Winthrop Rockefeller Foundation

Written Testimony Submitted to Arkansas State General Assembly House and Senate Education Committees

May 13, 2014 at 10 a.m.

Ву

The Winthrop Rockefeller Foundation

Good morning. My name is Sherece West-Scantlebury, and I am the President of the Winthrop Rockefeller Foundation. Building on the legacy of Governor Rockefeller, the Winthrop Rockefeller Foundation has been and continues to be a champion for a public education system that supports all Arkansas children. For nearly forty years, WRF has invested in research and systems change that improve educational outcomes for our students.

During the era of *Lake View*, WRF provided important data and leadership around possible solutions to increase revenue for the state's K – 12 system. Today, the Foundation continues to use its time and resources to help move Arkansas from among the nation's lowest performing in economic and education indicators to become one of the nation's highest ranking in measures of family and child well-being. We believe that all Arkansans fare better when our children have equitable access to high-quality educational opportunities.

In that light, we appreciate the opportunity to share our perspective on the need for continued support for Arkansas students and a recommitment of time, talent, and resources to improve our education system. We should note that *this testimony does not reflect a position on any pending legislation*, but we do believe that if our state is to continue moving forward, the success of every student must be a priority for our policymakers, business leaders, and educational institutions. Included here are recommendations for the Committee's consideration that emerge from the Foundation's grantmaking and research.

Invest early.

Any definition of "adequacy" must include equitable access to high quality early educational opportunities. That is why the Foundation has invested more than a million dollars in the Arkansas Campaign for Grade-Level Reading with the goal that by 2020, every Arkansas third grader will read proficiently. Our 2011 report, *The Arkansas Campaign for Grade-level Reading: A Call to Action,* makes the case that third grade reading proficiency is one of the most important indicators of future academic and career success.

It also makes some simple recommendations for improving third grade reading proficiency in Arkansas:

- Improve school readiness by expanding pre-K and evidence-based home visiting programs
- Reduce summer learning loss by investing in high-quality summer and youth development programs
- Decrease chronic absence by ensuring our children are in the classroom every day and able to learn
- Strengthen parent and community engagement by providing caregivers with the support and resources needed to be their child's first and most important advocates

If Arkansas's K-12 system is to benefit all students, we must invest in proven strategies to ensure early success.

Invest in opportunity for <u>all</u> students.

Adequacy must also include a universal commitment to public school systems that benefit all children regardless of race, income level, geography, or any other factor. Based on research produced by the Schott Foundation for Public Education, Arkansas's economy loses \$142 million annually because of inequity in our education system. WRF supports the Arkansas Opportunity to Learn Campaign — a coalition of statewide organizations, community leaders, parents, students, educators, and policymakers that are committed to strengthening public education in Arkansas. This diverse coalition has identified some key ways to expand opportunity:

- Build stronger parent, community, student, and school partnerships
- Increase accountability for how schools spend NSLA funding
- Create fairer systems of discipline that reduce suspensions and out-of-class time
- Make career and technical education opportunities more accessible for students

In addition to the recommendations above, to increase equity, we must ensure that our tax system is fair and create better parity in how school districts are funded. Since the Foundation funded *Tax Options for Arkansas: Funding Education After the Lake View Case* in 2003, the state has taken significant steps to improve the adequacy and equity of our schools but a regressive tax system in Arkansas continues to contribute to inequitable school funding.

The public school system and its funding mechanism needs to be fair to create opportunity for all students in our state.

Invest in effectiveness through high-quality academic standards.

Finally, adequacy must demand the high, clear, and consistent expectations for learning that are essential to improving educational outcomes for all students and it must ensure accountability for the state's K - 12 education system. The Foundation has invested in the implementation of the Common Core Standards through a partnership with the Arkansas Department of Education and Walton Family Foundation.

Common Core Standards have the potential to increase student achievement and close race and socioeconomic gaps by ensuring all Arkansas students graduate with the skills and knowledge to be successful in the global marketplace. To enjoy the full benefit of Common Core Standards, it is critical to:

• Provide evidence-based resources for parents and teachers

• Offer quality professional development to support the continued implementation of these standards.

Arkansas has taken the critical step of adopting Common Core Standards. It is now essential to maintain these new standards and ensure their effective implementation so that we can begin to see positive returns.

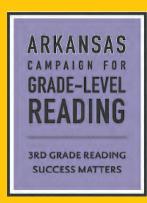
Strategic investments in education today are key to the long-term future of Arkansas. The Winthrop Rockefeller Foundation continues to use our resources to identify and lift up best practices. Ultimately, it will require state investment to scale these best practices and make certain that all of our state's students are successful. But first, it requires a commitment to defining educational adequacy in a way that recognizes the need for early investments, access to opportunity for all students and a strong commitment to world class standards.

We will make the resources referenced in this testimony available electronically and in hard copy for inclusion in the official record of these proceedings. Thank you again to Sen. Key and Rep. McLean for providing us with this opportunity.



THE ARKANSAS CAMPAIGN FOR GRADE-LEVEL READING

A CALL TO ACTION



SEPTEMBER 2012

SUPPORT PROVIDED BY: THE SCHOTT FOUNDATION FOR PUBLIC EDUCATION AND THE WINTHROP ROCKEFELLER FOUNDATION

ARKANSAS ADVOCATES
FOR CHILDREN AND FAMILIES
UNION STATION, SUITE 306
1400 WEST MARKHAM
LITTLE ROCK, AR 72201
501-371-9678

614 EAST EMMA, SUITE 107 Springdale, ar 72764 479-927-9800

WWW.ARADVOCATES.ORG

^{*} WE THANK OUR FUNDERS FOR THEIR SUPPORT BUT ACKNOWLEDGE THAT THE FINDINGS AND CONCLUSIONS PRESENTED IN THIS REPORT ARE THOSE OF AACF AND DO NOT NECESSARILY REFLECT THE OPINION OF THE FOUNDATIONS.

TABLE OF CONTENTS

THE ARKANSAS CAMPAIGN FOR GRADE-LEVEL READING	4
THE IMPORTANCE OF GRADE-LEVEL READING IN ARKANSAS	5
THE ARKANSAS READING GAP	7
IMPACTING THE READING GAP	8
CLOSING THE READING GAP	11
CALL TO ACTION	14
ENDNOTES	15



THE ARKANSAS CAMPAIGN FOR GRADE-LEVEL READING

A student's ability to read at grade level by the end of third grade is one of the most important predictors of school success and high school graduation. In this report, we answer four questions:

- 1. Why is reading by third grade important?
- 2. How does Arkansas measure up on third grade reading proficiency?
- 3. Why does Arkansas under-perform?
- 4. What can we do about it?

The Arkansas Campaign for Grade-Level Reading will propel the state forward to achieve the following goal:

BY 2020, ALL ARKANSAS CHILDREN WILL READ AT GRADE LEVEL BY THE END OF THIRD GRADE.



THE IMPORTANCE OF GRADE-LEVEL READING IN ARKANSAS

Reading proficiently by the end of third grade impacts a variety of outcomes such as:

- Children's ability to learn after third grade
- Children's academic outcomes as measured by standardized tests, grades, and course failures
- Non-academic outcomes such as self-esteem and behavioral issues
- The strength of our state's economy

READING TO LEARN. True reading comprehension is not just the ability to recognize words and articulate them, but also the ability to understand the underlying concepts expressed by those words. Reading serves as a crucial skill to a student's growth across all subject areas. As children move beyond the third grade, the reading skills needed to do their work become more sophisticated. The transition from third to fourth grade marks a shift from "learning to read" to "reading to learn." From reading and writing in the social sciences to the application of mathematical principles to real world situations, students make use of reading skills on a daily basis across their coursework.

ACADEMIC OUTCOMES. A 2010 study on the long-term impact of third grade reading found that students with higher reading scores at the end of third grade also had higher scores when they reached eighth grade. The study, which looked at the performance of 26,000 Chicago public school students, also found that third grade reading skills are a strong predictor of a ninth grade student's GPA (positively) and number of course failures (negatively).²

A 2011 study of nearly 4,000 students born between 1979 and 1989 documented the impact of reading proficiency on staying in school. Almost all (96 percent) readers who were proficient in the

The transition from third to fourth grade marks a shift from "learning to read" to "reading to learn."

third grade graduated from high school. However, four times as many non-proficient students failed to graduate by the age of 19. Most troubling, nearly one in four (23 percent) below-basic readers failed to obtain a high school diploma by 19 (although the researchers were unable to authoritatively determine whether the students had actually dropped out).³

NON-ACADEMIC OUTCOMES. Failure to achieve reading proficiency has also been linked to other factors that may harm a student's chances at academic success. Unskilled readers have low self-esteem, which reduces their confidence in their ability to thrive academically. They are also significantly more likely to engage in behaviors that lead to disciplinary troubles and, indeed, may result in suspensions that prevent their learning. Because of these things, poor reading indirectly shapes educational achievement.⁴

IMPACT ON THE ECONOMY. The economic consequences of not graduating from high school are grave. High school dropouts are more likely to be unemployed, spend more time in poverty, use more public assistance, and be on death row than people who have a high school diploma.⁵



What would cutting the dropout rate mean for Arkansas? A 2011 report found that addressing the high school dropout rate would have a huge impact on economic growth in the state. According to the report, an estimated 11,900 Arkansas students dropped out of the class of 2010. If that number were cut in half, to 5,950, the state would see the following:

- \$60 million in increased home sales
- \$51 million in increased gross state product
- \$42 million in increased earnings
- \$33 million in increased spending
- \$9.8 million in increased investments
- \$5.9 million in increased auto sales
- \$3.5 million in increased tax revenue
- 300 new jobs⁶

The societal problems that we usually associate with adults often have their roots in the reading skills developed (or not) by students during their earliest school years. As a recent report on the subject concluded, "The bottom line is that if we don't get dramatically more children on track as proficient readers, the United States will lose a growing and essential proportion of its human capital to poverty, and the price will be paid not only by individual children and families, but by the entire country."

THE ARKANSAS READING GAP

NAEP. Analysts of the third grade reading level crisis in the United States typically rely upon scores on the National Assessment of Educational Progress (NAEP) in evaluating the depth of the problem. NAEP, also known as "The Nation's Report Card," employs a careful sampling process to ascertain how America's students are doing, and its fourth grade exam is given at the start of that school year.8

The NAEP scores indicate that a large percentage of Arkansas students are not proficient in reading by the end of third grade. While grade-level reading issues are prevalent across the country, Arkansas lags behind other states in this measure. In 2011, 68 percent of fourth graders nationwide were not proficient. Arkansas ranks 36th in the nation. Despite the educational investments in the state in the past decade, seven in 10 fourth graders continue to lack this important proficiency (see Figure 1).

NAEP also shows that there is a significant gap in reading proficiency among Arkansas students across racial and ethnic lines. ¹⁰ Figure 1 shows that 38 percent of Arkansas's white fourth-graders showed proficiency on the NAEP exam in 2011, while just over one in 10 black students did so. Hispanic students also are challenged in terms of reading proficiency, with under 20 percent of all fourth graders reading at grade level.

THE BENCHMARK. The Arkansas Benchmark Exam is the state-level examinations used to determine whether adequate yearly progress is being achieved under the No Child Left Behind (NCLB) education law. The tests are given late in the spring of each year.

Figure 1 Percentage of 4th graders reading at or above proficient based on NAEP data, 2002-2011

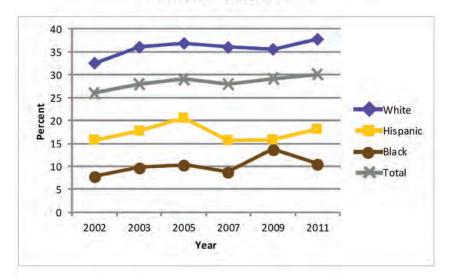
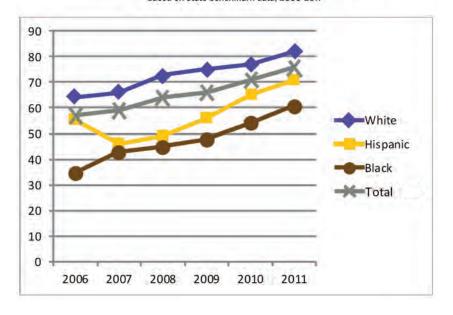


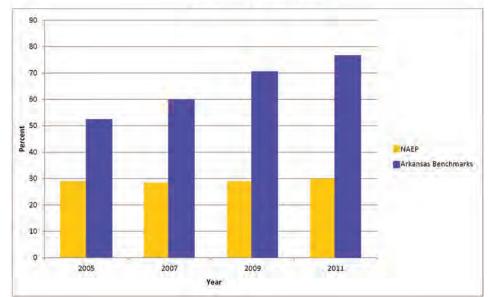
Figure 2 Percentage of 3rd graders reading at or above proficient based on state benchmark data. 2006-2011



As Figure 2 indicates, over the past six years, the Benchmark results have shown a steady increase in the percentage of children who can read proficiently by the end of third grade. This has been true for Black, Hispanic, and White children. And the gap between the different subgroups is narrowing. However, there are still too many children who do not read proficiently—39 percent of Black children, 29 percent of Hispanic children, and 18 percent of White children. There is also a clear gap across school districts. Nearly 42 percent of the state's school districts have overall reading proficiency rates that are less than the statewide average.¹¹

Figure 3

Comparison of state benchmark and NAEP scores for proficient and above. 2005-2011



Analysis of benchmark data also shows that children who are not performing well in third grade are likely to perform poorly by eighth grade. The vast majority of third graders (68.5 percent) reading at a level below basic in 2004-05 remained at basic or below basic five years later. Reading skills make a big difference in other subject areas as well. The majority of students who are non-proficient in reading in third grade are non-proficient in math five years later. Students who did better in reading while in third grade, performed better in eighth grade math. In short, early reading proficiency has a big impact on later success in the classroom.

COMPARING THE NAEP AND THE BENCHMARK.

The state-level examinations used to determine whether adequate yearly progress is being achieved under No Child Left Behind consistently overestimate the percentage of students who are reading proficiently. States have the power to develop their own tests, which are uniformly less stringent than the NAEP test when it comes to meeting internationally recognized educational standards. There is also substantial variability across the states in how they stack up against the NAEP in terms of proficiency. Arkansas's state benchmark exam is one of the more stringent in the country, ranking eighth for fourth grade reading proficiency in terms of its NAEP scale equivalency. Still, it is fair to say that Arkansas's state tests underestimate the number of students reading proficiently at this level, based on international standards. As Figure 3 shows, there is a significant gap between the percentage of children who were reading proficiently as indicated by the 2011 Benchmark (76 percent) and NAEP (30 percent) scores.

The primary challenge in relying on the NAEP as Arkansas's measure of reading proficiency is that results are not available at the local level. Local data are needed to track the progress of individual districts and to provide the information needed by state and local officials who formulate policies and allocate resources in response to the progress that districts are making toward reading proficiency goals. The state benchmark test overestimates reading proficiency at the local level, but it is the only way to track local progress.

IMPACTING THE READING GAP

Research in recent years has begun to clarify what impacts our children's failure to achieve reading proficiency. This research falls into four key impact areas:

- School Readiness
- Chronic Absence
- Summer Learning Loss
- Parent and Community Engagement

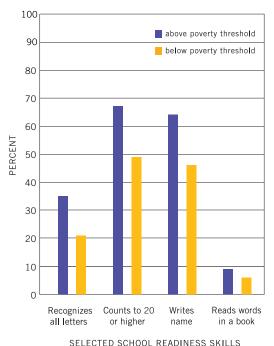
Percentage of Children Ages 3–6 With Selected School Readiness Skills, by Poverty Status

SCHOOL READINESS. Too many children from low-income families begin school already far behind. For some children, learning proficiency challenges begin before they are born. As of 2009, nearly one in four mothers in Arkansas still received no prenatal care. A variety of developmental problems, particularly related to brain functioning and behavioral issues (such as ADHD), are tied to being a low-birth weight baby. A growing body of research shows that in utero exposure to drugs, alcohol, and the substances in cigarettes is also tied to detrimental health outcomes that interfere with learning, including reading development. It

Low-income children are less likely to be read to regularly or to have access to books, literacy-rich environments, high-quality early care, and pre-kindergarten programs. As a consequence, these children may hear as many as 30 million fewer words than their middle-income peers before reaching kindergarten. Research shows that such interactions are critical for language development, an important precursor to literacy. Only 29 percent of eligible three-year-olds and 59 percent of eligible four-year-olds have access to Arkansas's Pre-K program.

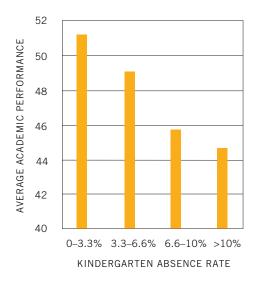
CHRONIC ABSENCE. Too many children from low-income families miss too many days of school. In 2004-05, seven percent of Arkansas's third graders were chronically absent, missing one-tenth of the school year, or almost 20 days of school. This percentage likely underestimates the absenteeism rates. On average, Arkansas third graders miss 7.75 days per year, double the national average for that grade. These students cannot afford to lose time on task, especially in the early years when reading instruction is a central part of the curriculum. Absenteeism numbers are also important because of their strong correlation with dropout rates. A separate analysis of Arkansas data has shown that low attendance and being suspended from school are two of the strongest determinants of whether a student drops out of school.

SUMMER LEARNING LOSS. Too many children lose ground over the summer months. While lower-income children learn at the same rate as their wealthier peers during the school year, summer learning loss means that, across time, major gaps grow across economic lines. This is true even in the earliest years as students are learning to read; lower-income children lose as much as two months of reading achievement during the summer months. This significantly delays these students' progress in reading proficiency and creates gaps between richer and poorer students that grow exponentially over



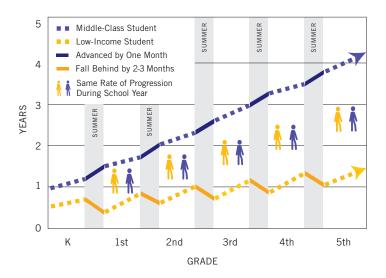
SELECTED SCHOOL READINESS SKILLS

Source: O'Donnell, Kevin. Parents' Reports of the School Readiness of Young Children from the National Household Education Surveys Program of 2007, Table 2. National Center for Education Statistics. August 2008. www.childtrendsdatabank.org/?q=node/291



Source: ECLS-K data analyzed by National Center for Children in Poverty (NCCP).

