History of Education Financing

First, this paper will give a brief history of education in the U.S. and how it was funded, bringing us from the 19th century to our current models. Public education in America has its roots in Colonial times, when the primary purpose of schooling for early Americans was so that children could understand and read the Bible and its teachings. By the 1830's state governments had begun to encourage government run schools, and Massachusetts even passed a law requiring public high schools in 1827, but attendance was not yet common or mandatory. However, from the mid-19th century to the early 20th century, states began exerting more power and control over the educational system. Laws were passed that compelled the establishment of school districts, as well as taxation to fund them. Attendance became mandatory, and some states, such as Oregon, even made it illegal to attend nonpublic schools. Measures such as these eventually caused the Federal government to weigh in on education ("A Brief History").

The Federal government first became involved with education in 1867 with the creation of the Department of Education. Its purpose at the time of its inception was to gather information about schools and teaching in order to aid states in establishing successful elementary and secondary, as well as post-secondary, school systems. Financial support from the Federal government began in 1890 with the Second Morrill Act, which gave the Secretary of Education responsibility for distributing funds provided by the sale of public lands to states and territories for the "support of the colleges for the benefit of agriculture and mechanic arts," or what are referred to today as land-grant universities. The Smith-Hughes Act in

1917 continued federal funding for vocational education, allocating monies for the purpose of "cooperating with the States in paying the salaries of teachers, supervisors, and directors of agricultural subjects, and teachers of trade, home economics and industrial subjects." Next, World War II started to make its impact, starting with the Lanham Act in 1941 and followed by the Impact Aid laws passed in 1950. These laws provided funding for schools located on military bases and other federal lands that did not have the ability to collect property tax. In 1944, Congress passed the Serviceman's Readjustment Act, or the "GI Bill." This bill gave numerous benefits to soldiers returning from the war, one of which was financial aid to attend college. In the 1950s, war, or the threat of war, again spurred on more attention for education from the federal government. The Russians had successfully launched the Sputnik spacecraft into orbit, and the U.S. responded with the National Defense Education Act of 1958. The act "provided a student loan program, aid to elementary and secondary school instruction in science, mathematics and foreign languages, and graduate student fellowships." The 1960's saw the rise of the civil rights movement, which emphasized equality for all persons, regardless of their sex, race, or disability status. Congress used education as an agent for reform, passing the Elementary and Secondary Education Act and Higher Education Act in 1965. These brought funds to disadvantaged students across the country in the form of Title I funds for poor rural and urban areas, as well as financial aid for needy college students. In 1980, the Department of Education became a Cabinet level agency. ("The Federal Role in Education"). Another major change in federal support of education came in 2001, when President George W. Bush enacted the No Child Left

Behind Act (NCLB), which amended the Elementary and Secondary Education Act of 1965. The NCLB aimed to increase accountability and student progress across school districts, give parents and students more choices, and give greater funding flexibility for states, school districts, and schools. This funding flexibility included the ability for states and local education agencies to consolidate portions of funds from different federal grants and transfer the consolidated funds into one of those grant programs. These grant programs included Teacher Quality State Grants, Educational Technology, Innovative Programs, Safe and Drug-Free Schools, and Title I ("Executive Summary").

The late 1980's through the 1990's brought about significant change and reform for education finance. During that time period, nearly all states implemented some type of change to their elementary and secondary education funding process, and many states continue to fund their education systems using the programs set forth during that period. Reform in many states was in reaction to lawsuits brought by parties questioning the constitutionality of the states' methods of equalizing funding for public school districts. Citing passages from their states' constitutions, such as in Washington, where "it is the paramount duty of the state to make ample provision for the education of all children residing in the state," these lawsuits sought more equity in the way funds were distributed to try to mitigate wealth inequality between school districts. Disparity existed because funding for schools at the local level primarily comes from a tax on property. Therefore, wealthier districts brought in more revenue from these taxes, and thus had more money to spend on elementary and secondary education. The states provided

money in an effort to supplement local expenditures, but the lawsuits and other reforms called for a more equalized funding model. In response, states created a variety of different programs to solve the problem. Many of these programs were foundation programs, in which a formula generated an expenditure amount per pupil that offered a "basic", "minimum", or "adequate" education. The general trend across the country was that state money for education, as well as power over education, increased. One popular tactic included placing a limit on the rate that property could be taxed in order to receive state funds, or supplying funds inversely proportional to the wealth of a district. Michigan went to the extreme in 1993 by eliminating local property taxes as a means of funding operating revenue for elementary and secondary education. Michigan replaced this gap primarily with a two-cent increase in sales tax, in combination with other sources (Verstegen).