Low-Income Students Fall 2.5 to 3 Years Behind by Fifth Grade



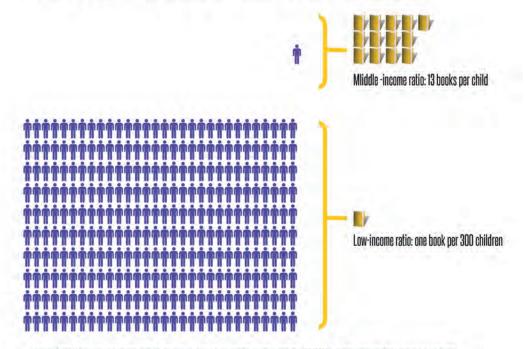
Source: Cooper, H., Borman, G., & Fairchild, R. (2010). "School Calendars and Academic Achievement." In J. Meece & J. Eccles (Eds.), *Handbook of Research on Schools, Schooling, and Human Development* (pp. 342-355). Mahwah, NJ: Erlbaum.

the course of their educational careers. Children from wealthier families actually make gains during the summer months, applying the skills they have learned during the school year to the varied experiences provided to them during the summer. ¹⁸ Just 17 percent of Arkansas school children participate in summer learning programs. ¹⁹

PARENT AND COMMUNITY ENGAGEMENT. Children and schools succeed when parents and the community are engaged in the school and with the children. This includes more formal activities such as Parent Teacher Associations and school boards, as well as informal activities such as volunteering during the school day and at school activities. One critical aspect of parent and community engagement is reading to children. A variety of forces can limit parents' ability to play this important teaching role. First, many working parents lack the time needed to read to children in a relaxed setting. Second, many parents don't have the literacy

skills or access to books and other materials to aid in reading to their children. Finally, many parents do not know what an important force they can be in shaping their children's preparation for school. All of these limitations, of course, are most likely to be faced by lower-income parents.²⁰ Because buying books can be difficult for lower-income families, strong public libraries are crucial. Per capita funding for public libraries in Arkansas is one-half of the national average.

Ratio of age-appropriate books per child in middle- and low-income neighborhoods



Source: Neuman, Susan B. and David K. Dickinson, ed. Handbook of Early Literacy Research, Volume 2. New York, NY; 2006, p. 31. www.serve.gov/toolkits/book-drive/index.asp



CLOSING THE READING GAP

The goal of the Arkansas Campaign for Grade-Level Reading is to make sure that, by 2020, all Arkansas children read at grade level by the end of third grade. Seem ambitious? It is. But it is a goal we can reach. The research is clear on the importance of grade-level reading. If we can reach our goal, the educational and economic benefits to Arkansas will be enormous: improved literacy, higher graduation rates, untold economic benefits, and an educated workforce ready to tackle the global economy of the 21st century.

HOW DO WE GET THERE? By focusing on each of the four impact areas and fostering a culture that values and invests in the education of our children.

IMPROVE SCHOOL READINESS by investing in prenatal care and expanding early childhood education. Arkansas has made significant strides in recent decades to improve prenatal care, but clear challenges remain. A particular challenge is the unavailability of services in the most remote parts of the state. In rural Arkansas, innovations such as telemedicine are addressing but have not solved the challenges of accessibility.

High-quality early childhood education has proven to be the most promising strategy to help less advantaged children start school with the same potential for learning as their more advantaged peers. While not a cure-all for every educational challenge that a child encounters, early childhood education helps level the playing field, including reading preparation, before those limitations become an expansive barrier to children's learning success.²¹

Over the past decade, Arkansas has made a major investment in early childhood education for threeand four-year-olds, dramatically expanding access for at-risk students and upgrading the quality of its program to become one of the nation's best. This investment has begun to produce results for children from different economic, racial, and ethnic groups as they start school, getting more students on the path to effective reading.



There remains important work to be done if the state is to use the power of early childhood education to create proficient readers. First, many young people who are eligible for the program do not enjoy its benefits because of state budget limitations, the lack of local providers, or because some families choose not to take advantage of the program. Second, while many families up to 200 percent of poverty are eligible for free access to the program subject to state budget constraints, this leaves many working-poor families without the ability to cover the cost if they can get their child into a program. Finally, it is crucial that Arkansas policymakers continue to address issues related to enhancing teacher qualifications and ratchet up standards with a particular focus on reading preparation.

REDUCE CHRONIC ABSENCE by improving school-based health systems and keeping better track of students who routinely miss classes. A variety of factors drive chronic absence: parents not prioritizing attendance, aspects of the school environment that push children away, and logistical challenges in getting children to and from school.²² The most common logistical challenges are family instability, a variety of factors tied to socioeconomic situation, ranging from homelessness to less obvious realities of being poor in America, and illness, especially asthma.²³

Proactive steps to improve student health in Arkansas would have an immediate impact on chronic absence. The Coordinated School Health model, which operates in districts around the state and helps schools leverage community health resources to meet the health needs of their students, is nationally recognized. Arkansas has 11 School Based Health Centers, which provide accessible care for both well-child checkups and acute and chronic health care needs. Both of these efforts could be expanded.

Arkansas should use its longitudinal tracking system to reach out to parents and highlight the dangers of chronic absence as soon as the pattern begins to show itself. That same tracking system can identify patterns

across schools where chronic absence is common and identify problems within the school environment, like bullying, that are pushing children away. School social workers, home visitors, and other staff can reach out to parents to help solve their social and economic challenges.

STOP SUMMER LEARNING LOSS by investing in high-quality summer programs that give kids an opportunity to learn during the summer months. For low-achieving students, summer reading programs provide the opportunity to catch up to peers. A few weeks of intensive instruction with individual attention increases proficiency and leads to increases in positive attitudes about school and self-esteem, especially when parents are involved in the programs.

While a variety of summer programs of varied quality exist in the state of Arkansas, there is no statewide initiative for summer learning. Following on recommendations developed by the 2008 Governor's Task Force on Best Practices for After-school and Summer Programs, the Department of

Human Services, the Department of Education, the Arkansas Out of School Network (AOSN), and local service providers have worked together to establish quality standards, licensing requirements, professional development trainings, and evaluation methods needed to operate quality programs in the state of Arkansas.

In the 2011 session of the General Assembly, legislators passed the Positive Youth Development Grant Program Act. The bill aims to expand the availability of positive youth development programs to children ages five through 19 and establishes a grant program to support positive youth development efforts—including high-quality summer programming—in the state. At present, the rules and regulations for the grant program are being developed. Unfortunately, there is no funding stream for the program. It is the next priority for advocates of expanded out-of-school opportunities for young kids. Summer programs aimed at undermining summer learning loss would be a great investment for the state of Arkansas as it works to ensure that it's students achieve higher rates of grade-level reading.

STRENGTHEN PARENT AND COMMUNITY ENGAGEMENT by encouraging involvement and making sure kids have access to books outside of school hours. Strong schools have strong parent and community engagement. In these schools, parents and other community members are involved in governance and provide ongoing volunteer support to children and teachers. Children benefit when more adults are involved in their lives, both at school and at home, and when they have access to more resources, including books. It is crucial that in-home reading and storytelling be a part of

the life experience of youngsters from the time of their birth so that they develop the vocabulary and cognitive skills necessary to become proficient readers by the end

of third grade.

Access to books outside of school can make all the difference. Strong public libraries are crucial, especially for lower-income families for whom buying books is difficult. Per capita funding for public libraries in Arkansas is one-half of the national average. There is evidence that the gap between high-quality libraries (mostly in urban and suburban areas) and poorly resourced libraries has grown in the state. A greater investment in libraries is crucial for children to have access to books that encourage a love of reading at an early age. Additionally, programs like Reach Out and Read can put more books in the hands of our children. Resources like AETN Kids can provide tools to parents so they can help their children learn to read.



CALL TO ACTION

There is no single answer to solving the grade-level reading crisis in Arkansas. A variety of responses, involving the work of parents, educators, policymakers, and others in the community are crucial to eliminate the percentage of students who are non-proficient in reading at the end of third grade. We must:

- Improve school readiness
- Reduce chronic absence
- Stop summer learning loss
- Strengthen parent and community engagement

The ARKANSAS CAMPAIGN FOR GRADE-LEVEL READING will need the support and involvement of you—our citizens, our community leaders, our state and local partners, and our policymakers—to accomplish our goal of making sure all children read at grade level by the end of third grade. Do your part. Join the campaign at WWW.AR-GLR.NET.

Endnotes

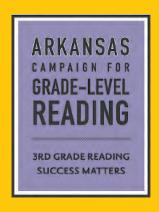
- ¹ Joy Lesnick, Robert M. Goerge, Cheryl Smithgall, and Julia Gwynne. 2010. *Reading on Grade Level in Third Grade: How Is It Related to High School Performance and College Enrollment?* Chicago: Chapin Hall at the University of Chicago.
- ² Lesnik et al.
- ³ Donald J. Hernandez. 2011. *Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation*. Annie E. Casey Foundation. 2011.
- ⁴ Nonie K. Lesaux. 2010. *Turning the Page: Refocusing Massachusetts for Reading Success*. Strategies for Children, Inc.
- ⁵ John M. Bridgeland, John J. Dilulio, and Karen Burke Morison. 2006. *The Silent Epidemic: Perspectives of High School Dropouts*. Washington, DC: Civic Enterprise.
- ⁶ "Education and the Economy: Boosting Arkansas' Economy by Improving High School Graduation Rates." Alliance for Excellent Education, March 2011.
- ⁷ Leila Feister. *EARLY WARNING!: Why Reading by the End of Third Grade Matters.* 2010. Annie E. Casey Foundation: 7.
- 8 From the NAEP reading standards: http://nces.ed.gov/nationsreportcard/reading/achieveall.asp.
- $^9~http://www.kansasopengov.org/SchoolDistricts/StudentAchievement/NAEPRankingsbyState/4thGr~adeReadingProficiency/tabid/2169/Default.aspx.$
- ¹⁰ For more on achievement gap, see Jay Barth and Keith Nitta, *Education in the Post-Lake View Era: What is Arkansas Doing to Close the Achievement Gap?* Arkansas Advocates for Children and Families and Arkansas Public Policy Panel, 2008.
- ¹¹ While 2012 Benchmark data have been released, as of August 24, 2012, the racial breakdowns are net yet available, so we present only the 2011 data in our report.
- ¹² Arkansas Department of Health, *The Current Birth Data by State, Region, and County: May 2010*; Centers for Disease Control and Prevention, *National Vital Statistics Reports*, Volume 58, number 24.
- ¹³ Ron Haskins and Isabel Sawhill. 2009. *Creating an Opportunity Society*, Washington, DC: Brookings Institution Press; Maureen Hack, Daniel J. Flannery, Mark Schluchter, Lydia Cartar, Elaine Borawski, and Nancy Klein. 2002. "Outcomes for Young Adulthood for Very-Low-Birth-Weight Infants." *New England Journal of Medicine* 347: 141-143.
- ¹⁴ Diane Barone. "Prenatal Drug and Alcohol Exposure and Reading Disabilities." 2011. In R. Allington and A. McGill-Franzen, (Eds.), *Handbook of Reading Disabilities*. Mahwah, NJ: Erlbaum Publishers: 120-128.
- ¹⁵ Author's analysis of de-identified Arkansas longitudinal testing data received from the Arkansas Research Center.
- ¹⁶ Mariajosé Romero and Young-Sun Lee. 2007. *A National Portrait of Chronic Absenteeism in the Early Grades*. New York: National Center for Children in Poverty, Columbia University.
- ¹⁷ Robert Balfanz and Vaughan Byrnes, *Early Indicator Analysis: Arkansas*. Center for Social Organization of Schools, Johns Hopkins University. 2010.
- ¹⁸ Harris Cooper, Barbara Nye, Kelly Charlton, James Lindsay, and Scott Greathouse. 1996. "The Effects of Summer Vacation on Achievement Test Scores: A Narrative and Meta-Analytic Review." *Review of Educational Research* 66: 227-268.
- ¹⁹ http://www.afterschoolalliance.org/documents/AA3pm_Summer_2010/ArkansasNR.pdf.
- ²⁰ Jeanne Brooks-Gunn and Lisa B. Markman. 2005. "The Contributions of Parenting to Ethnic and Racial Gaps in School Readiness." *The Future of Children* 15: 139-168.
- ²¹ Robert G. Lynch. 2007. Enriching Children, Enriching the Nation: Public Investment in High-Quality Prekindergarten. Washington, DC: Economic Policy Institute.
- ²² Julia Steiny. 2012. "Chronic absence Reveals and Causes Problems." *Education News*, 1 February (http://www.educationnews.org/education-policy-and-politics/julia-steiny-chronic-absenteeism-reveals-and-causes-problems/).
- ²³ Hedy Chang and Mariajose Romero. 2008. *Present, Engaged, and Accounted For: The Critical Importance of Addressing Chronic Absence in the Early Grades*. The Annie E. Casey Foundation; National Center for Children in Poverty.

The findings of this report are based on a forthcoming report on grade-level reading by Dr. Jay Barth, M.E. and Ima Graves Peace Distinguished Professor of Politics and Chair of the Department of Politics & International Relations at Hendrix College.



WWW.AR-GLR.NET @ARKANSASGLR







Tax Options for Arkansas

Funding Education After the Lake View Case



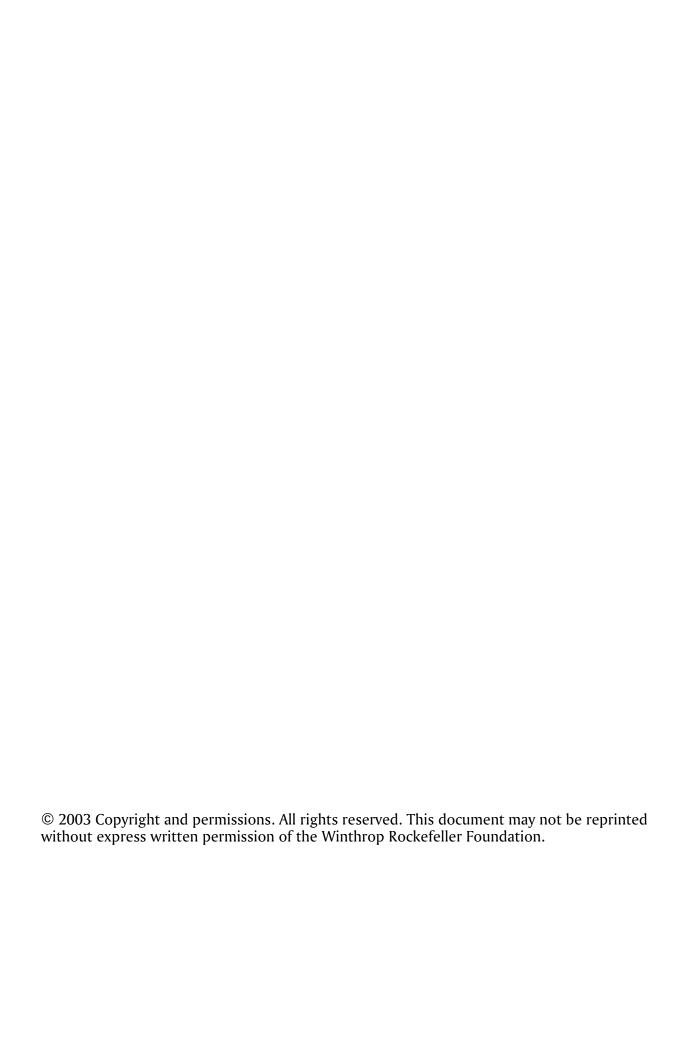
Winthrop Rockefeller Foundation July 2003

Tax Options for Arkansas Funding Education after the Lake View Case

Matthew Gardner
Rich Huddleston
James Metzger
Richard Sims

A Study Conducted for The Winthrop Rockefeller Foundation July 2003

> Institute on Taxation and Economic Policy Arkansas Advocates for Children and Families HISTECON, Inc.



TAX OPTIONS FOR ARKANSAS

The Winthrop Rockefeller Foundation commissioned *Tax Options for Arkansas* to provide a useful resource for understanding the impact of recent school finance legislation on the state's tax and education system. The study examines options available to Arkansas policy makers as they seek to adequately fund the state's system of elementary and secondary schools.

WINTHROP ROCKEFELLER FOUNDATION

In 1974, the Trustees of Governor Winthrop Rockefeller's estate endowed the Winthrop Rockefeller Foundation to continue the work of the Rockwin Fund. Governor Rockefeller established the Rockwin Fund in 1954 and, on an annual basis from 1956 until his death in 1973, funded projects and programs he believed were important to improving the quality of life in Arkansas.

The Winthrop Rockefeller Foundation is a private, nonprofit foundation whose mission is to improve the lives of Arkansans by funding programs and projects that improve education; economic development; and economic, racial, and social justice. During the past 29 years, the Foundation has awarded over \$65 million in grants.

The study could not have been completed without the assistance of the staffs at HISTECON Associates, Inc., the Institute on Taxation and Economic Policy (ITEP), and Arkansas Advocates for Children and Families (AACF). Research assistance was provided by Norton Francis, Will Gomaa, Jeremiah Gardner and Robert Wolfe.

Crucial direction and many helpful comments were provided by Bill Rahn and Mary Kaye McKinney at the Winthrop Rockefeller Foundation, and by the study's Advisory Committee, which met throughout 2002 and reviewed the final report. Grateful acknowledgment is also given to many state agencies, especially the Arkansas Department of Education, legislators, and school officials whose support was vital in preparing the analysis.

All conclusions or interpretations in this report are those of the authors and not the Winthrop Rockefeller Foundation.