Today, funding methods for public schools across the country still vary widely, but most have common sources. The primary method of funding at the local level is still property tax, while state sources include sales tax, personal and corporate income tax, excises taxes on motor vehicles, alcohol, and cigarettes, as well as more specialized taxes and sources such as the lottery or mineral leases. Obviously, states also differ greatly on the proportion of public school funding from local, state, and federal sources. For 2000-2009, the national averages for the shares of education funding were 43.49% from local sources, 48.13% from state sources, and 8.39% from federal sources. Nevada relied the most of any state on local funds (64.78%), and consequently relied the least on state funds (28.76%). In contrast, Hawaii, which is the only state with a single statewide school district, had

the least contribution from local sources (5.32%) and the most contribution from state sources (85.23%) during that time span. Mississippi had the highest proportion of their education expenditures come from federal funds (15.96%) of any state from 2000-2009, while New Jersey (4.19%) had the least. Tables 1-3 below show the states with highest and lowest percent of revenue coming from each of local, state, and federal sources:

Table 1:

Highest and Lowest Percent of Elementary and Secondary Education Revenue from Local Sources				
	Local	State	Federal	
Top Five				
Nevada	64.78	28.76	6.45	
Illinois	55.88	35.44	8.70	
Missouri	56.89	35.17	7.93	
Pennsylvania	54.29	37.90	7.80	
Massachusetts	50.78	43.72	5.48	
Bottom Five				
Hawaii	5.32	85.23	9.43	
New Mexico	14.25	71.29	14.48	
Vermont	15.98	76.50	7.52	
Alaska	24.89	58.98	16.15	
North Carolina	27.85	62.62	9.51	

Table 2:

Highest and Lowest Percent of Elementary and Secondary Education Revenue from State Sources			
	Local	State	Federal
Top Five			
Hawaii	2.03	88.70	9.27
Vermont	15.98	76.50	7.52
New Mexico	14.25	71.29	14.48
Minnesota	29.56	64.03	6.39
North Carolina	26.17	64.57	9.25
Bottom Five			
Nevada	64.78	28.76	6.45
Nebraska	53.60	37.11	9.28
Missouri	56.89	35.17	7.93
Illinois	58.07	33.49	8.44
South Dakota	51.00	34.15	14.84

Table 3:

Highest and Lowest Percent of Elementary and Secondary Education Revenue from Federal Sources

	Local	State	Federal	
Top Five				
Mississippi	30.00	54.03	15.96	
Alaska	24.52	59.59	15.90	
South Dakota	51.00	34.15	14.84	
New Mexico	17.26	68.59	14.16	
North Dakota	48.06	37.39	14.55	
Bottom Five				
New Jersey	53.41	42.42	4.19	
Connecticut	52.14	42.16	5.69	
Massachusetts	50.78	43.72	5.48	
Wisconsin	41.83	51.76	6.39	
Minnesota	28.10	66.16	5.74	
	(Nat	ional Cont	or for Education Sta	

(National Center for Education Statistics).