Winthrop Rockefeller Foundation Education Funding Advisory Committee

This study benefitted greatly from the expertise of a diverse group of individuals serving in an advisory capacity. While the advisory committee's input helped guide the research, the recommendations contained herein are not necessarily those of individual committee members.

Robert Cabe Arkansas Blue Cross and Blue Shield Little Rock

Thelma Cook Altheimer School District Altheimer

Jean Edwards Sherrill

Dan Farley Arkansas School Boards Association Little Rock

Tristan Greene Arkansas Department of Education Little Rock

Jackie Lewis Alread Community Resource Development Corporation Bentonville

Jodie Mahony Mahony and Yocum El Dorado Robert McGinnis West Memphis

Essie Middleton Arkansas Congress of Parents and Teachers Association Little Rock

Rich Nagel Arkansas Education Association Little Rock

Dr. Kellar Noggle Arkansas Association of Educational Administrators Little Rock

Dr. Angela Maynard Sewall College of Education, UALR Little Rock

Dr. Ashvin Vibhakar Institute for Economic Advancement UALR Little Rock

Contents

Preface 1
Introduction
Chapter One. Key Concepts Used in the Study
Chapter Two. Educational Adequacy in Arkansas
Chapter Three. Alternatives to Revenue Raising
Chapter Four. An Overview of the Arkansas Tax System
Chapter Five. The Arkansas Personal Income Tax
Chapter Six. The Arkansas Corporate Income Tax
Chapter Seven. Arkansas Sales and Excise Taxes
Chapter Eight. Arkansas Property Taxes
Chapter Nine. Other Important Revenue Sources
Chapter Ten. Options for Increasing Education Funding
Chapter Eleven. The Economic Impact of Achieving Adequacy
Chapter Twelve. Barriers to Tax Changes
Chapter Thirteen. Conclusion
Appendix A: Detailed Distributional Estimates
Appendix B: Composition of Arkansas Assessed Value in 1999
Appendix C: Methodology

PREFACE

rkansas is at a crossroads. In November of 2002, the Arkansas Supreme Court ruled that the state's system of public elementary and secondary schools was both inequitable and inadequate. The *Lake View* decision signals conclusively to Arkansas policymakers that they must enact unprecedented increases in state expenditures on elementary and secondary education in order to repair the constitutional violations found by the court.¹

However, the state's current tax system is likely to be insufficient to support the sea change in public spending that will be necessary to comply with the *Lake View* decision's requirements—raising several vital questions:

- What policy changes will be required in order to provide a constitutionally acceptable level of school funding?
- What will be the implications for tax equity and tax adequacy of the substantial tax reforms that Arkansans may implement in coming years?
- Perhaps most important for the state's long term vitality, how will these changes in tax and spending policy affect the state's economy?

The Winthrop Rockefeller Foundation undertook this report in order to provide Arkansas policy makers and the public with the information needed to answer these questions. The Foundation has a long history of research on state and local taxes and a particular interest in the effects of tax systems on funding for public schools.

The Foundation contracted with three research groups with extensive experience in Arkansas tax analysis to prepare a study of funding alternatives for education. Cooperating in the study are the Institute on Taxation and Economic Policy of Washington, D.C., HISTECON Associates, Inc., of Little Rock, and Arkansas Advocates for Children & Families.

The report includes an in-depth look at the *Lake View* state supreme court decision, which set out a vision of the sort of education system Arkansas's constitution requires.

The report takes a hard look at the virtues and shortcomings of each of the state's major taxes and assesses the Arkansas tax system as it affects taxpayers at different income levels. The report also

addresses the implications of various newly emerging tax policy issues confronting state legislatures across the country, ranging from Internet-based sales tax transactions to the decline of the corporate income tax—all with an eye toward developing strategies for increasing the yield of the Arkansas tax system at a time when raising revenue is a priority.

The report builds on this survey by offering a menu of options for tax reform, focusing primarily on revenue raising alternatives but including options for low-income tax relief as well. These options include rate increases as well as base-broadening strategies designed to eliminate costly loopholes. The study provides distributional estimates for each tax option, along with an estimate of the impact on state revenues. Where relevant, the offsetting impact of these options on federal tax revenues are projected as well—an important consideration in assessing the impact of tax changes on Arkansans.

The main analytical tool used throughout this analysis is the ITEP Microsimulation Tax Model. Since conducting a study of the state's tax structure in 1997, ITEP has maintained current data on the Arkansas tax system in this model. ² The ITEP model is capable of analyzing the revenue yield and distributional impacts of various tax reform options, including changes in income taxes, consumption taxes, and property taxes.

The study also uses a general equilibrium model to estimate the impact of various tax and spending changes on the Arkansas economy, and finds that on balance, a package of tax and spending increases satisfying the *Lake View* requirements would have a stimulative effect on the state economy.

The fiscal demands of the *Lake View* case represent a daunting short-term challenge to Arkansas policy makers—but these short-term needs also provide an opportunity for lawmakers to craft tax reform solutions that will ensure the long-term solvency of Arkansas state and local governments.

We hope that this report will prove useful to the citizens and policymakers of Arkansas as they seek to preserve the quality of education in the state.

A shorter publication, "Arkansas at a Crossroads," summarizes the main findings of this report.

¹Lake View School District No. 25 v. Huckabee et al, 351 Ark. ____, S.W.3d ____ (2002).

²Building a Better Arkansas Tax System: Evaluating the Options. Institute on Taxation and Economic Policy, 1997.

INTRODUCTION

he purpose of this study is to analyze the implications of the *Lake View* case for the future of financing public education in Arkansas. The study has three broad goals:

- First, the report provides a detailed **menu of revenue-raising options** that could be used to meet the *Lake View* spending mandates.
- Second, the report examines thetax equity impact of various financing options on Arkansas taxpayers at different income levels.
- Third, the report analyzes the impact on economic development of these financing options.

This introductory chapter provides a "road map" for the study, describing the contents of each chapter.

Basic Tax and Education Policy Concepts

This report deals with two very different public policy areas—state tax policy and education finance. Chapter One provides a brief introduction to the most important principles of tax and education policy that are used in the study.

About the Lake View Case

E ducational adequacy was thrust into the spotlight in Arkansas when the state's supreme court ruled in November 2002 that the current education system is both inadequate and inequitable—and therefore unconstitutional. Chapter Two provides a detailed analysis of the *Lake View* case and its explanation of what an "adequate" education means in Arkansas.

Chapter Two also surveys attempts to define the actual policy changes that will be required in order to improve Arkansas education and reviews estimates of the cost of implementing these changes.

Finally, Chapter Two surveys several other states that have attempted court-ordered school funding reform, with the goal of gleaning lessons that might help achieve adequacy in Arkansas.

Alternatives to Tax Increases

As state lawmakers ponder ways of funding adequacy, some will advocate avoiding tax increases by "trimming the fat" from current state spending. Two ways of achieving this are reducing state spending in areas other than education and by reducing the number of school districts in the state. Chapter Three evaluates these non-tax strategies.

The Current Arkansas Tax System

Chapter Four provides a summary of the current tax structure. The chapter shows that Arkansas is not a high tax state, but that there is wide variation in the burden of individual Arkansas taxes: while the Arkansas property tax burden is among the lowest in the nation, Arkansas sales taxes are among the *highest* in the nation, and Arkansas personal income taxes are slightly below the national average.

Chapter Four also demonstrates that the Arkansas tax system is *regressive*. That is, it requires low-income taxpayers to pay a higher share of their incomes in taxes than the very wealthy. This is primarily due to the state's heavy reliance on sales and excise taxes.

Personal Income Taxes

The Arkansas income tax is an important source of tax progressivity. The tax helps to offset the regressive impact of Arkansas consumption taxes and property taxes. Yet the tax base contains loopholes that sharply reduce the overall progressivity of the tax—and limit the state's ability to fund education. Chapter Five describes the major factors limiting the yield and progressivity of the current Arkansas income tax and discusses options for low-income tax relief to offset the impact of income tax hikes.

Corporate Income Taxes

The Arkansas corporate income tax is in decline. The state's corporate taxes have fallen throughout the past two decades. **Chapter Six** looks at the factors contributing to this steady decline and describes measures that could help revitalize the corporate tax.

Sales and Excise Taxes

A rkansas relies more heavily on sales and excise taxes than most other states. The state's consumption tax burden was eighth highest nationally in 2000. Yet, as **Chapter Seven** shows, the state allows expensive exemptions that reduce the yield of the tax.

Closing these loopholes would broaden the base of the sales tax, increasing its perceived fairness—but would also make the tax system more regressive. For this reason, Chapter Seven also discusses options for low-income sales tax relief.

Property Taxes

Like most states, Arkansas relies on local and state property taxes as one mechanism for funding education. As shown in **Chapter Eight**, Arkansas is unusual in its very low property tax burdens—and in the extent to which it relies on state-level taxes to supplement the education finance role of the property tax. For this reason, property tax reform may be integral to state policy makers' efforts to adequately fund education. The challenge facing Arkansas is to increase the state's reliance on property taxes in a way that reduces inequities between school districts.

Chapter Eight describes several tax reforms that could help achieve this, including the imposition of a statewide property tax and the creation of a low-income "circuit breaker" tax credit.

Other Revenue Sources

Several lesser revenue sources could be harnessed to help fund education—including one source that Arkansas has chronically undertaxed (the extraction of natural gas) and one source that Arkansas does not currently rely on at all—a lottery. In addition, Arkansas lawmakers can take action to avoid the federally-induced repeal of the Arkansas estate tax—one of the few truly progressive taxes levied on the state level. Chapter Nine provides details on the pros and cons of using these tax sources for education.

Tax Reform Options

Tax increases will almost certainly be necessary in order to meet the *Lake View* court's educational mandates. **Chapter Ten** describes 25 tax changes that can be used as "building blocks" for revenue raising in Arkansas. Distributional and revenue analyses are provided for each option.

Because none of these building blocks will be sufficient to fund *Lake View* on its own, the chapter also presents six packages of tax reform options that would be adequate to fund Arkansas education.

The Economic Impact of Achieving Adequacy

Policy makers will be intensely interested in evaluating the economic impact of the *Lake View*-mandated changes. **Chapter Eleven** shows that these major tax and spending changes would have a positive impact on economic growth in Arkansas.

Barriers to Tax Changes

Implementing wholesale tax reform is rarely easy. Chapter Twelve describes the major hurdles, both institutional and political, that could prevent Arkansas lawmakers from complying with *Lake View*.

These include Amendment 19, which makes it significantly more difficult to pass income tax increases than to pass sales tax hikes, and several property tax limitations that could hamper the state's ability to make the property tax a significant part of any revenue raising solution.

The chapter also discusses the importance of public opinion of tax policy options—and shows that public evaluations of these options depend critically on showing the linkage between taxes and spending.

Notes on Presentation

This report includes many tables describing the distributional impact of tax reform options. These tables are produced using the ITEP Tax Model. The tables divide the Arkansas population into quintiles (groups of 20 percent), and further subdivide the wealthiest quintile into three subgroups. This is done because the wealthiest quintile receives more than half of all Arkansas personal income in 2002—and because income is distributed unequally within the top quintile. The following table shows the distribution of Arkansas income in 2002.

- The poorest quintile of Arkansans, with an average income of \$7,400, earned just 3.6 percent of all income in the state in 2002.
- The wealthiest one percent, with an average income of almost \$575,000, represented 13.9 percent of all income in the state.

The Distribution of Income in Arkansas					
All Families & Individuals in 2002					
Inco	me Group	Income Range		Average Income	Share of Income
Low	est 20%	Less th	nan \$12,000	\$7,400	3.6%
Sec	ond 20%	\$12,000	to \$20,000	\$16,300	7.8%
Mid	dle 20%	\$20,000	to \$34,000	\$26,900	12.9%
Fou	rth 20%	\$34,000	to \$54,000	\$44,500	21.6%
%	Next 15%	\$54,000	to \$104,000	\$73,200	26.3%
Top 20%	Next 4%	\$104,000	to \$241,000	\$141,400	14.0%
P	Top 1%	\$241,000	or more	\$574,600	13.9%

KEY CONCEPTS USED IN THE STUDY

his report deals with education finance. In discussing this issue, the report will frequently touch on certain fundamental concepts and principles. This chapter provides a brief introduction to the most important principles of tax and education policy that will be used in the study.

Principles of Tax Policy

There is a widely agreed-upon set of principles according to which tax systems are judged. These tax policy principles include:

- Tax fairness:
- Broadening the tax base;
- Adequacy;
- Federal tax interaction;
- Balancing the tax burden; and
- Economic development consequences.

Tax fairness can be thought of in two important, ways: vertical equity and horizontal equity.

Vertical equity means the way a tax system treats people at different income levels. Three terms are typically used in discussing vertical equity:

- Regressive tax systems require that low- and middle-income families pay a higher share of their income in taxes than do upper-income families.
- Proportional or *flat* tax systems take the same share of income from all taxpayers.
- Progressive tax systems require upper-income families to pay a larger share of their incomes in taxes than those with lower incomes.

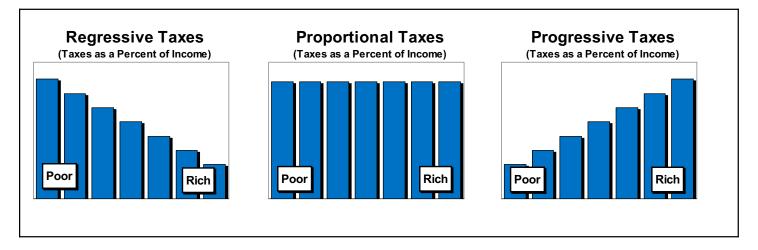
Historically, there has been widespread acceptance of the notion that, at a minimum, tax systems should not be regressive. That is, poorer families should not contribute a larger share of their incomes in taxes than do the wealthiest families.

The Arkansas tax system is regressive. As shown in Chapter Four, low-income Arkansas families pay a higher share of their income in state and local taxes than do upper-income families.

A second measure of tax fairness is how a tax system treats taxpayers who are fundamentally similar in terms of their ability to pay. When economists discuss the horizontal equity of a tax system, this is what they are referring to—the extent to which the tax system provides preferential treatment to some taxpayers over other, very similar taxpayers.

The Arkansas tax system is riddled with tax loopholes that violate this second conception of tax fairness. Income tax breaks for capital gains, property tax breaks for agricultural property, and sales tax exemptions for services all serve to create inequities between otherwise identical taxpayers—and reduce the yield of Arkansas taxes. Targeted tax loopholes of this sort violate the public's sense of tax fairness. For this reason, **broadening the tax base** by eliminating special tax breaks is doubly beneficial: it reinforces public perceptions of tax fairness, and it increases the long-term viability of the Arkansas tax system. The dual fiscal constraints of an economic slowdown and the *Lake View* mandates should motivate lawmakers to take a hard look at base-broadening strategies.

The primary concern of lawmakers seeking to fund any government expenditure is **adequacy**. That is, the tax system must yield enough revenue to pay for



important government services in both the short run and the long run. As lawmakers piece together revenue-raising ideas in the upcoming legislative session, special emphasis should be placed on the tax system's ability to fund education in the long run. True tax reform will not only achieve fiscal balance in the short run, but will also reduce the likelihood of fiscal crises recurring in the future.

State tax systems do not operate in a vacuum. Changes in Arkansas tax policy affect the federal tax burdens paid by Arkansans—and vice versa. This **federal interaction** is important in understanding the impact of tax reform on Arkansans.

How does state tax policy affect federal tax burdens? Any Arkansas resident who itemizes his federal tax return is allowed to deduct his Arkansas income and property taxes. Because these deductions reduce federal income tax liability, part of the state income and property tax initially paid by itemizing Arkansans is ultimately exported to the federal government. This means that the real tax burden on wealthier Arkansans (who are more likely to itemize their federal returns) is never as large as their state tax returns would indicate. This also means that if Arkansas raises income or property taxes to pay for education, a substantial portion of the tax hike will not be paid by Arkansas taxpayers at all—but will be paid directly by the federal government. If, on the other hand, Arkansas raises sales or excise taxes to fund education, none of the additional taxes paid by Arkansans would be offset by federal tax cuts.

How does federal tax policy affect state tax policy? Several of the major taxes levied by Arkansas are linked directly to the federal tax structure for administrative simplicity. For example, when Arkansans file their state income tax returns, the definition of gross income that is used is taken directly from the federal tax forms, to minimize the administrative burden on these taxpayers. The same is true of estate taxes and corporate income taxes. The down-side of this approach is that any federal tax changes that cut income or estate taxes—such as the major tax cuts enacted by Congress in 2001, 2002 and 2003—will automatically affect the Arkansas tax base unless Arkansas lawmakers take action to decouple from these changes. This is the challenge facing Arkansas lawmakers with recently enacted corporate loopholes and the repeal of the federal estate tax.

Successful tax systems use a **balanced tax structure** that does not rely too heavily on any particular tax source, so that fluctuations in individual tax

sources do not have a significant effect on state revenues. Chapter Four shows that Arkansas relies more heavily on sales taxes—and less heavily on property and income taxes—than most states. This principle suggests that Arkansas tax reforms should avoid increasing the state's already-high sales taxes.

Policy makers are frequently concerned about the negative **economic development consequences** of tax changes. It is important to assess the impact of the taxes a state levies and the quality of the services that are provided with these tax revenues side by side in attempting to evaluate the impact of fiscal policy on a state's economic climate. Chapter Eleven of this study measures the long-term impact of the spending and tax changes that will likely be required to satisfy the *Lake View* mandate on economic growth and employment in the state.

Education Policy Principles

The principal battleground over state education policy in recent years has been in the court system. This is because the most fundamental question addressed in state education policy battles is usually what level of education is required by the state's constitution. As a result, technical and legal terms tend to dominate discussions of how best to fund schools. This section provides an overview of the most important terms used in these battles.

Equity is what people have in mind when they evaluate whether a state's education system is fair to all of its students. Measuring the equity of a school funding system means measuring the treatment of any particular student compared to any other student. This can mean looking at the treatment of students in different school districts, or the treatment of students with different needs living within the same school district. Definitions of equity also differ on a more fundamental level: what ought to be equalized? And what does "equal" mean? Over the years, courts have defined equity as, among other things:

- equal access to education;
- equality of educational outcomes;
- equal dollars per pupil; and
- equal tax rates for taxpayers.