Current Funding Model in Mississippi

The current method of funding education in Mississippi is known as the Mississippi Adequate Education Program (MAEP). The purpose of the MAEP is to determine the appropriate amount of funding for school districts in order to ensure that each child in Mississippi has access to an "adequate" education, regardless of where he or she may live. The Mississippi Department of Education (MDE) determines the adequate amount of funding by selecting both successful and efficient school districts. The MDE annually gives each school district an accreditation rating on a scale of 1.0 to 5.0, with 5.0 being the best. A school district is considered successful if it has an accreditation rating of at least 3.0. Next, a school district must also be efficient. An average of all school districts is taken for the costs of instruction (teachers per 1,000 students), administration (administration/staff ratio), maintenance and operations (M&O spending and maintenance staff per 100,000 square feet), and ancillary (librarians and counselors per 1,000 students). If a district is one standard

deviation above the mean or two standard deviations below the mean, it is considered efficient. School districts that are both successful and efficient are used to generate the average cost for each component. The sum of the four components gives the initial base student cost. For stability in budgeting processes, the base student cost is calculated once every four years instead of annually, and an inflation adjustment is made in the years before a new calculation. Finally, the base student cost multiplied by the Average Daily Attendance gives the starting dollar amount per student that districts are awarded.

Next, the local contribution of the district is subtracted. To be eligible for the MAEP, a school district must levy a property tax of 28 mills. Some districts may choose to have a higher tax, or the 28 mills tax may provide a surplus of funds, so the maximum percentage of the total program cost that a local district has to pay is 27%. There is a maximum total millage rate of 55 mills, but local school boards are allowed to increase tax revenue up to 7% more than the previous year's total. Then, the MAEP provides funding for Add-On programs and an At-Risk component. The At-Risk component is calculated as 5% of the base student cost multiplied by the number of students on free and reduced lunch in the district. Add-On programs include transportation, special education, gifted education, vocational education, and alternative education. Thus, the current formula for the state's contribution to funding public K-12 education is:

Base student cost X ADA + At-Risk component + Other Add-Ons – Local Contribution

= MAEP program cost per pupil

(Mississippi Adequate Education Program).

In reviewing the MAEP, Leonard finds that the MAEP has been achieving its goal of improving student performance. The number of Level 1 and Level 2 schools, or those that are considered low-performing and under-performing, have been greatly reduced (Leonard).

Methods

To analyze the recession and its impact on education funding, the author researched economic indicators at the state and national level, including gross domestic product, unemployment, home and land values, foreclosure and delinquency rates, and personal incomes by industry. In addition, the author consulted state revenue and expenditure reports, as well as revenue and expenditure reports for elementary and secondary education in the U.S. and Mississippi. The author analyzed total state expenditures, total elementary and secondary education expenditures, expenditures per pupil, local millage rates, and other sources of revenue for education. Data from 2000 to 2012 were examined where available.

Recession

The recession of the late 2000s was one of the worst economic downturns in the U.S. since the Great Depression. The National Bureau of Economic Research labeled December 2007 as the beginning of the recession. Gross domestic product growth had slowed down each year from 2004 to 2007, growing 1.94% in 2007 as compared to 3.59% in 2004 (World Bank). The S&P 500 had reached an all-time high of 1561.80 on October 12, 2007, and it stayed as high as 1504.66 in December 2007. Unemployment in 2007 was 4.6%, the lowest it had been since 2000 (Labor

Force Statistics). Personal incomes and personal consumption in the U.S. had grown each year from 2000 to 2007, with incomes growing a total of 139.4% during that span, and personal consumption increasing by 48.9% (GDP and Personal Income by State). According to the Lincoln Institute of Land Policy, aggregate home values in the fourth quarter of 2007 were \$24,848 billion, and the aggregate value of residential land was \$9,264 billion. There were \$2,306 billion in mortgage originations in 2007, with the delinquency and foreclosure rates at 5.4% and 2.0%, respectively (U.S. Census Bureau).

However, the global economy began to deteriorate in 2008, and seemingly every aspect of the economy started to suffer the consequences. The S&P 500 gradually declined during the first three quarters of 2008, and then the first of a series of shocking bankruptcies to some of Wall Street's most elite firms occurred. Lehman Brothers, one of the largest investment banks in the U.S. with \$691.1 billion in assets, filed for Chapter 11 bankruptcy protection on September 15. The stock markets responded swiftly and drastically, falling 4.7% in one day. The decline continued with the stock index dropping roughly 350 points from 1255.07 on September 19 to 899.22 on October 10. During that span, Washington Mutual, with \$327.9 billion in assets, also filed for bankruptcy. One of the most common explanations for the causes of the recession was the bursting of a credit bubble in the housing markets. Home and land values started an immediate and steady decline in 2008, with home values dropping a total of 9.08% and land values falling 21.88% (Davis). Mortgage originations fell to \$1,509 billion, while delinquency and foreclosure rates grew substantially from their 2007 marks, up to 6.9% and 3.3%.