Adequacy means providing sufficient levels of funding to allow all children to attain a certain level of education. While equity compares school districts to each other, adequacy measures education funding relative to an absolute standard for the quality of

education across the state. For example, if state and local spending on Arkansas public education were allocated between school districts in a way that did not provide enough money to pay for each district's needs, but provided a similar quality of education to children across the state, it could be said that the Arkansas education system was equitable but not adequate. If, on the other hand, Arkansas policymakers provided large amounts of education spending for poor school districts, but provided even larger amounts for wealthy districts, the education system would be adequate but not equitable.

Like equity, adequacy is hard to define: courts have generally defined an adequate education only vaguely, as one that enables students to participate productively in society and to lead a fulfilling life.

Most states have not explicitly defined precise standards for adequacy. This is a challenge that Arkansas currently faces: what educational standards will result in an adequate Arkansas education? While more than one panel of experts have stepped forward in recent years to provide recommendations for achieving educational adequacy in Arkansas, state lawmakers have not yet answered this question conclusively. However, the state legislature is scheduled to report the findings of a new adequacy study in September of 2003.

In the context of education policy, efficiency is a measure of the relationship between how much a school system spends on education and the educational outcomes (graduation rates, test scores, etc.) that result. An efficient school system is one that accomplishes a certain level of education at the lowest cost. Conversely, a school district is said to be inefficient if it spends more on education than other districts with the same educational outcomes. As lawmakers seek to increase the quality of Arkansas schools, more attention may be paid to which school systems are currently most (and least) efficient.

School Funding 101

Why is it so difficult to achieve educational adequacy and equity? The basic problem confronting local governments seeking to fund schools is that property wealth is distributed unequally between districts. The less property wealth in a given district, the less revenue that district can raise in taxes. As a result, property-poor districts are not able to fund the

costs of education as easily as property-wealthy districts. For example, in 2000 the Lake View district raised only \$827 per student in local revenue—just over a guarter of the \$3,200 per student raised by the Little Rock district that year. Even property wealthy districts can find it difficult to raise enough money to fund schools adequately using property taxes. In other words, financing public schools using local property taxes introduces problems of *equity* between districts and adequacy for almost all districts. The Arkansas school finance system is designed to remedy both of these problems by providing state funding to lowproperty-wealth districts. (The principal finding of the Lake View case is that in fact, the current structure does not remedy either problem and is therefore both inequitable and inadequate. This case is described in Chapter Two.)

All Arkansas school districts are required to tax property at a basic rate of at least 25 mills (that is, 2.5 percent of assessed value). ³ Each year the state determines the "base level revenue," which is the amount of spending per pupil that would be achieved by dividing all state and local school funding equally between students. In 2003, that number is \$4,916 per pupil. If local school districts are unable to provide enough property tax revenue to achieve this \$4,916 per-pupil target, the state provides enough additional aid to each district to ensure that the sum of local tax effort and state aid will reach the target.

What can go wrong with a school funding system that works in this way? First, the equalized amount of spending per pupil—\$4,916 in this case—may be well short of the amount required to achieve an adequate education. Second, property-wealthy districts can raise more than this state-sponsored amount per pupil without relying on state help—which means that the amount spent on education will differ between poor and wealthy districts, even after taking account of state aid. This is why the Arkansas Supreme Court found the state's education finance system both inadequate and inequitable.

Chapter Two uses the building blocks described so far to provide a detailed explanation of the Lake View case and its implications for adequacy—and assesses the recommendations of two separate proposals for achieving adequacy.

³Chapter Eight discusses property taxes in greater detail.

CHAPTER TWO

EDUCATIONAL ADEQUACY IN ARKANSAS

The *Lake View* decision is the latest volley in a nationwide battle to establish educational adequacy as a fundamental right under state constitutions. The *Lake View* court's main finding—that the Arkansas system of funding elementary and secondary education is both inequitable and inadequate—serves notice that Arkansas must thoroughly overhaul its funding of local schools. This chapter reviews the Arkansas supreme court's decision in *Lake View*, surveys the state of educational achievement in Arkansas, reviews the recommendations of two recent studies focusing on ways in which Arkansas can improve its education system, and surveys the experience of other states that have faced similar judicially-imposed school funding crises.

Why is school funding a constitutional issue?

The Arkansas constitution includes two provisions that require the state to provide public education.

Article 14 requires the state to "maintain a general, suitable and efficient system of free public schools and...adopt all suitable means to secure to the people the advantages and opportunities of education."

Article 2 forbids the state to "grant to any citizen or class of citizens privileges or immunities which upon the same terms shall not equally belong to all citizens."

In other words, the state must provide a "suitable" system of public education, and must provide it "equally" to all Arkansas children.

The court's decision in *Lake View* says that the current education system does not meet either of these requirements—and is therefore unconstitutional.

The Lake View Decision

The court decision that prompted the state's current educational crisis was handed down on November 21, 2002. The state supreme court found Arkansas's system for funding public schools to be inequitable and inadequate—and therefore unconstitutional.

Because the state legislature has never developed a complete set of standards for educational adequacy, and because the state constitution does not discuss the meaning of adequacy in detail, the court was required to look elsewhere for a set of standards by which the state's education system could be judged. The court drew upon a 1989 Kentucky court decision

—discussed at length later in this chapter—that listed the characteristics of a constitutionally adequate education system.⁴ The *Lake View* decision distilled the Kentucky court's characteristics (referred to as the "Rose standards") into the following list:

- The state is solely responsible for the education system.
- The tax effort to support this system should be evenly spread.
- The system must provide the necessary resources to fund education uniformly throughout the state.
- The system must provide an adequate education.
- The system must be properly managed.

Having identified these characteristics of an adequate education finance system, the court identified five remedies that the state must implement in order to meet the constitution's requirements:

- First, school districts throughout the state must provide **equal educational opportunities** for their students. The state must ensure that poorer school districts are able to provide children with educational opportunities.
- Second, the state must ensure that every school district has substantially **equal facilities**. The state must provide a remedy to allow every district to have equal facilities, equipment and supplies.
- Third, Arkansas teachers' salaries should be raised to attract and retain qualified teachers, while maintaining salary equity between school districts.
- Fourth, the state must improve its method of measuring equity. The court ruled that educational equity must be measured not by reference to the amount of revenue available to school districts, but by the amount actually spent on education in each district.
- Fifth, the state must make an effort to quantify the costs of achieving a constitutional education system by **conducting an adequacy study**.

In addition, the court overruled an earlier lower court ruling that the state must provide **early child-hood education programs**. The November 2002 dec-

⁴Rose v. Council For Better Education, No. 88-SC-804-TG, Supreme Court of Kentucky, 790 S.W.2d 186 (1989).

ision found that while these programs might be desirable, they were not constitutionally required.

The court made a point of not prescribing how the legislature should change the education system to respond to these mandates, noting that the court's role is solely to determine whether the existing system is constitutional—not how to *make* the system constitutional. The court identified the General Assembly and the Department of Education as the state agencies responsible for achieving adequacy. Recognizing the difficulty of achieving these changes, the court gave the legislature a grace period in which to respond to these mandates. The November 2002 decision's mandates will not take effect until January 1, 2004—meaning that the Arkansas legislature must respond to the court's mandate in 2003.

The state legislature has already responded to one of these mandates: the legislature will report the findings of an adequacy study in September of 2003.

The *Lake View* decision imposes broad mandates for educational reform in Arkansas, and requires the legislature to act quickly in response to these mandates. This decision reflects the pressing need for educational improvement in the state: as the next section demonstrates, the state compares poorly to the rest of the nation on basic measures of educational achievement and effort.

Educational Indicators in Arkansas

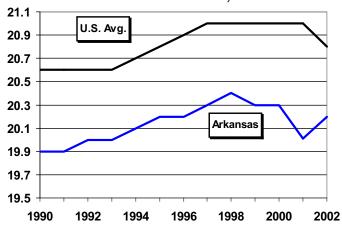
The quality of a state's education system can be measured by reference to the educational outcomes it achieves—test scores and graduation rates—or by the level of spending on students and teachers. Arkansas consistently ranks below average in each of these areas.

Percentage of Students At or Above "Proficient" on NAEP Exams:				
Grade:	4th	n 8th		
	Math	Reading	Writing	Science
Arkansas	13%	23%	13%	23%
U.S.	25%	31%	24%	30%
Ark. as % of US	52%	74%	54%	77%

Source: National Center for Education Statistics

Arkansas students tend to be less proficient in important subjects than students nationwide. Thirteen percent of Arkansas eighth graders are "proficient" in writing—just over half the national average. Arkansas students also trail the nation in reading, science and math proficiency.

Arkansas ACT Test Scores, 1990-2002



This lack of proficiency is also evident in the test scores of Arkansas high school students applying for college admission. Arkansas students consistently scored below the national average on the ACT admissions test throughout the 1990s.

Educational Achievement in Arkansas: Percentage of Population 25 and Older, 2002

State	High School	Bachelor's Degree	Graduate Degree
Arkansas	81.0	18.3	6.3
Neighboring States	81.6	23.0	7.6
U.S. Average	84.1	26.7	9.8
Arkansas Rank	40	50	50

Arkansans also trail the national average in educational achievement. Arkansans over 25 are less likely to have graduated from high school than Americans overall and much less likely to have achieved a bachelor's degree or a graduate degree. The state ranks 40th in high school graduation rates and 50th—dead last—in the percentage of adult residents with college and graduate-school degrees.

Arkansas also ranks poorly on measures of commitment to quality in education. Arkansas spends less than almost every other state on elementary and secondary education. The state spent \$5,459 per pupil in school year 2001, 47 th highest nationally and well

below the national average of \$7,156.

Arkansas also spends less on teacher salaries than most states. In 2001, the

Spending per Pupil, 2001		
Arkansas	\$5,459	
Neighboring States	\$5,822	
All States	\$7,156	
Arkansas Rank	47	
Course NOTO		

Source: NCES

Average Teacher Salaries, 2001		
Arkansas	\$34,641	
Neighboring States	\$35,430	
U.S.	\$43,335	
Arkansas Rank	43	

Source: National Education Association

average Arkansas teacher earned just \$34,641—twenty percent below the national average and 43rd highest nationally. Arkansas

teacher salaries were also lower than those of its neighboring states, which averaged \$35,430.

How can Arkansas Achieve Adequacy?

What steps can Arkansas take to improve the adequacy of its education system? Two legislatively-created groups, the State Board of Education Advisory Committee and the Arkansas Blue Ribbon Commission on Education, each spent the better part of 2001 and 2002 identifying ways to improve education.⁵ These groups' reports, released in 2002, provide detailed recommendations for improving the quality of Arkansas education.

The State Board's Advisory Committee issued 23 recommendations to improve education. The recommendations were grouped in five broad categories: attracting teachers, improving curricula, improving facilities, achieving accountability, and cutting costs. The Advisory Committee ranked three of these recommendations as being "decisively important:"

First, the Board emphasized the importance of higher teacher salaries, professional development, and incentives. The committee recommended raising Arkansas teachers' salaries to the regional average, adding ten days to the minimum annual teachers' contract, and increasing the required amount of professional development. Finally, the Board recommended providing monetary incentives to teach hard-to-staff schools and in subjects for which teachers are in short supply.

Second, the Board recommended access to early childhood education, ensuring that all three- and four-year-old children have access to early-childhood education programs delivered by any willing provider selected by parents, and establishing a sliding fee scale based on income.

Finally, the Committee's recommendations for **school accountability** included holding local school districts accountable for academic and fiscal outcomes

and developing a plan for the state to intervene if a school district fails academically or fiscally.

The Blue Ribbon Commission on Education recently issued 29 recommendations for educational adequacy. Unlike the Advisory Committee, the Blue Ribbon Commission developed cost estimates for many of the recommendations:

- Salaries for Arkansas teachers should be increased to help attract more qualified instructors. The overall goal should be to reach the regional average salary level by the 2006-07 school year, estimated to be \$45,000 (Cost: \$405 million).
- A program of early childhood education should be established for all four-year-old children in Arkansas, especially for children in low-income families (Cost: \$100 million).
- Teachers' health insurance and other employee benefits should be expanded to equal the benefits available to all state employees (Cost: \$60 million).
- School districts should provide employees with free workforce education programs and access to a career center (Cost: \$44 million).
- A comprehensive curriculum should be provided in each Arkansas school district to meet the needs of its students in terms of academic, social, cultural and physical development (Cost: \$24 million).
- Funding-distribution formulas should be changed to provide adequate funds to maintain adequate facilities (Cost: \$23 million).
- Schools should address unique student needs, such as limited English proficiency and alternative learning environments (Cost: \$22 million).
- Capital funding should be increased to ensure adequate facilities in every school district (these costs were not reported, but could exceed \$100 million—see discussion in Chapter 11).

The Blue Ribbon Commission's plan would cost at least \$689 million annually—including early childhood education (\$100 million) but not including any facilities or construction costs—and would be phased in over five years. These two sets of recommendations provide a useful road map for Arkansas policy makers as they seek to define the specific policy changes necessary to improve Arkansas education.

⁵Blue Ribbon Commission on Education, 2002, *Report and Recommendations* (Little Rock: Ark. General Assembly); Board of Education Advisory Committee, 2002, *Report of the Advisory Committee* (Little Rock: Ark. Dept of Education).

Achieving Adequacy in Other States

Many states have struggled with court-ordered school finance reform in recent years. This section looks at the recent experiences of three states—Alabama, Kentucky, and Michigan—in combining tax reform with school finance reform, with an eye toward drawing lessons for successful school finance reform in Arkansas.

In the case of *Harper v. Hunt*, which began in 1990, **Alabama**'s entire primary and secondary public school system was declared unconstitutional by a lower court because it did not fulfill the constitutional guarantee of an adequate and equitable education.⁶

The lower court's decision prescribed specific policy changes to remedy these constitutional violations, including performance standards for students and educators, school accountability, staff development, teacher pay, and school capital infrastructure. Annual cost increases for these educational changes were estimated at \$1.7 billion.

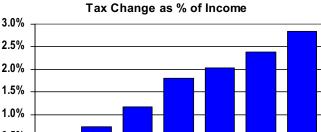
Recently, the Alabama supreme court upheld the lower court's finding that the system was unconstitutional, but admonished the lower court to leave decisions about how to achieve adequacy to the legislature and the governor. To date, the legislature has not complied with the court's mandate.

In 1989, the **Kentucky** supreme court found the Kentucky school system unconstitutional in *Rose v. Council For Better Education*.⁸ The court described in detail the requirements of an "efficient" education system. The list of these requirements drawn up by the court became the "Rose standards" that subsequently formed the basis of the Arkansas court's definition of an adequate school system.

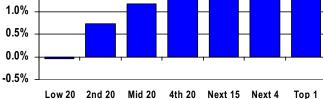
Responding almost immediately to the *Rose* mandate, the Kentucky General Assembly enacted a plan creating a new school-funding system that included state-aid adjustments for exceptional and atrisk students as well as transportation costs. It also included funds for special education, preschool programs, technology, professional development, deficient schools and rewarding school improvement.

The main funding sources for the reform plan were a one cent sales tax increase, a one percent increase in the corporate income tax, and loophole-closing personal income tax reforms. Local districts were required to levy a minimum property-tax rate of 30 mills to participate in the state-aid program. Local supplements were also limited, partially equalized, and subject to local voter approval. The new taxes increased funding for schools by 42 percent from 1990 to 1994, and by 1999 the per-pupil spending gap between wealthier and poorer districts had closed from \$1,199 to \$757.9 During that time, reading scores doubled for Kentucky's students, and student test performance also improved. 10

The Kentucky legislature took steps to ensure that the increased state tax burden from this plan would not fall primarily on low-income taxpayers by simultaneously enacting a low-income tax credit. The 1990 reforms also strengthened the personal income tax base in a progressive way by eliminating the state's deduction for federal personal income taxes paid—a rarely used loophole that primarily benefitted the very wealthiest Kentuckians. The following chart shows the distributional impact of the personal income tax reforms included in the 1990 changes.



1990 Kentucky Income Tax Changes



Unlike the other states surveyed here, the impetus for school finance reform in **Michigan** in the early 1990s was not a court mandate, but public dissatisfaction with the state's high property taxes and inequality in school funding between poor and wealthy local districts. In 1993, the state legislature voted to eliminate the local property tax as a source for school funding. In a 1994 election, Michigan voters ratified a "tax swap" that funded local property tax

⁶*Alabama Coalition for Equity, Inc. v. Hunt* No. CV-90-883-R (Ala. Cir. Ct. Montgomery County), 6224 So.2d 107 (Ala. 1993).

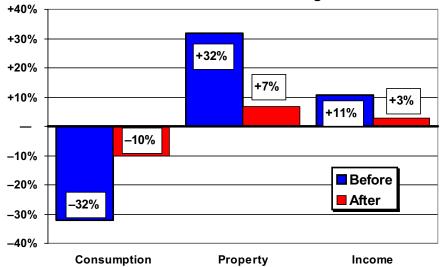
⁷Ex parte Governor Fob James, 2002 WL 11508(Ala., 2002).

⁸Rose v. Council For Better Education, Inc., No. 88-SC-804-TG; Supreme Court of Kentucky, 790 S.W.2d 186 (1989).

⁹A. Watson, "Kentucky's Educational Reform," *Illinois Issues*, July 1990, p. 23.

¹⁰Kentucky Department of Education, *Results Matter: A Decade of Difference in Kentucky's Public Schools* 1990 - 2000 (Frankfort: Dept. of Education), Apr. 11, 2000, p. 63.

Michigan Taxes Compared to U.S. Average, Before and After 1994 School Funding Reforms



repeal by increasing general sales taxes by two percent and cigarette taxes by 50 cents per pack, with the proceeds devoted to funding schools. The voters also agreed to create a new state-administered property tax. These changes shifted most of the school funding burden from the local government level to the state.