Subprime mortgages received a great amount of attention for their role in the crisis. From 2007-2008, delinquency rates for these loans grew 27.5%, up to 19.9%, and foreclosure rates grew 57.5%, up to 13.7% (U.S. Census Bureau). Other economic indicators began to show the severity of the impending financial crisis. The U.S. GDP shrunk for the first time over the course of a whole year since 1991, falling 0.02% in 2008 (World Bank). Unemployment increased to 5.8%, although personal incomes grew 4.63% (Labor Force Statistics). Despite the overall growth in personal incomes in 2008, sectors such as motor vehicles manufacturing and securities and investments trading saw incomes immediately decrease 13.47% and 12.34%, respectively. Similarly, personal consumption grew each of the first three quarters of 2008, but finally dropped 2.71% in the fourth quarter (GDP and Personal Incomes by State).

Those parts of the economy that did not struggle as badly in 2008 certainly struggled in 2009. GDP dropped severely by 3.5%, and the S&P 500 hit a low of 683.38 on March 6, 2009 (World Bank). General Motors, Chrysler, and CIT Group, with combined assets of \$210.7 billion, all filed for bankruptcy in 2009, joining a number of other firms across the country. The NBER tabbed June 2009 as the trough of the recession. Unemployment ballooned to 9.3%, and personal incomes fell 4.3%, the first time of the decade (Labor Force Statistics). While personal incomes in most industries were not drastically affected in 2008, 2009 saw sharp drop offs in several areas. Construction incomes fell 13.96%, manufacturing fell 11.18%, renting and leasing of real estate fell 12.35%, mining fell 47.13%, and funds, trusts, and other financial vehicles fell 43.94%. Personal consumption

continued its decline from the end of 2008, dropping another 0.81% by the second quarter of 2009 (GDP and Personal Income by State). By quarter four, home values had dropped another 1.6%, and land values fell by 0.96% (Davis). Although mortgage originations bounced back to \$2,103 billion, delinquency rates rose to 9.3% and foreclosure rates increased to 4.6%. These rates continued to worsen for subprime mortgages, reaching a delinquency rate of 25.5% and a foreclosure rate of 15.6% (U.S. Census Bureau).

Mississippi was certainly not immune to the effects of the recession.

Unemployment rose every month in 2008, from 6% in January up to 7.9% in December. Although personal incomes and GDP grew in Mississippi in 2008, declines were seen in these statistics in several industries, such as information, wholesale and retail trading, transportation and warehousing, and manufacturing. Average home and land prices fell in all four quarters of 2008, declining a total of 3.7% from 2007 prices. Struggles continued in 2009, as GDP fell 2.4% and personal incomes across all industries dropped 2.5%. Some industries were especially hurt by the recession, with real estate falling 7.0%, manufacturing falling 8.5%, construction falling 13.2%, and mining falling 59.4% (GDP and Personal Incomes by State). Home prices in Mississippi continued their steady decline, dropping another 1.7% in 2009, followed by a 3.1% drop in 2010 (Davis).

These hardships the American economy was facing led to the creation and implementation of the American Recovery and Reinvestment Act of 2009. Congress passed the bill on February 19, 2009, and newly inaugurated President Obama

signed it shortly thereafter. According to the government's website for the Recovery Act, the three main goals of the bill were as follows:

- Create new jobs and save existing ones
- Spur economic activity and invest in long-term growth
- Foster unprecedented levels of accountability and transparency in government spending

To reach these goals, the act called for \$787 billion in government spending for a variety of programs, ranging from tax cuts for families and businesses, funding for entitlement programs, and funding for federal contracts, grants, and loans. The total amount of aid was increased to \$840 billion to correspond with President Obama's budget for 2012. Funds provided by the Recovery Act are still being distributed, but roughly 90% of the funds awarded have been paid out. Thirty-six percent of these paid funds were designated for various tax credits for individuals, families, and businesses. Medicaid/Medicare and education were the next largest recipients of funds, each receiving about 12% of distributed funds to date. 67.6% of the funding for education was given to the Office of Elementary and Secondary Education within the Department of Education. Transportation and infrastructure spending received 8.11% of paid out funds, while public assistance programs such as unemployment insurance and family services received 13.4% of funds ("Breakdown of Funding").

These federal funds came with certain stipulations. For several funding areas, including education, transportation, housing, and healthcare, the American Recovery and Reinvestment Act required a "maintenance of effort" (MOE), in which states had to keep funding for certain programs at a level equal or above a

designated prior level. Funds given to the Office of Elementary and Secondary Education for the State Fiscal Stabilization Fund, which made up 54.8% of the Office's total stimulus receipts, contained an MOE requirement. Under the Act, states were required to keep financial support for elementary and secondary education for fiscal years 2009, 2010, and 2011, at a level greater than or equal to the level the state provided in fiscal year 2006. States could also request a waiver from the MOE requirement if the percentage of total state revenues spent on education was greater than or equal to the percentage spent in the previous year. The U.S. Department of Education's Office of Inspector General quickly became aware of potential negative consequences of the MOE requirement and published a report in September of 2009 stating, "Some States' budget proposals would reduce State support for public education back to the FY 2006 levels and replace the State funds with their SFSF allocation to free up State resources for non-education budget items" (U.S. Department of Education).

State Expenditures Analysis

According to data from the National Association of State Budget Officers' annual State Expenditure Reports, most states did take advantage of the MOE requirement. Total state expenditures grew each year from 2000 to 2010, including 2.9% growth in 2009 and 4.8% growth in 2010. Similarly, expenditures from the states' general funds, other state expenditures, and bonds increased an average of 5.68% every year from 2000 to 2008, but these expenditures fell 1.61% in 2009 and 1.94% in 2010. To compensate for these decreases, state expenditures that were sourced from federal funds grew 15.7% in 2009 and 20.9% in 2010. Total state

expenditures for elementary and secondary education grew each year except for 2010, in which nominal expenditures fell 0.9%. However, as predicted by the Department of Education's Office of Inspector General, federal funds from the American Recovery and Reinvestment Act supplanted state funds. Although total state elementary and secondary education expenditures experienced 3.5% growth in 2009, expenditures for education from the states' general funds, other state funds, and bonds only increased 0.63%, while state expenditures sourced from federal funds increased 21.24%. The 0.9% fall in nominal elementary and secondary education expenditures in 2010 corresponded with a 6.74% drop in education expenditures from general funds, other state funds, and bonds, while state expenditures on education from federal sources grew another 28.91%. Therefore, one can see that on average, states used the flexibility of the American Recovery and Reinvestment Act's MOE requirement to replace state funds normally allocated to elementary and secondary education. In fact, in 2010, general funds, other state funds, and bond expenditures on education decreased in 39 states. Another metric to consider is elementary and secondary education expenditures as a percent of the total state budget. Data show that the budget share for elementary and secondary education fell 3.7% in the U.S. and 15.8% in Mississippi during the recession, leading one to believe states cut money normally intended for education and gave it to other programs. (National Association of Budget Officers).