The state's assumption of the school funding burden resulted in funding increases of up to 30 percent for poorer districts, and reductions in revenue to wealthy districts of about 4 percent.

The Michigan tax reforms were also designed to restore balance to the state's tax system. The chart above shows that in 1990, Michigan property taxes were more than thirty percent above the national average, while its sales and excise tax burden was more than thirty percent below the national average. The 1994 reforms reduced this imbalance substantially: by 2000, Michigan property tax revenues were just seven percent above the national average, and consumption tax revenues were only ten percent below the national average.

While this change restored balance to the Michigan tax system, it did so by increasing slowgrowing cigarette taxes and volatile sales taxes, which generated insufficient revenues to replace the lost property tax receipts. The state responded to these problems two years later, in 1996, by dedicating a portion of personal income tax revenues to schools.

Because this "balancing" process involved increases in regressive sales and cigarette taxes, these changes also made the Michigan tax structure more regressive. Since the 1996 release of ITEP's study, Who Pays?, Michigan has been recognized as one of the "terrible ten" most regressive tax systems in the nation—largely due to the school finance reforms implemented in 1994.¹¹

Conclusion

The Lake View decision serves notice that the state's advert that the state's education system is both inadequate and inequitable—and the recent recommendations of two major education commissions provide a valuable blueprint for the sort of changes that will revitalize the Arkansas education system.

Arkansas is one of many states that have sought to reform school funding and the experiences of these other states offer valuable insights for state policy

makers. Kentucky's 1990 reforms show that judicial mandates for education funding reform can result in immediate action, with long-run improvements in educational achievements while simultaneously revitalizing the state tax system. Kentucky's legislature responded to a court mandate within a year, passing a revenue-raising package that increased state revenues through a combination of loophole-closing and rate increases that "spread the pain" between income, sales and property taxes. Kentucky lawmakers also seized the opportunity to enact true tax reform, shoring up the income tax base by eliminating a costly loophole and providing low-income tax relief to help offset the state's regressive sales tax increases.

By contrast, the Michigan legislature's choice to fund educational adequacy using cigarette and sales tax revenues bodes ill for the long-term viability of education funding in the state—and has made the tax system more inequitable. The Michigan reforms show that school funding based on slow-growth revenue sources may be a short-term respite, not a long-term solution.

Finally, the example of Alabama shows that judicial mandates are insufficient to ensure educational adequacy. More than a decade after the state's education system was first found inadequate, no substantial reforms have been enacted—and Alabama's schools continue to perform poorly.

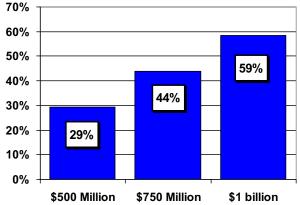
¹¹Institute on Taxation and Economic Policy, Who Pays? A Distributional Analysis of the Tax Systems in All 50 States. (1996)

CHAPTER THREE

ALTERNATIVES TO REVENUE RAISING

s we have seen, achieving adequacy in Arkansas education will require substantial new state spending. As state lawmakers ponder ways of funding adequacy, some will advocate avoiding tax increases by "trimming the fat" from current state spending. This could mean either reducing state spending in areas other than education, or achieving greater efficiency with the current level of education spending. This chapter addresses the possible yield of these non-tax strategies.





Cost Savings from "Across the Board" Cuts

One option that may seem appealing to tax-averse lawmakers is to simply cut the budgets of other state agencies. Unfortunately, this can only offer a partial solution. The reason is simple: the state's entire general revenue budget for areas other than education was \$1.7 billion in fiscal year 2003. Across-the-board cuts of, for example, \$500 million, would reduce non-education funding by 29 percent.

A \$1 billion cut would have an even more dramatic impact: these departments would see cuts of almost 59 percent, or more than half of their budgets.

Moreover, any "across the board" budget cuts would likely result in a decreased flow of federal funds to Arkansas. This is because some state spending generates federal matching funds.

For example, our system of low-income health care, known as Medicaid, is paid for by a federal-state partnership. For every dollar of Medicaid spending by a particular state, the federal government matches that spending with an additional amount of financial support. Poorer states receive a larger matching grant.

Arkansas currently receives a 3-for-1 match: every \$100 million spent on Medicaid by Arkansas brings in \$300 million of additional federal spending on Arkansas health care.

This federal matching grant makes it easier for Arkansas to provide adequate health care to low-income Arkansans—but it also means that balancing the Arkansas budget with Medicaid cuts is a costly proposition. If the state spends \$100 million less in Medicaid, it loses \$300 million in federal grants. Such a loss would drastically reduce the state's ability to provide quality health care for low-income families—a high price to pay for adequately funding education.

Cost Savings From Restructuring

Critics of the Arkansas school system frequently point to the state's unusually high number of school districts as a cause of inefficiency. While it is true that Arkansas's 310 districts are more than the national average (and more than almost all neighboring states), Arkansas has actually "built down" dramatically from its initial design of one district per township. Between 1900 and 1955, the number of divisions was cut from almost 5,000 to 423. Since 1955, another 113 districts (27 percent) have been eliminated, leaving the current total of 310 districts.

A series of studies have estimated the possible efficiency gains from Arkansas school consolidation. A 1996 report by the Arkansas Bureau of Legislative Research estimated that \$27 million per year could be saved if many rural high schools were merged and small districts were combined along county lines.¹²

A 1998 report by the Murphy Commission advocated streamlining school administration, arguing that doing so would save schools \$17 million each year.¹³

A 1999 study sounded a cautionary note, arguing that mass school consolidation would not necessarily result in large savings to the state, since cost savings in one area might be offset by higher costs in other areas. The study showed that recent consolidations

¹²"Minutes of the Joint Interim Oversight Subcommittee on Educational Reform," January 25, 1996.

¹³Murphy Commission, *Streamlining and Cost-Saving Opportunities in Arkansas' K-12 Public Education System*, (Little Rock: Arkansas Policy Foundation, 1998).

Can Restructuring Help Achieve Adequacy?

Costs of Adequacy

Blue Ribbon Commission	\$689 Million
Advisory Committee	No estimate

Resources Available From Restructuring:

Bureau of Legislative Research (1996)	\$27 Million
Murphy Commission (1998)	\$17 Million
Hughes Study (2002)	\$40 Million
Dodson and Garrett (2002)	\$34 Million

Remaining State Revenue Needed >\$649 Million

had led to higher costs per student because of higher salaries and transportation costs.¹⁴

A 2002 study found that individual school districts could save a minimum of \$103,000 per year from consolidation, and that merging all rural districts in the state would save \$34 million annually.¹⁵

Another recent study evaluated the efficiency of each Arkansas school districts based on 28 different indicators of school costs. ¹⁶ The study found that the 100 most efficient school districts in the state were able to provide education at a per-student cost of \$4,900. The study estimated that from \$23 million to \$40 million in additional resources would be available for improving adequacy if a restructured school system could educate more children at the cost achieved by these efficient school districts.

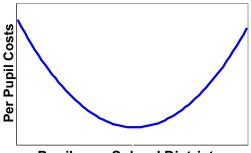
School District Size and Efficiency

The estimates presented so far suggest that Arkansas could save up to \$40 million by consolidating some of its 310 districts to form larger, more efficient school districts, and advocates of consolidation have argued that restructuring could be essential to meeting the *Lake View* requirements. In particular, creating larger school districts could reduce the wealth disparity between poor and wealthy school districts and could improve the state's ability to effectively and efficiently manage schools statewide.

However, there are two important caveats. First, it can be difficult to determine the most efficient school district size in any state, and there is likely to be substantial variation *within* any particular state in the most efficient district size, due to socioeconomic differences between districts. Second, some observers have argued that smaller school districts offer unique learning advantages that can be lost in the search for greater school efficiency.

Studies generally show a U-shaped relationship between district size and per-student costs. This is because certain costs such as capital outlays, staff salaries, and utilities are fixed for all school districts, regardless of size. In other words, per-student educational costs actually decline as enrollment increases, up to a certain point. A 1990 survey found that existing literature estimated the optimum Arkansas school district size at between 600 and 1,600 students. However, the study's author cautioned that consolidation of school districts must include weighing the advantages and disadvantages of each case, such as the costs of additional busing, loss of opportunities for student-teacher interaction, and the loss of community use of public school facilities.

The Relationship Between School Size and Per-Pupil Costs



Pupils per School District

One recent study found that minimum costs per student in Texas were achieved when districts had 7,890 students and in Wisconsin at 5,964 students per district.¹⁸ Another study found scale economies for Wisconsin school districts up to 1,500 students.¹⁹ Garrett and Dodson also note "significant scale econ-

¹⁴Truett Goatcher, *School District Consolidation Will Save Millions of Dollars: Fact or Myth?*, (Little Rock: Arkansas Association of Educational Administrators, January 1999), p. 10.

¹⁵T.A. Garrett and M.E. Dodson III, "Inefficient Education Spending in Public School Districts: A Case for Consolidation," Working Paper 2002-010A, Fed. Reserve Bank of St. Louis, 2002.

¹⁶Mary Hughes, "Restructuring: Cost Savings and Benefits," Topical Report, HISTECON Associates, Inc., Jan. 2003.

¹⁷Richard Patrick Paul, "The Arkansas School Consolidation Issue: A Study of the Relationship of Certain Input Variables on School Effectiveness," (Ed.D. diss., U. of Arkansas, 1990), p.70.

¹⁸Reschovsky and Imazeki, "Achieving Educational Adequacy through School Finance Reform," *J. Education Finance* 26 (2001).

¹⁹J. Riew, *Scale Economies, Capacity Utilization and School Costs*, 11 Journal of Education Finance 433 (1986).

omies" in Arkansas and Kansas at enrollments of 2,000 to 2,500 students per district.²⁰ Another study found economies of scale in Oklahoma districts with about 1,000 students.²¹ So estimates of the efficient district size vary considerably between (and within) states.

Moreover, these estimates do not take account of a complicating factor in Arkansas: the need for adequacy. Any efficiency gains from restructuring must be achieved without sacrificing adequacy—and there is reason to think that the two may be at odds.

Studies show that the cost of adequacy can vary widely between districts, even when attempting simply to meet average standards. One study found that inefficient districts required four times the funding per student to achieve average results.²²

Some education policy experts argue that maximizing efficiency can have negative impacts if consolidation reduces the number of small schools. These experts argue that small schools offer advantages that outweigh the need for efficiency:

The small schools literature began with the large-scale quantitative studies of the late 1980s and early 1990s that firmly established small schools as more productive and effective than large ones. These studies, involving large numbers of students, schools, and districts, confirmed that students learn more and better in small schools (Lee & Smith, 1995). Students make more rapid progress toward graduation... Students behave better in smaller schools, which thus experience fewer instances of both minor and serious infractions (Stockard & Mayberry, 1992). All of this is particularly true for disadvantaged students, who perform far differently in small schools and appear more dependent upon them for success than do more fortunate youngsters (Lee & Smith, 1995). ...All of these things we have confirmed with a clarity and at a level of confidence rare in the annals of education research.²³

The Rural School and Community Trust has advocated for the preservation of smaller schools and school districts. A recent Trust report argued that poor and minority students actually do not perform better in larger schools or larger school districts and may benefit from their small school experiences.²⁴

This tension between advocates of small schools and those seeking to maximize efficiency has not been resolved. A recent U.S. Department of Education survey of the smaller-classes policy debate concluded:

Reducing class size to below 20 students leads to higher student achievement. However, class size reduction represents a considerable commitment of funds, and its implementation can have a sizable impact on the availability of qualified teachers. Strengthening teacher quality also leads to higher student achievement.²⁵

Adding It Up: More Revenues are Needed

This chapter has surveyed the potential impact of two non-tax alternatives available to lawmakers as they seek to adequately fund Arkansas's education system. While each of these alternatives could reduce the pressure on Arkansas policy makers to increase taxes, neither can serve as a substitute for the hard tax policy decisions that lie ahead. While across-the-board budget cuts in non-education areas could free up additional state spending to help meet the Lake View requirements, only draconian cuts in these spending areas could completely resolve the current funding difficulties. And the potential gains from the second alternative surveyed in this chapter—restructuring Arkansas schools by reducing the number of districts and/or schools—are too small to have a significant impact on the state's current spending needs. At best, restructuring could yield \$40 million—7 percent of the Blue Ribbon Commission's estimated cost for ensuring educational adequacy. Finally, if the gains from restructuring are achieved at the expense of losing the "small school" environment that some education experts believe is critical to educational achievement, then restructuring may not be worth achieving.

The next six chapters focus on the Arkansas tax system, with an eye towards identifying areas in which tax reform can help Arkansas fund education.

²⁰Garrett and Dodson, 2002.

²¹Jacques, Brorsen, and Richter, "Consolidating Rural School Districts: Potential Savings and Effects of Student Achievement," *Journal of Agricultural and Applied Economics* 32 (2000): 573-583.

²²Reschovsky and Imazeki, 389.

²³M. A. Raywid, "Current Literature on Small Schools," *Analysis Archives*, 3(18), 1-25. (ED 389 503).

²⁴"Small Works in Arkansas," (Randolph, VT: The Rural School and Community Trust, 2002).

²⁵Ivan Pritchard, National Institute on Student Achievement, "Reducing Class Size: What Do We Know?" (SAI 98-3027), U.S. Department of Education, March 1999.

AN OVERVIEW OF THE ARKANSAS TAX SYSTEM

Arkansas state and local tax structure in comparison to other states and looks at trends in Arkansas tax revenues over the past two decades. Special attention is paid to areas in which the Arkansas tax system differs greatly from other states. We also estimate the distribution of state and local tax liability by income levels in 2002 and assess the distributional impact of tax changes enacted in the 1990s.

Arkansas State and Local Taxes by Source

Fiscal Year 2000

	% of State	/Local T	ax Revenue	Tax as % of Personal Income			Ark as %
	Arkansas	Rank	U.S. Avg	Arkansas	Rank	U.S. Avg	of US
Property	16.2	45	28.6	1.7	47	3.1	55%
General Sales	36.9	8	24.7	3.8	8	2.7	141%
Selective Sales	12.5	19	10.8	1.3	19	1.2	108%
Individ.Income	24.7	25	24.3	2.5	31	2.5	99%
Corp. Income	4	20	4.1	0.4	23	0.4	93%
Other Taxes	5.7	35	7.6	0.6	41	0.8	75%
Total Taxes	100	•	100	10.4	35	10.8	96%

Note: Ranks include Washington, D.C.

SOURCE: Bureau of Economic Analysis, Bureau of the Census

The Arkansas Tax Burden—How High?

The Arkansas tax burden is relatively low. In fiscal year 2000, the Arkansas state and local tax burden represented 10.4 percent of personal income in the state—4 percent lower than the national average, and 35th highest nationally. However, this overall figure conceals substantial variation in the burden of particular Arkansas taxes:

- The Arkansas property tax burden is among the lowest in the nation. At 1.7 percent of personal income, Arkansas property taxes are just over half the national average. Only four states had a lower property tax burden than Arkansas in 2000.
- Arkansas sales taxes, by contrast, are among the *highest* in the nation. At 3.8 percent of personal income, the Arkansas sales tax burden is eighth highest in the nation—and more than 40 percent higher than the national average.

Arkansas Taxes As a % of National Average



■ Personal income tax and corporate income tax burdens are each somewhat lower than the national average in fiscal year 2000.

Primarily because of this imbalance between its very low property taxes and its very high sales taxes, the Arkansas tax system is also unusually weighted towards state-level sources. Local taxes represent just over 18 percent of all Arkansas tax revenues in fiscal 2000—lowest in the nation. Other states derive 38 percent of their tax revenues—more than twice as much as Arkansas—from local sources.

Limitations of Aggregate Tax Data

The primary problem with the aggregate measures of tax burden presented so far is that they tell us little about whether specific groups of taxpayers experience Arkansas as a low-tax, high-tax, or average tax state. Taxes can affect taxpayers differently depending on their income levels, the composition of their income, their family size, whether they own a home, and many other factors. Most states provide targeted tax breaks aimed at particular income groups—and the impact of these tax breaks is concealed by focusing on the aggregate tax burden.

Another problem with aggregate measures of tax burden is that they include all taxes collected in the state, regardless of whether the residents of the state actually pay those taxes. A significant portion of the taxes paid by businesses to the state of Arkansas are not ultimately paid by Arkansas residents at all, but are "exported" out-of-state and paid by non-residents. Much of the Arkansas business tax burden ultimately is paid by non-Arkansans through either higher prices

on goods and services exported from Arkansas or lower returns on profit for out-of-state investors in businesses operating in Arkansas. Thus, the business tax component is another reason these aggregate statistics do not tell the whole story.

Federal Taxes Matter, Too

ross-state comparisons of tax burdens are also → affected by the ability of state residents to deduct their income and property taxes on their federal tax forms. The more a state relies on federally deductible income and property taxes, the lower the federal taxes paid by its citizens—a factor which simple cross-state comparisons of state and local tax burdens does not capture. Residents of states relying more heavily on deductible taxes have lower total tax burdens—state, local and federal—than the residents of states relying more heavily on non-deductible taxes (such as the general sales tax). The following example shows the impact of federal deductibility on a family earning \$75,000 and paying \$3,300 in state and local taxes. If these taxes are composed entirely of income and property taxes—all of which are federally deductible —the federal tax burden on this family will decrease by about \$500, or 15 percent of the state tax bill this family paid. On the other hand, if this family lives in a state that levies only non-deductible taxes, such as a sales tax, this family's federal tax burden won't change at all.

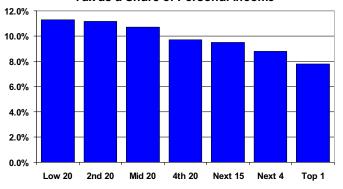
Federal deductibility is an important mechanism for exporting state taxes to the federal government. In essence, the federal government subsidizes states that rely heavily on deductible taxes. This means that states relying heavily on non-deductible taxes (as Arkansas does with its general sales tax) or having a low reliance on deductible taxes (as Arkansas does with its property tax) are missing an opportunity to minimize the amount of state tax revenues that come out of the pockets of Arkansas taxpayers.

The Impact on a Family with \$75,000 of Income	
of Paying Deductible Instead of Non-Deductible Taxe	S

State A: Deductible Taxes		State B: Non-Deduct	ible Taxes
State Property Tax	\$ 1,400		
State Income Tax	1,900	Sales Taxes	\$ 3,300
Total State Taxes	3,300	Total State Taxes	3,300
Federal Income Tax	8,900	Federal Income Tax	9,400
Total	\$12,200	Total	\$12,700

\$500 (15%) of deductible taxes is offset by lower federal tax.

Arkansas State and Local Taxes in 2002 Tax as a Share of Personal Income



The Distribution of Arkansas Taxes

The distributional chart above takes into account the exporting issues that the aforementioned aggregate data cannot address: the distributional chart estimates the net burden of Arkansas taxes on Arkansas residents at various income levels in 2002. The chart shows that Arkansas's overall state and local tax system is *regressive*: it requires middle- and lower-income residents to pay a greater share of their income in state and local taxes than it does the wealthy. The poorest 20 percent of Arkansas non-elderly families pay 11.3 percent of their income in state and local taxes, compared to 10.7 percent for middle-income families. The wealthiest one percent of Arkansas residents paid just 7.8 percent of their income in state and local taxes.

When the federal deductibility of income and property taxes is taken into account, Arkansas taxes are even more regressive. After taking account of this "federal offset," the wealthiest Arkansas taxpayers pay just 5.8 percent of their income in taxes—less than half the burden paid by the poorest Arkansans.

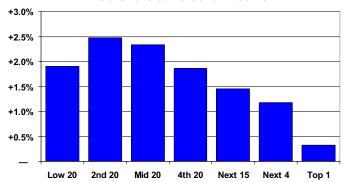
A regressive tax system is problematic because it places the largest tax burden on those with the least ability to pay taxes. A ten percent tax burden on middle- or low-income families cuts directly into their standard of living in a significant way. But a similar level of taxation on wealthy families does not as significantly impede their quality of life. This observation is the underpinning of the ability-to-pay principle—the idea that wealthier taxpayers can more easily bear the cost of taxes than can lower-income taxpayers. A progressive tax system takes a larger percentage of the income of the well-off than it does from those with lower incomes, in conformity with the "ability to pay" principle. A regressive tax system—like that of Arkansas—violates this basic principle of tax policy fairness.

The overall regressivity of the Arkansas tax system is due to several factors:

- Arkansas sales and excise taxes are regressive and are among the highest in the nation.
- Arkansas property taxes, while not high in the aggregate, are also regressive.
- Arkansas income taxes are progressive—but less so than in many states, partially due to the state's tax break for capital gains and its relatively low top tax bracket.

Equally troublesome is that the Arkansas tax system is steadily becoming more regressive. A January 2003 ITEP study found that tax changes in the 1990s had the effect of increasing Arkansas tax burdens in a regressive way. As the following chart shows, all Arkansas taxpayers saw, on average, tax hikes during the 1990s. But the smallest tax hikes were experienced by the very wealthiest one percent of taxpayers. And the poorest 80 percent of Arkansans experienced greater tax hikes than the wealthiest 20 percent.





Aggregate data on trends in the state's tax system over the past two decades tell a similar story: the state has increased its reliance on sales and excise taxes substantially since 1980. The state's consumption tax burden was fifteenth highest nationally in 1980 and had risen to eleventh highest nationally by 2000. Conversely, the state's reliance on property tax revenues—already ninth lowest nationally in 1980—declined even further in the past twenty years, to seventh lowest in 2000. While the share of Arkansas revenues derived from the personal income tax grew between 1980 and 2000, income taxes in the nation as a whole grew even faster—so the state's income tax

ranking fell from 19th highest to 25th highest. In other words, the imbalance in the Arkansas tax structure between property taxes and sales taxes has been exacerbated by the events of the past two decades.

Part of the reason for the state's regressive tax structure—and for the regressivity of changes in the past decade—is the incentives offered by the Arkansas Constitution. Amendment 19, known as the Futrell Amendment, requires a supermajority vote of 75 percent of the state's legislators to pass an increase in every major type of tax—except the regressive sales tax. This allows a minority of the members of either chamber of the Arkansas General Assembly to block any tax increase in personal and corporate income taxes, gasoline and cigarette taxes, and severance taxes—and makes it comparatively easy for the legislature to enact sales tax hikes. Chapter Twelve describes this feature of the Arkansas tax system in more detail.

Conclusion

The Arkansas tax system is not especially burdensome overall, with a below-average overall tax ranking. However, this ranking conceals important variations in the burdens of particular Arkansas taxes. The Arkansas tax system is out of balance, with a very heavy sales tax burden and a very low property tax burden. This lack of balance, partially the result of Amendment 19's incentive for sales tax increases, is the most important factor making the Arkansas tax system regressive—and is critically responsible for the growing regressivity of the state's tax system over the past decade.

The revenue-raising mandates imposed by *Lake View* present an opportunity for Arkansas to repair both of these flaws in the Arkansas tax structure. Restoring balance in the Arkansas tax system can also have salutary effects on tax equity in Arkansas.

²⁶ITEP, Who Pays? A Distributional Analysis of the State and Local Tax Systems in All Fifty States. (2003)

THE ARKANSAS PERSONAL INCOME TAX

tate personal income taxes are the main progressive element of state tax systems. The Arkansas income tax helps to offset the regressivity of sales, excise and property taxes. But the income tax has become less progressive over time, and a variety of poorly targeted loopholes threaten to reduce the state's ability to fund education and other services.

An Average	Tax	Burc	len
------------	-----	------	-----

The Arkansas individual income tax burden is about average compared to other states. In 2000, Arkansas Source: Bureau of Economic Analysis, Bureau of the Census personal income taxes were 2.6 per-

cent of personal income, ranking 31st nationally.

Arkansas, like other states, has increased its reliance on the individual income tax over the years. Arkansas's individual income taxes rose from less than 1.9 percent of personal income in 1980 to 2.6 percent in 2000. Yet because state income taxes grew even more rapidly nationwide, the state's ranking actually fell, from 22nd highest in 1980 to 31st in 2000.

A Narrow Tax Base

ike most states, Arkansas ties its income tax base Ldirectly to federal adjusted gross income (AGI) as determined on federal income tax forms. By adopting federal AGI as its starting point for state income tax purposes, Arkansas automatically excludes some forms of income from taxation. For example, federal AGI does not include most Social Security benefits, welfare benefits, gifts, medical savings accounts, alimony paid, student loan interest, and education IRAs.

In addition to these federal exclusions, Arkansas also allows a series of special tax breaks that must be claimed separately on Arkansas income tax forms. As a result, Arkansas AGI differs from federal AGI in several important ways:

- Arkansas allows a special exclusion for 30 percent of capital gains income.
- Unemployment compensation, taxable on the federal level, is exempt in Arkansas.
- All federally taxable Social Security benefits are exempt from taxation in Arkansas.

Trends in Arkansas Income Taxes								
	As	a % of P	ersonal	Income	Α	s % of T	otal Taxe	s
	1980	US Rank	2000	US Rank	1980	US Rank	2000	US Rank
Arkansas	1.9%	22	2.6%	31	21.2%	19	24.7%	25
Louisiana	0.7%	40	1.6%	40	7.0%	39	14.5%	40
Mississippi	0.9%	39	1.7%	39	9.2%	38	16.0%	39
Missouri	1.6%	28	2.6%	28	19.1%	22	26.9%	17
Oklahoma	1.3%	34	2.7%	23	14.5%	34	25.9%	20
Tennessee	0.1%	44	0.1%	43	1.0%	44	1.5%	43
Texas	_	45	_	44	_	45	_	44
ALL STATES	1.9%		2.6%		18.8%		24.2%	
AR as $\%$ of US avg	99%		97%		113%		102%	

■ Arkansas does not tax the first \$6,000 of pensions.

Several other Arkansas-specific tax preferences further reduce the amount of income subject to the Arkansas income tax.

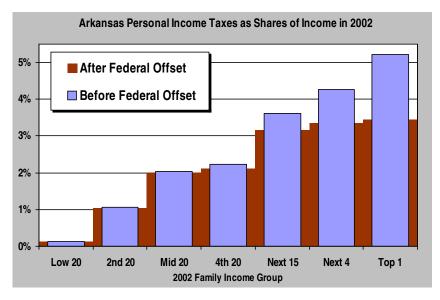
Taxpayers who do not itemize their deductions can claim a **standard deduction** on their Arkansas income taxes. Arkansas's standard deduction is \$2,000 for a single taxpayer and \$4,000 for a married couple filing jointly. Unlike the federal standard deduction, the Arkansas standard deduction does not contain a "marriage penalty" if a couple files jointly.

Arkansas allows a \$20 personal exemption credit for each taxpayer and dependent. Unlike personal exemptions, which reduce taxable income, a personal credit is deducted from the tax due.

A Progressive Income Tax

The Arkansas income tax is progressive. Low-income taxpayers pay, on average, 0.1 percent of their income in income taxes. The middle 20 percent of taxpayers pay 2.4 percent of their income in income taxes, and the top one percent of Arkansans pay 5.2 percent of their income in income taxes.

When the deductibility of state income taxes on federal income tax returns is taken into account, however, the income tax is much less progressive and much less burdensome. The effective income tax burden on the wealthiest 1 percent of Arkansans falls from 5.2 to 3.4 percent when federal deductibility is taken into account.



Factors Limiting Income Tax Progressivity

While the Arkansas income tax is progressive, several features of the tax structure make it less progressive than it could be. Most notably:

- The top marginal tax rate starts at a relatively low income level—\$27,500 in 2002.
- A special tax break for capital gains income makes the tax less progressive than the rate structure would suggest, because capital gains income is mostly realized by wealthier Arkansans.
- The state's complete exemption of Social Security benefits reduces tax progressivity.
- The relatively low \$20 personal exemption credit is ineffective as a low-income tax relief device.

The Rate Structure

Like most of the 41 states currently levying income taxes, Arkansas uses a graduated tax rate structure with six rates ranging from 1 percent to 7 percent. The lower tax rates are meant to shield part of the income of low- and middle-income Arkansans from the impact of the top rate by ensuring that only the wealthiest taxpayers are subject to the highest rate.

However, these lower rates have lost much of their value to low-income taxpayers over time. When the Arkansas income tax was enacted in 1929, the top tax bracket was set at \$25,000 of taxable income. This top bracket remained unchanged for 70 years, until 1999 legislation indexed all income tax brackets for inflation. In tax year 2002, the top bracket started at \$27,500 of taxable income. While this annual inflationary adjustment will prevent further losses in the real value of the lower Arkansas income tax bracket.

the top bracket is worth much less today than when it was initially set. When the \$25,000 tax bracket was enacted, it was worth \$263,000 in today's dollars—similar to the top tax brackets currently used by the federal income tax.

This decline in the real value of the top bracket means that more than a quarter of all Arkansans paid at the top rate in 2000—substantially more than would be paying at the top rate if Arkansas had indexed its brackets for inflation. The decision not to index brackets between 1929 and 1999 thus amounts to a decision to sharply increase the percentage of Arkansans paying at the top income tax rate. Out of 35 states with graduated income tax rates, 19 states cur-

rently target their top tax bracket to a smaller share of the population than Arkansas.

A Special Tax Break: Capital Gains

Arkansas and the U.S. government both give favorable tax treatment to capital gains income. Under federal law, capital gains are taxed at a top rate of 20 percent, compared to 38.6 percent for regular income.

Arkansas allows a special exclusion for 30 percent of long-term capital gains. This exclusion reduces the overall progressivity of the tax system—and exports almost a third of its benefits to non-Arkansans. The table on the next page shows the distributional impact of the state's capital gains tax break and highlights the important distinction between the impact of the capital gains exclusion on state revenues and its impact on Arkansas taxpayers.

- 63 percent of the state tax cuts from the capital gains exclusion go to the wealthiest 1 percent of taxpayers—and the poorest 60 percent of Arkansans receive 1 percent of the benefits.
- Because the wealthy taxpayers who benefit most from this tax break usually itemize their federal income taxes, a large percentage of the state revenue losses from the capital gains exclusion never make their way to the wallets of Arkansans—but are collected directly by the federal government in the form of higher federal income taxes. In particular, 34 percent of the state tax cuts for the wealthiest Arkansans—and 25 percent of the state tax revenue losses from this exclusion—go directly to the federal government in this way.

The Arkansas Capital Gains Exclusion: Gain for the Wealthy, Loss for the State

Income Group	Average State Tax Cut	% of State Tax Cut	% of State Cut Offset by Federal Tax Hikes
Lowest 20%	\$ —		_
Second 20%	_	_	_
Middle 20%	2	1%	_
Fourth 20%	7	5%	8%
Next 15%	21	11%	7%
Next 4%	137	20%	20%
Top 1%	1,759	63%	34%

Social Security Exclusion

Under federal tax rules, Social Security benefits are exempt if the taxpayer's income is below \$32,000 for married couples (\$25,000 for other taxpayers). Taxpayers with income exceeding these thresholds pay some tax on Social Security benefits. ²⁷ This limited federal tax on Social Security applies to less than 20 percent of elderly Arkansans. However, Arkansas departs from the federal definition of AGI by allowing taxpayers to subtract any and all Social Security income that is taxable for federal purposes. Both the federal exemption and the Arkansas exemption tend to benefit wealthier elderly taxpayers. The Arkansas-specific exemption, however, is especially regressive—and quite costly.

Personal Exemption Credit

Although the personal exemption credit is a progressive feature of the Arkansas tax system, the relatively low level of the credit (at \$20, the Arkansas credit is among the lowest in the nation) means that the state's exemption credit has a relatively small impact on overall progressivity.

Recent legislation will increase the value of the credit somewhat in future years. Legislation enacted in 2001 indexes the \$20 credit to inflation—but provides that the adjustment will be made only in years in which state general revenue growth is projected to be 4.2 percent or higher. While this

change will help prevent further reductions in the real value of the credit, it will not undo the losses already suffered—and it will not take effect until July of 2003.

Approaches to Income Tax Relief

In recent years, many states have moved to decrease the income tax burden paid by low-income working taxpayers. The inclusion of poor taxpayers on the income tax rolls, once the rule among states levying such taxes, is now the exception. Arkansas, however, is one of 17 states that still tax single-parent families earning less than the poverty level.²⁸

An increasingly popular means of achieving state tax relief for the working poor is an **Earned Income** Tax Credit (EITC). The federal EITC is designed to provide targeted tax relief to low-income working taxpayers. Because it is calculated as a percentage of earned income, the EITC acts as a work incentive for low-income taxpayers. In tax year 2002, eighteen states allowed a state EITC modeled on the federal credit. Most of these state credits are, like the federal credit, refundable. This means that low-income taxpayers are paid back any EITC in excess of their pre-credit tax liability. Thus, the EITC mitigates the effect of regressive sales and excise taxes on lowincome taxpayers. Because the benefits of the EITC phase out above a specified income level, the credit is targeted to the working families who need it most, and the cost of the credit is kept to a minimum.

Exporting State Income Tax Burdens

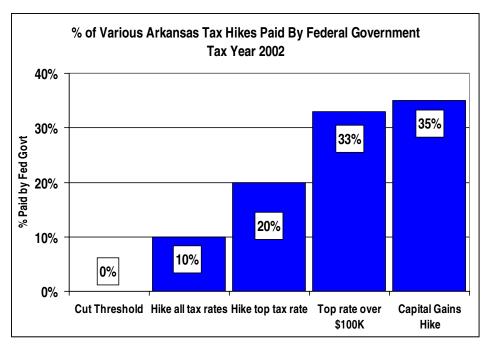
A nimportant—and frequently overlooked—feature of personal income taxes is that part of their cost is ultimately paid by federal taxpayers in other states. Arkansas taxpayers who itemize their federal income tax returns are allowed to deduct their state income taxes on their federal forms. In other words, when Arkansas taxpayers pay their state income taxes, they get part of it back through federal tax cuts.

Almost a fifth of the state income taxes paid by Arkansans are offset by federal tax cuts. For high-income taxpayers, close to 39 percent of state income taxes are paid by the federal government this way.

This write off tends to benefit higher-income taxpayers (the ones most likely to itemize) and reduces the progressivity of the Arkansas individual income

²⁷For taxpayers with income above these thresholds, but below \$44,000 (\$34,000 for single filers), 50% of Social Security benefits contributing to adjusted income above these thresholds are subject to tax. At very high income levels (above \$44,000 for married couples), 85% of benefits are subject to tax.

²⁸State Income Tax Burdens on Low-Income Families in 2001, Center on Budget and Policy Priorities (2002).



taxpayers (such as reducing the threshold for filing taxes) tend to be paid entirely by state residents, since low-income Arkansans are unlikely to itemize their federal tax returns. But state tax hikes targeted to wealthier taxpayers (such as a capital gains tax increase) will be partially exported to the federal government, because these taxpayers are more likely to itemize their federal tax returns and tend to pay higher marginal federal income tax rates. The more progressive the income tax hike, the greater the percentage of the state tax increase that will be paid in the form of a federal tax subsidy, rather than from the pockets of Arkansans.

tax. However, it also benefits the Arkansas economy. The deductibility of state individual income taxes means that some of the state income taxes used to fund state services impose no cost at all on the Arkansas economy.

The deductibility of state income taxes is an especially important consideration when evaluating the impact of potential income tax changes. Arkansas lawmakers seeking to raise income taxes can decide what fraction of a tax hike should be paid by Arkansans and what portion of the tab should be picked up by the federal government, simply by targeting the tax hike to a particular segment of the population. The chart at the top of this page shows the share of the state tax hike that would be paid by the federal government for various potential income tax increases. State tax hikes that target low-income

Conclusion

The personal income tax is the most important tool available to state lawmakers for offsetting the regressivity of the sales and property taxes upon which states rely for most of their revenue. The Arkansas income tax helps to achieve this purpose—yet the limited progressivity of the income tax means that overall, poor Arkansans pay a higher effective tax burden than do the wealthiest taxpayers. This limited progressivity can be traced to the relatively low top tax brackets and the special capital gains tax loophole.