However, since a large portion of funding for elementary and secondary education also comes from the local level, what happened to total expenditures on education and expenditures per pupil? Both total expenditures and expenditures

per pupil increased every year from 2000 to 2009. Thus, although the percent of state budgets spent of elementary and secondary education declined during the recession, total education expenditures and expenditures per pupil still increased. The rate of growth did slow down, though. On average, expenditures per pupil grew 5.11% and total expenditures grew 5.76% through 2008, but this growth slowed to 2.86% for per pupil expenditures and 2.4% for total expenditures in 2009. This change in growth rate corresponded with a change in the mix of sources of revenue for education. In the U.S. in 2008, 43.5% of revenues came from local sources, 48.3% came from state sources, and 8.2% came from federal sources. As aid from the American Recovery and Reinvestment Act, came in, these shares shifted to 43.7% from local sources, 46.7% from state sources, and 9.6% from federal sources. Therefore, on average, school districts across the U.S. were able to increase total expenditures and expenditures per pupil during the first year of the recession, but states substituted federal funds for state funds, and local revenues remained basically unchanged. 2010 data for elementary and secondary education revenues and expenditures are not yet available from the National Center for Education Statistics, although, according to the Department of Education, federal funds now make up roughly 10.8% of education expenditures (National Center for Education Statistics).

Mississippi Education Expenditures and Funding

Mississippi saw similar trends as much of the U.S. Total state expenditures grew 6.66% on average from 2000 to 2010, including 4.7% and 12% in 2009 and 2010, respectively. Expenditures from Mississippi's general fund, other state funds,

and bonds increased an average of 3.82% from 2000 to 2010, but these expenditures decreased slightly in 2010, falling 0.67%. However, state expenditures sourced from federal funds jumped 30.1% from 2009 to 2010 to counteract the drop in state sourced funds. As was the case in many other states, Mississippi's expenditures on elementary and secondary education that were sourced from the general fund, other state funds, and bonds fell 2.26% in 2009 and 2.88% in 2010. State expenditures from federal sources for education actually decreased by 1.07% in 2009, but bounced and grew 14.57% in 2010. Again, one can surmise that Mississippi used the MOE requirement and federal funds to supplant money normally allocated for education (National Association of State Budget Officers).

Mississippi was also saw total expenditures for elementary and secondary education and expenditures per pupil increase from 2000 to 2010. Similar to the rest of the U.S., growth for total education expenditures slowed from an average of 5.35% per year from 2000 to 2008 to 1.72% in 2009 and 0.77% in 2010, and expenditures per pupil slowed from 4.51% average growth from 2000 to 2008 to 1.81% in 2009 and 0.39% in 2010. However, in terms of expenditures per pupil, Mississippi's worst five districts became worse at some point during the recession. Table 4 shows the growth in expenditures per pupil for 2009 and 2010 for the bottom five school districts in terms of average rank in expenditures per pupil from 2000 to 2010:

Table 4: Change in Expenditures Per Pupil in North Pike, Desoto County, Lincoln County, Marshall County, and George County School Districts

	Average Rank	2009	2010
North Pike	151.2	6.93%	-1.27%
Desoto County	150.5	0.68%	-2.47%
Lincoln County	146.3	-1.59%	1.89%
Marshall County	143.5	-3.33%	1.00%
George County	141.5	-0.61%	2.30%

(Superintendent's Annual Report)

One can see that although there were slight decreases, North Pike, Lincoln County, and George County actually increased expenditures per pupil during the recession. However, both Desoto County and Marshall County are above average in average daily attendance, with Desoto County being the largest school district in the state. Also, statewide average growth was 2.21% during the recession, so all of these districts except for North Pike were below average.

As stated above, state sourced funds for education decreased in both 2009 and 2010, while federal funds increased dramatically in 2010. As expected, the makeup of elementary and secondary education revenue from local, state, and federal sources shifted during this period. Table 5 shows the shares of revenue for education from local, state, and federal sources from 2008 to 2010:

Table 5: Percent of Elementary and Secondary Education Revenue from Local, State, and Federal Sources

	Local	State	Federal
2008	28.34%	55.25%	16.38%
2009	29.84%	54.33%	15.73%
2010	30.14%	48.21%	21.62%

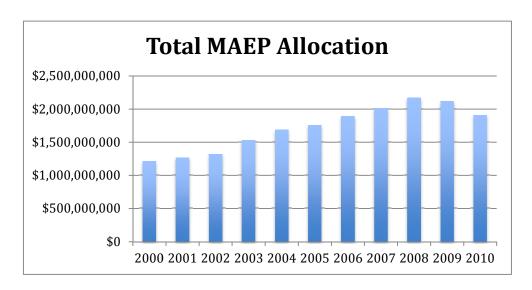
(Superintendent's Annual Report)