Reforms that expand the tax brackets and eliminate the capital gains exclusion could help fund the state's *Lake View*-related expenses—but could also help to fund low-income targeted tax cuts such as the Earned Income Tax Credit.

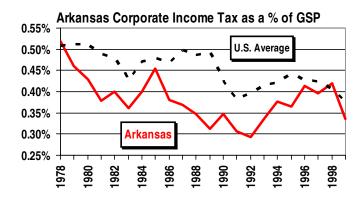
THE ARKANSAS CORPORATE INCOME TAX

he corporate income tax is an important tool for state tax progressivity. In the 45 states that levy one, a corporate income tax helps offset the regressivity of the property and sales taxes which make up the bulk of state and local tax revenues. However, in recent years Arkansas corporate income tax revenues have declined both as a share of total Arkansas revenues and as a share of the economy. This decline is troublesome for two reasons: first, it appears to have been the result of corporate tax avoidance strategies rather than the conscious design of Arkansas policymakers. Second, it means that an increasing proportion of the tax burden is borne by individual Arkansas taxpayers. However, Arkansas lawmakers can help revitalize the corporate income tax by eliminating these loopholes—and can add greater accountability to the tax policy process by allowing greater public disclosure of corporate tax breaks.

A Declining Tax Source

The Arkansas corporate income tax is in decline, both as a share of the state's economy and as a share of total taxes. In the past two decades, Arkansas corporate taxes have fallen from 0.52 percent of Gross Domestic Product (GDP) to 0.34 percent of GDP. This mirrors a national trend in corporate taxes, as the following chart shows—but the Arkansas corporate tax burden has been lower than the national average for most of this period.

The corporate income tax also represents a smaller piece of the Arkansas tax pie. In 1972, the corporate income tax generated almost one-third (31 percent) of all Arkansas income tax revenue. In 2000, the corporate tax represented only 14 percent of all income tax revenue—which means that 86 percent of these revenues now come from the personal income tax.



Shares of Arkansas Income Taxes 1977-2000 100% 95% Corporate 90% 85% 80% 75% 70% 65% Personal 60% 55% 50% 1983 1985 1987 686

Advantages of the Corporate Income Tax

Unique among the major taxes levied by state governments, the corporate income tax is a progressive tax that is largely exported to residents of other states. Both of these traits—its progressivity and its exportability—are due to the fact that corporate income taxes are generally passed through to owners of corporate stock.

Since stock ownership is concentrated among the very wealthiest taxpayers, the corporate income tax is one of the most progressive taxes a state can levy.

Because most corporations with Arkansas operations have shareholders throughout the nation, the burden of the corporate income tax is distributed to other states depending on where shareholders live. The ability to export part of the corporate income tax burden in this way is important because out-of-state shareholders benefit indirectly from the public services provided to Arkansas corporations.

How The Corporate Income Tax Works

The Arkansas corporate income tax was enacted in 1929 as a two percent tax. The tax rate has since been gradually increased to the current 6.5 percent top rate. In theory, the Arkansas corporate income tax is based on corporate profits. Yet because the state closely follows federal corporate income tax rules, the tax base incorporates many loopholes that allow corporations to pay far less than they would if they

were being taxed on actual profits. This means that the effective tax rate on corporations doing business in Arkansas (that is, actual tax collections as a percentage of total in-state corporate profits) is much lower than the nominal rate.

Corporate Tax Loopholes

Corporate tax revenue has declined in many states because of special tax breaks enacted by law-makers. In addition, many profitable businesses have learned to manipulate tax laws to take advantage of loopholes that lawmakers had no intention of creating.

Among the most pernicious and frequently exploited of these unintended loopholes is the "Delaware holding company" loophole. Corporations operating in multiple states pay Arkansas income taxes only on the share of their profits that are generated in Arkansas. Corporations doing business in Arkansas can therefore reduce their Arkansas income tax by minimizing the amount of Arkansas profit they report. One way they accomplish this by creating passive investment corporations, or PICS, in states (notably Delaware and Nevada) that do not levy corporate income taxes or do not tax certain types of corporate profits.

Companies then shift their Arkansas profits, on paper, to their subsidiary PICs in, say, Delaware—and reduce the amount of profit that is taxable in Arkansas. Arkansas is one of 24 states that do not currently have a statutory mechanism to curb the use of the PIC loophole.

However, closing the PIC loophole is quite straightforward—and 21 states have now taken steps to prevent multi-state corporations from using this tax avoidance scheme. Five states explicitly do not allow corporations to deduct payments to PICs from their income, and 16 states require combined reporting of income so that the profits from PICs and other subsidiaries are added together for tax purposes.

Another example of avoidance occurs in the division of corporate profits into the categories of **business income** and nonbusiness income. The former is income from transactions in the regular course of the business's trade, and the latter refers to all other income. Generally, for tax purposes, business income is apportioned among the states affected according to a set of apportionment rules. But in more than half the states—including Arkansas—the statutory definition of business income is worded in a way that excludes certain irregular transactions. Businesses in these

states can reduce their tax liability by not counting these transactions as part of business income. Many states have closed this loophole by defining business income as all the income that is allowed by recent U.S. Supreme Court standards.²⁹ Arkansas is among the states that have not taken this step—but could easily shore up the tax base by making a minor wording change in its tax statutes.

The Arkansas tax base is also being eroded by federal tax changes. Federal "stimulus" legislation enacted in 2002 increased the amount of **accelerated depreciation** corporations can write off. If Arkansas keeps its current procedure for business deductions, it will not feel the effect of these federal changes. That change would mean \$24 million more each year for the state. If the state conforms to the federal changes, this amount of revenue may be lost annually. More than twenty five states have "decoupled" from this federal change in order to preserve this revenue.

No-Tax Arkansas Corporations?

E ven as the overall importance of corporate income tax revenues have declined nationally, evidence is mounting that individual Fortune 500 corporations have been able to use federal tax breaks to reduce their corporate tax liability substantially.

An October 2000 ITEP analysis of 250 of the largest and most profitable corporations in America found that 133 of these corporations—more than half—paid less than half of the nominal federal corporate income tax rate of 35 percent in at least one year between 1996 and 1998, and that 41 of these companies actually received net tax rebates from the federal government during this period.³⁰ Because Arkansas taxable corporate profits are based on federal taxable profits, it is likely that the same federal loopholes also have an effect on the tax payments of Arkansas corporations.

The ITEP analysis was made possible by the fact that publicly held corporations must disclose information about their federal corporate income tax payments to shareholders and the Securities and Exchange Commission (SEC). As a result, we know that some of the top employers in Arkansas have been able

²⁹Michael Mazerov, "Closing Three Common Corporate Income Tax Loopholes Could Raise Additional Revenue for Many States," Center on Budget and Policy Priorities, Washington, DC, Apr. 9, 2002.

³⁰Corporate Income Taxes in the 1990s, Robert S. McIntyre, Institute on Taxation and Economic Policy, October 2000.

to take major advantage of loopholes in the federal corporate income tax. For example, ITEP's study found that four profitable Fortune 500 corporations with large employment bases in Arkansas paid an effective federal corporate income tax rate of less than six percent during at least one year between 1996 and 1998—and that one of these corporations actually paid a *negative* income tax rate in 1998.

If these large, profitable corporations were this successful in reducing their tax liability through completely legal tax loopholes on the federal level, it seems plausible that the same corporations may be using these loopholes to reduce their state corporate income tax burden as well. Unfortunately, neither the SEC nor most state governments (including Arkansas) require corporations to release detailed information on the tax loopholes they have claimed.

Annual "tax expenditure reports" identifying the aggregate cost of the tax breaks enjoyed by corporations operating in Arkansas would represent an important step toward greater accountability in Arkansas tax policy. Only this sort of public accounting can reveal the extent to which the state's corporate tax base has been reduced by these loopholes. Yet even a tax expenditure report would tell us nothing about the taxpaying behavior of individual corporations—or about the impact these loopholes are having on the effective tax rate paid by profitable corporations doing business in Arkansas.

As a result, it's not currently possible to determine whether the loopholes described here have spawned an epidemic of state tax avoidance. However, more open disclosure of state corporate tax information could help clarify this issue. As ITEP's Good Jobs First project has documented, nine states now require corporations to disclose some information about the state or local tax breaks they receive.³¹ Most recently, in the fall of 2001 North Carolina legislators amended the state's tax-subsidy law to require extensive company-specific reporting of tax credits. The new disclosure requirements apply to state tax credits for training, research and development, and machinery and equipment credits. The North Carolina law also requires disclosure, when a company claims development zone credits, of how many of the new jobs created as a result of the tax credit went to residents of the development zone. This sort of disclosure requirement could help Arkansas lawmakers determine the overall effect of these tax breaks on individual companies' tax-paying behavior.

Conclusion

The Arkansas corporate income tax is an important source of tax progressivity. In the absence of a healthy corporate income tax, state lawmakers must increase their reliance on other tax sources—including individual income and property taxes. Yet Arkansas lawmakers have taken no actions to prevent this tax shift from corporate taxpayers to individual taxpayers.

At a time when Arkansas policy makers are facing difficult decisions about the appropriate combination of revenue-raising measures to fund the *Lake View* requirements, shoring up the corporate income tax base by eliminating unintentional loopholes is an obvious (and relatively painless) choice that will be instrumental in ensuring the future vitality of the corporate income tax—and of the state education system.

³¹A list of these states is available on the Good Jobs First website at www.goodjobsfirst.org/research.htm .

ARKANSAS SALES AND EXCISE TAXES

C ales and excise taxes, or consumption **S** taxes, are the only major revenue source for which the Arkansas state and local tax burden exceeds the national average—indicating an imbalance in the state's tax structure. General sales taxes and specialized excise taxes on items such as alcohol and tobacco represented nearly half of all Arkansas state and local taxes in fiscal year 2000, well above the national average of 35 percent. This imbalance is troublesome because consumption taxes are the most regressive revenue-raising option available to lawmakers—and because the yield of the Arkansas sales tax Source: Bureau of Economic Analysis, Bureau of the Census is likely to decline in future years as an increasing share of consumption remains untaxed.

Trends in Arkansas Consumption Taxes								
	As a	a % of Po	ersonal	Income	A	s % of T	otal Taxe	es
	1980	US Rank	2000	US Rank	1980	US Rank	2000	US Rank
Arkansas	3.9%	20	5.1%	8	43.3%	15	49.4%	11
Louisiana	5.2%	7	6.1%	5	50.9%	9	57.2%	4
Mississippi	5.3%	5	5.5%	6	56.3%	5	50.8%	8
Missouri	3.5%	28	3.9%	21	41.9%	19	40.7%	16
Oklahoma	3.4%	31	4.1%	19	37.3%	25	39.2%	19
Tennessee	4.8%	9	5.1%	9	58.3%	3	58.9%	3
Texas	3.8%	22	4.8%	13	44.1%	13	50.9%	7
ALL STATES	3.6%		3.8%		35.8%		35.5%	
AR as % of US avg	106%		133%		121%		139%	
o		, , 5		_				

The Arkansas Consumption Tax Burden

The Arkansas sales and excise tax burden is much higher than the national average. In fiscal year 2000, Arkansas sales and excise taxes amounted to 5.1 percent of personal income-eighth highest in the nation. By this measure, Arkansas sales and excise taxes have grown from 3.9 percent in 1980 to 5.1 percent in 2000. As a result, the state's ranking jumped from twentieth to eighth highest during this period.

The recent growth in Arkansas's consumption tax burden is largely the result of increases in general sales taxes. Arkansas's sales tax revenue rose from 2.3 percent of income in 1980 to 3.8 percent in 2000.

The Most Regressive Tax

onsumption taxes are inherently regressive because low-income families spend more of their income on purchases of items subject to sales and excise taxes than do wealthier taxpayers. Typically, low-income families spend three-quarters of their income on items subject to sales tax, middle income families spend about half their income on items subject to sales tax, and the wealthiest taxpayers spend less than a sixth of their income on such items. The distributional impact of Arkansas consumption taxes reflects this pattern:

■ Sales and excise taxes consume 9.2 percent of the income of the poorest Arkansas taxpavers.

- Middle-income Arkansans pay 7.1 percent of their income in sales and excise taxes:
- The wealthiest one percent of taxpayers pay 1.4 percent of their income in sales and excise taxes.

Put another way, the Arkansas consumption tax structure is equivalent to an income tax with an 9.2 percent rate for the poor, a 7.1 percent rate for the middle class, and a 1.4 percent rate for the wealthiest Arkansans. Obviously, no one would intentionally design an income tax that looks like this—vet by relying heavily on consumption taxes, this is the choice Arkansas policy makers have made. The main reason this pattern is tolerated in consumption taxes is that their regressive nature is concealed by an innocuous-looking single rate and that the amount families pay is hidden in many small purchases throughout the year. Property taxes and income taxes are much more noticeable because taxpayers usually receive an annual bill for payment of these taxes.

Bang for the Buck?

↑ nother disadvantage of sales taxes is that they are Anot deductible for families who itemize their federal or state income taxes. In contrast, taxpavers who itemize deductions on their federal and state income taxes are allowed to deduct payments for local property taxes. The non-deductibility of sales taxes means that these taxes offer a poor "bang for the buck" from the perspective of individual taxpayers, who must shoulder the entire cost of the state and local sales taxes they pay.

A High-Rate Tax

The Arkansas general sales tax was introduced in 1941 at a rate of 2 percent. The rate increased to 3 percent in 1957 and remained unchanged until 1983. In the past twenty years, however, the state sales tax rate has been increased four times, rising from 3 percent to 5.125 percent. Since 1990, only one

Arkansas Sales Tax Rates Over Time					
1941	2.0%				
1957	3.0%				
1983	4.0%				
1991	4.5%				
1997	4.625%				
2001	5.125%				

other state—Michigan—has increased its sales tax rate more than Arkansas has. The current rate is among the highest in the region.

In addition to the state sales tax rate of 5.125 percent, local governments are allowed to levy a combined 3.0 percent rate. This means that the maximum sales tax rate in any Arkansas jurisdiction is 8.125 percent.

A Broad Tax Base—Including Groceries

Arkansas's sales tax base is broad compared to most other states. The most important reason for this is that Arkansas, unlike most states, fully taxes sales of groceries. Arkansas is one of only eight states that fully tax food for home use without providing any offsetting low-income tax relief.

Although Arkansas is unusual in taxing groceries, the state allows a wide variety of other sales tax exemptions. These fall into two broad categories: exemptions of goods and exemptions for services.

Sales tax exemptions for goods reduce Arkansas taxes by \$1.7 billion annually. Nearly 67 percent of this revenue loss is due to "mandatory" exemptions—tax breaks over which the state has little or no control. Mandatory exemptions include sales for resale or inputs into the production of goods, federal government exemptions, and interstate commerce clause exemptions.

Although these mandatory exemptions account for the lion's share of the state's sales tax revenue loss, discretionary exemptions—those over which the state has control—cost Arkansas citizens more than \$580 million annually. The chart on the next page shows the beneficiaries of these discretionary exemptions.

Business and agricultural exemptions, including sales of seed for commercial agriculture and sales of manufacturing machinery and equipment, comprise 64 percent of the cost of discretionary exemptions.

Nonprofit organizations and governments comprise 14 percent of discretionary exemptions. These exemptions include sales to hospitals, sanitariums, or

Top 20 "Discretionary" Sales Tax Exemptions \$ Millions

1.	Motor Fuel & and Special Motor Fuel	93
2.	Seed for Commercial Agriculture	81
3.	Pollution Control Machinery & Equipment	73
4.	Sales to Non-Profit Hospitals	70
5.	Manufacturing Machinery and Equipment	55
6.	Feedstuffs Used in Agriculture	51
7.	Machinery and Equip. Used in Farming	32
8.	Motor Vehicles of Less Than \$2,500	18
9.	Advertising Space in Publications	17
10.	Agric. Chemicals & Medications	16
11.	Cotton	14
12.	Prescription Drugs & Oxygen	7
13.	Machinery & Equip. in Remanufacturing	5
14.	Used Property Taken as a Trade-In	5
15.	Food in School and College Lunchrooms	4
16.	Utilities Used in Steel Mills	3
17.	Motor Vehicles for Rental Businesses	3
18.	Newspapers	3
19.	Cotton Seed in its Original Production	2
20.	Used Manufactured Homes	2

Source: Arkansas Department of Finance and Administration

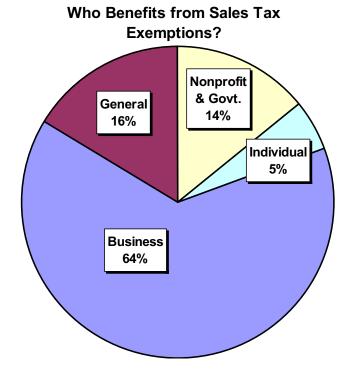
nonprofit nursing homes, religious or charitable organizations, local governments, and school districts and educational institutions.

Certain exemptions benefit individual consumers. Examples include sales of the first 500 kilowatt hours of electricity per month to residential customers with household incomes less than \$12,000; sales of used motor vehicles with values less than \$2,500; and sales of prescription drugs. These individual exemptions are less than 6 percent of the total cost of exemptions.

Other general exemptions are available equally to all consumers. These exemptions represent 16 percent of discretionary sales tax exemptions. The largest single exemption in this category is sales of motor fuel, with an annual cost of \$93 million.³²

The sales tax exemptions described so far were explicitly written into the tax code by legislators. However, another important class of Arkansas sales tax exemptions can't be found on the books at all. While

³²Sales of motor fuel are, however, subject to a special excise tax. Most states take this approach, exempting gasoline from the sales tax and subjecting it to an excise tax instead.



the Arkansas sales tax applies to sales of goods unless exempted, sales of services are exempt unless explicitly taxed. This is due to an accident of history: in the first half of the twentieth century (when most state sales tax statutes were written), economic activity in the United States was focused primarily on the production and consumption of tangible goods, and the production of services was much less important as a share of GNP. However, since 1950, the importance of services has increased almost continuously, while goods-producing sectors have declined.