As the table shows, federal funds increased greatly and took some of the burden off of Mississippi's state-sourced funds, while local funds increased slightly as well. The growth in the local share of total education revenue amounted to a roughly \$57 million increase in 2009, followed by another \$36 million in 2010. According to data from the Mississippi Department of Education, local governments generated this extra revenue by increasing the average total mills levied on property from 44.61 in 2008 to 47.44 in 2009, and then to 48.29 in 2010 (Superintendent's Annual Report).

At the state level, sources of funding for Mississippi's General Fund took a hit during the recession. Sales tax receipts and personal income tax receipts grew every year from 2000 to 2008, and then sales taxes fell off by 2.94% in 2009 and 6.65% in 2010, while personal income taxes dropped 2.41% in 2009 and 6.33% in 2010. Corporate income tax receipts had shown great strength from 2003 to 2008, increasing by 82.85%. However, after the recession hit, corporate income taxes fell 10.0% in 2009 and 4.31% in 2010. On average, Mississippi's total Tax Commission receipts grew 4.18% from 2000 to 2008, but declined 3.23% in 2009 and 4.75% in

2010 (Mississippi Department of Revenue, *Annual Report*). These drops in revenue, accompanied by lower levels of spending on education from state funds, meant that the Mississippi Adequate Education Program received less funding during the recession, both in total and per pupil. Tables 6 and 7 illustrate these changes:

Table 6: Total Amount of Elementary and Secondary Education Revenue from MAEP from 2000 to 2010



MAEP Funding Per Pupil \$5,000.00 \$4,710.26 \$4,588.47 \$4,352.29 \$4,500.00 \$4,141.48 \$4,100.12 \$3,789.32 \$3,641.64 \$4,000.00 \$3,500.00 \$3,308.14 \$2,853.45 \$2,716.18 \$2,581.66 \$3,000.00 \$2,500.00 \$2,000.00 \$1,500.00 \$1,000.00 \$500.00

Table 7: MAEP Expenditures Per Pupil from 2000 to 2010

(Superintendent's Annual Report)

2008

2009

2010

2007

2006

Federal assistance during the recession came primarily from the American Recovery and Reinvestment Act of 2009. As shown above, the bulk of this federal assistance arrived in 2010. Sources of federal funds for education in 2009 totaled about \$676 million, with no line items attributed to the American Recovery and Reinvestment Act. In 2010, these sources grew to \$946 million, with roughly \$267 million directly credited to the new stimulus funds (Superintendent's Annual Report).

2005

\$0.00

2000

2001

2002

2003

2004

Conclusion

In summary, it is clear that the economies of Mississippi and the rest of the U.S. were negatively affected by the recession. Organizations of all types, whether business, non-profit, or government, had to make difficult decisions and slash budgets. The American Recovery and Reinvestment Act offered aid to individuals and organizations across the U.S., with funds targeted for certain purposes. Certain purposes required organizations, such as state governments, to make use of these funds with a "maintenance of effort" stipulation, which meant states expenditures on certain programs had to be maintained at least at a prior level. A majority of stimulus funds marked for elementary and secondary education carried a "maintenance of effort" requirement, so many states decided to supplant some of their normal state funds for federal funds instead. Total expenditures on education and expenditures per pupil still grew during the recession, but federal and local sources made up a greater share. For Mississippi, this meant federal revenues made up more than one-fifth of total revenues for education, local communities had to increase property taxes 8.25% on average, and the state's program meant to help equalize education spending across districts received 12% less money per pupil during the recession. This is disheartening for stakeholders in those communities as they try to bring their education systems even with the rest of the U.S., as Jerry Johnson concludes in his report for the Rural School and Community Trust, "Mississippi's school districts facing the greatest challenges to high academic achievement are also the ones that have the most limited resources with which to address those challenges" (Johnson, Jerry 10).

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