The challenge facing Arkansas—and all other states with outmoded sales tax laws—is to modernize the sales tax base by including at least some sales of personal, professional or business services. However, many states have failed to achieve this. A 1996 study by the Federation of Tax Administrators (FTA) found that of 164 potentially taxable services, less than half were taxed by most states.³³ The FTA study found that Arkansas has done better than many states in adapting its sales tax base, but that the state still taxes just 65 of these 164 services. Notable omissions from the Arkansas base include:

personal services—barber shops and beauty parlors, debt counseling, and diaper services;

- business services—sales of advertising time or space, packing and crating, and bail bond services;
- professional services—legal and accounting.

Arkansas lawmakers have broadened the base somewhat by taxing particular services. In 1992, for example, the state legislature expanded the tax base to include specific services such as debt collection, pool cleaning, lawn care and landscaping, auto parking and dues and fees from health clubs. Yet, as the FTA survey shows, most services remain exempt.

Approaches to Sales Tax Reform

Arkansas relies more heavily on sales taxes than most states, with a relatively high rate and a broad tax base. Yet the state also allows a wide variety of exemptions, many of which may be unwarranted. As Arkansas seeks to raise more revenue for education, which exemptions should be eliminated, and which should be preserved?

Economists generally argue that base-broadening is the best means of ensuring the long-term vitality of a tax. Narrow-based taxes tend to fluctuate more because changes in particular economic sectors can affect the overall yield of the tax, while broader-based taxes are less sensitive to these changes.

Exemptions can help make sales taxes less regressive, especially when the items exempted are "essentials" such as utilities and prescription drugs. But exemptions are a costly and poorly targeted approach to sales tax relief. For example, exempting groceries and restaurants from the state sales tax would cost more than \$300 million annually—and the benefits of exempting food would go to all taxpayers, regardless of income. A less expensive way to provide targeted tax relief would be a sales-tax credit for low-income taxpayers. Five states, Idaho, Kansas, Oklahoma, South Dakota, and Wyoming, currently allow

The Kansas Food Sales Tax Refund

Only taxpayers over 55, taxpayers with children under 18, and disabled taxpayers are eligible.

Income Level	Refund
\$0 to \$12,900	\$72 per exemption
\$12,901 to \$25,800	\$36 per exemption
\$25,801 or more	no refund

³³Federation of Tax Administrators, *Sales Taxation of Services:* 1996 *Update*, Research Report No.147 (Washington, DC: Federation of Tax Administrators), April 1997.

such a credit. The box on the previous page shows the details of one such program, the Kansas food sales tax refund. Kansas lawmakers have targeted this rebate to taxpayers over 55 and taxpayers with children under 18. This approach offers several advantages over exemptions: low-income credits can be targeted to Arkansas residents only, and can be designed to apply to whichever income groups are deemed worthy of tax relief. Chapter Ten of this report shows the cost and distributional impact of enacting such a credit.

Sales tax exemptions are sometimes simply good economics. There exists broad unanimity among economists that sales tax bases should include services—yet these same economists stress that any base-broadening reform should distinguish between services consumed by individuals and services consumed by businesses. If the goal of a properly designed sales tax is to tax all (and only) retail sales for final consumption, then taxing services consumed by businesses as an intermediate step in the production process is undesirable.

The potential revenue yield of taxing business consumption is tempting—but taxing these services would distort the economic behavior of businesses. A company that finds itself taxed four times in the process of producing a single good (three times on the purchase of intermediate goods and once on the sale of the final product) will face an incentive to escape taxation by "vertically integrating"—that is, producing intermediate goods itself.

By contrast, a clear-cut case can be made for extending the sales tax base to include personal retail services consumed by individuals.

Should Internet transactions be taxed?

Another important pitfall facing state and local sales taxes is the importance of Internet-based retail transactions. A growing share of retail purchases are being made on the Internet, and are not being taxed. According to a recent study, the total Arkansas state and local revenue loss from "e-commerce" was \$144 million in 2001.³⁴ The study projected that this revenue loss will reach \$488 million by 2005.

The most appealing solution to the question of the appropriate tax treatment of e-commerce is that it should be treated in exactly the same manner as other retail transactions. That is, retail transactions that are

taxable when sold as a "bricks and mortar" transaction should also be taxable when sold via electronic transactions. This is an intuitive notion of tax fairness that most people would agree on.

At present, Arkansas lawmakers have taken all available steps to achieve an equitable approach to taxing Internet transactions. In 2001, Arkansas passed landmark legislation (Act 922) requiring national retail chains with stores in Arkansas to collect sales taxes on purchases made over the Internet by Arkansas residents. The legislation taxes sales by companies with a physical presence in Arkansas—that is, companies with stores in Arkansas—that have established separate subsidiaries in order to avoid collecting sales taxes.

However, neither this legislation nor any other potential action by the current legislature can reach Internet sales by firms without a physical presence in Arkansas. In 2001, the U.S. Congress extended a moratorium prohibiting states from taxing Internet sales by companies that do not have a physical presence in the consumer's home state, effectively limiting states' ability to tax most Internet sales. The moratorium is set to expire in November 2003. Until the issue is decided at the federal level, Arkansas will not be able to take additional steps to tax Internet-based transactions.

Selective Sales and Excise Taxes

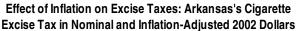
A rkansas relies slightly more on selective sales and excise taxes—that is, taxes that apply to sales of one particular item—than do other states. In 2000, excise taxes were 12.5 percent of Arkansas taxes, compared to 10.8 percent in all other states.

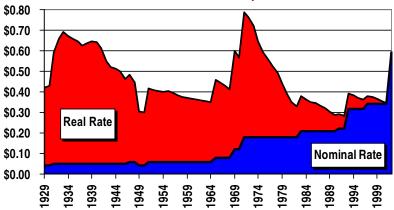
Arkansas levies several alcohol taxes, including a wholesale beer tax of \$7.50 per barrel, a retail beer tax of 3 percent, a wholesale liquor tax of \$2.50 per gallon of spirituous (hard) liquor and 75 cents on each gallon of vinous (wine) liquor, a 3 percent retail tax on liquor, wine, and other alcoholic beverages, and a 14 percent tax on the sale of mixed drinks in bars and restaurants.

Arkansas also taxes sales of cigarettes and other tobacco products, including a cigarette tax of 59 cents per pack and a wholesale tax on other tobacco products of 32 percent of the selling price.

The Arkansas soft drink tax is levied at a rate of \$0.21 per gallon for bottled drinks and \$2.00 per gallon for soft drink syrups. The state levies an insurance premium tax at rates from 2.5 to 3.0 percent.

³⁴Donald Bruce and William Fox, "State and Local Sales Tax Revenue Losses from E-Commerce" Center for Business and Economic Research, (Knoxville: Univ. of Tennessee) Sept. 2001.





Arkansas also levies an excise tax on motor fuel at 20.5 cents per gallon. Introduced in 1921 at one cent per gallon, the tax has increased almost a dozen times, and the tax rate has more than doubled since 1979.

There have been few major changes to excise taxes since the early 1990s.

- 1997 legislation increased cigarette taxes by 2.5 cents per pack.
- The motor fuels tax was increased by 4 cents per gallon in 1999.
- A 2001 law created a 3 percent retail tax on beer.
- Most recently, lawmakers increased the cigarette tax by 25 cents per pack in May of 2003.

Excise taxes are even more regressive than sales taxes. Excise taxes consume 2.1 percent of the incomes of the poorest Arkansans, 1.1 percent of the incomes of middle-income taxpayers, and 0.1 percent of income for the wealthiest 1 percent of Arkansans.

Excise Taxes and Inflation

Retail sales taxes are levied on an *ad valorem* basis—that is, they are calculated as a percentage of the price. This means that inflationary changes in the cost of taxable items are carried through to the ad valorem tax, and the yield of the tax will increase with

inflation. Unlike sales taxes, the excise taxes described in this section are imposed on a perunit basis rather than as a percentage of the sales price: for example, the Arkansas cigarette tax is a flat 59 cents per pack, no matter how much the pack of cigarettes costs. Excise tax revenue grows (or contracts) only when the volume of the commodity sold grows or contracts, and does not respond to changes in price. In an inflationary environment, this means that states must continually raise the rates of excise taxes in order to keep revenues up with inflation. The chart on this page shows the history of Arkansas lawmakers' unsuccessful attempts to avoid these inflationary losses

in cigarette tax revenue. The inflation-adjusted value of the Arkansas cigarette tax increases sharply when lawmakers increase the rate—and then gradually decreases due to inflation over time. The state's recently enacted 25 cent-per-pack cigarette tax increase will have a similar effect: short-term gains will be offset by a long-term decline in the yield of the tax.

Conclusion

The major source of imbalance in the Arkansas state tax structure is the state's growing over-reliance on regressive sales and excise taxes as a revenue source. This makes the tax system more regressive, and decreases the long-term adequacy of state revenues by increasing reliance on slow-growth taxes.

This imbalance in the tax system is at least partially attributable to institutional constraints that make it easier for lawmakers to enact sales tax hikes than to pass virtually any other tax increase—but it also reflects the unwillingness of policy makers to confront the inherent unfairness of this approach to public finance. As the state grapples with ways of achieving equity in school funding, it should also keep in mind that taking the "business as usual" approach—funding schools with regressive sales tax hikes—would exacerbate the structural imbalance in the Arkansas tax system.

CHAPTER EIGHT

ARKANSAS PROPERTY TAXES

ike most states, Arkansas relies on Llocal property taxes as one mechanism for funding education. Arkansas is unusual, however, in its very low property tax burdens—and in the extent to which it relies on state-level taxes to supplement the education finance role of the property tax. For this reason, property tax reform may be integral to state policymakers' efforts to adequately fund education. The challenge facing state lawmakers is to increase the state's reliance on property taxes in a way that does not worsen inequities between school districts or place excessive tax burdens on low- and middle-income Ar- Source: Bureau of Economic Analysis, Bureau of the Census kansans. This chapter looks at ways in which the state could accomplish this task.

Trends in Arkansas Property Taxes								
	As a % of Personal Income				As % of Total Taxes			
	1980	US Rank	2000	US Rank	1980	US Rank	2000	US Rank
Arkansas	1.8%	42	1.7%	46	20.4%	42	16.2%	44
Louisiana	1.3%	49	1.7%	45	13.2%	49	16.0%	45
Mississippi	2.1%	40	2.5%	36	21.7%	40	23.2%	38
Missouri	2.4%	36	2.3%	39	28.3%	29	23.8%	36
Oklahoma	1.7%	47	1.6%	47	18.3%	43	15.8%	46
Tennessee	2.0%	41	2.0%	42	24.0%	36	23.2%	37
Texas	3.0%	24	3.6%	13	34.7%	17	37.9%	6
ALL STATES	3.1%		3.1%		30.7%		28.6%	
AR as % of US avg	58%		54%		67%		57%	
Source Bureau of Foonemia Analysis Bureau of the Consus								

The Arkansas Property Tax Burden

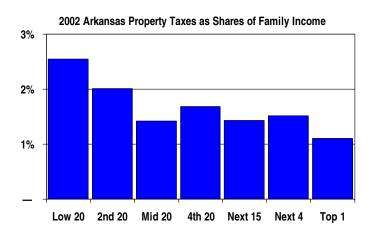
A rkansas property taxes are among the lowest in the nation. At 1.7 percent of personal income, the Arkansas property tax burden was just over half the national average in 2000—and fifth lowest nationally. Moreover, the state's property tax burden has fallen during the past twenty years, both as a share of personal income and as a share of the total tax burden. Property taxes are becoming less important as a revenue source nationwide—but Arkansas property taxes are falling even faster.

Property Taxes are Regressive

rkansas property taxes are regressive: lower-Hincome taxpayers pay more, as a share of income, than do better-off taxpayers. The poorest twenty percent of Arkansans pay 1.9 percent of their incomes, on average, in property taxes. Middle-income taxpayers pay 1.2 percent of their income in property taxes, and the wealthiest one percent of Arkansans pay 1.1 percent of their incomes in property taxes.

The chief reason why property taxes are regressive is that they are based on home values rather than on income levels. Home values represent a much higher share of income for middle- and lower-income families than for the wealthy. For example, it is common for a middle-income family to own a home valued at two or three times their annual income, but wealthier taxpayers are less likely to own homes worth as much relative to their income levels. As a result, property taxes generally take a larger share of income from middle-income families than from the better-off. And property taxes are insensitive to variations in taxpayers' income: a taxpayer who suddenly becomes unemployed will find that her property tax bill is unchanged, even though her ability to pay it has drastically fallen. By contrast, income tax bills vary with income levels, so income taxes are much more sensitive to taxpayers' ability to pay.

While the public's attention to property taxes is usually focused on the taxes paid by homeowners, the property tax also affects taxpayers who rent, rather than own, their home. It is generally assumed that some of the property taxes falling initially on owners of rental real estate are passed through to renters in the form of higher rents. However, Arkansas only



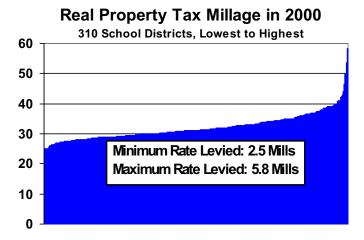
makes property tax relief available to homeowners. Because renters tend to be poorer than homeowners, this makes the tax system more regressive.

Property taxes are also paid by businesses. Some of the business property taxes paid in Arkansas are passed through to out-of-state shareholders and owners. Without this business tax, many businesses that use state services would go largely untaxed.

As is the case with the personal income tax, a portion of Arkansas property taxes on individuals is offset by federal income tax deductions. About 15 percent of the real and personal property tax paid by Arkansans is offset by federal tax cuts in this way.

How Property Taxes Work

The Arkansas property tax applies to two kinds of property: *real* property, which includes land, buildings, and improvements, and *personal* property, which includes all other property. The amount of tax paid on any particular Arkansas property is calculated through a three-step process. First, county officials assess the taxable value of each property by estimating the amount for which it could be sold—its *market value*. Second, they calculate its value for tax purposes—its *assessed value*. In Arkansas, most property is assessed at 20 percent of its market value. For example, a house worth \$100,000 would be assessed at \$20,000.



The third step is applying a property tax rate, also known as a *millage rate* (a mill is one-tenth of one cent), to the property's assessed value. This calculation yields the property tax burden.

While this procedure works the same way in every school district, the millage rates vary widely between districts, as the chart above shows. Millage rates for public school taxes are set by voters in each school district. In 2001, the average millage rate on Arkansas

property was about 45 mills, but some districts levied a rate above 50 mills—and a few levied just 25 mills, the minimum allowable tax rate. In other words, real property is taxed at very different rates in different jurisdictions. This happens for two reasons: first, some districts have a very low assessed value—so a much higher rate is needed in order to fund schools. Second, some districts choose to apply higher rates in order to provide higher quality education. School districts can levy taxes for three purposes:

- Maintenance and operations: normal school expenses, including salaries and maintenance.
- **Capital outlays:** office machinery and other items.
- **Debt service**: long-term costs such as new schools.

Agricultural Tax Breaks

A 1980 constitutional change, Amendment 59, created a special preferential tax treatment for agricultural land.³⁵ Known as "use value," this tax break shelters agricultural and timber land by assessing its value according to its current use as farm or timber land, not according to its actual market value.

Due to this tax break, agricultural land is regularly sold for much more than the land's appraised value, especially in large metropolitan areas such as Pulaski County, where developers can convert former farm or timber land into residential developments. One sale of 640 acres had a market price of \$1.4 million, while its appraised value was about \$100,000—about 7 percent of the actual price.³⁶

The use value provision is the product of a simple legislative goal: to protect farmers from increasing property tax burdens due to development-induced property value increases. However, some observers argue that use value is troubling for several reasons. First, this special treatment creates inequities between owners of agricultural and non-agricultural property.

Second, in many counties the portion of land that consists of crop, pasture, or timber land is enormous. This lowers the amount of locally-raised funds available to support schools and also increases the tax burden on all other property owners in the district—including residential homeowners.

Finally, because the use value provision was enacted through a constitutional amendment, it

³⁵HISTECON, *Arkansas 10 Years After Amendment 59: School Funding Under Stress*, Winthrop Rockefeller Foundation, Nov. 1990.

³⁶Calculations based on a report prepared for HISTECON by Apprentice Information Systems, LLC, Rogers, Ark., May 2002.

cannot be amended or modified by the legislature, the counties, or local school boards.

Appendix B shows the amount of the tax base in each county that is sheltered from market forces, thus limiting the ability of naturally-increasing land values to fund local schools. 37 Rural land—most of which benefits from the use-value provision—accounts for 22 percent of real property valuation in the state. Over one-half of Prairie and Woodruff County's real property value is held in rural land, while in several counties the figure is less than five percent. Almost all of Calhoun County's acreage (95 percent) is held as timberland, while only 1 percent of Mississippi County —in the Delta region—is listed as such. Twelve counties have more than 75 percent of their acreage in crops, while several counties have less than 5 percent in crops. Twenty two counties have more than 95 percent of their land in these classes.

These concentrations of land that are not subject to market valuation help explain the great disparity among Arkansas counties in assessed valuations per acre. While Benton County led the state with an assessed value per acre of \$356 in 1999, Searcy County could only manage one-ninth of that amount for an average of \$39 per acre. Appendix B shows that many of the lowest values occur in counties with large concentrations of timber or cropland. For example, high percentages of timberland are found in Bradley, Calhoun, Lafayette, Nevada, and Pike counties, where some of the lowest assessed valuations per acre occur.

Several other states with use value provisions have enacted recovery arrangements that require a landowner who experiences a windfall profit to pay taxes on the basis of the sale price. While the yield of such a provision in Arkansas is difficult to determine, this sort of recovery arrangement would increase the perceived equity of the Arkansas tax system and would provide some additional revenue to help fund educational adequacy.

Approaches to State Property Tax Reform

The state government is involved in property-tax administration in two important ways. First, the state's Assessment Coordination Department (ACD) reviews the quality of the assessment process in each county. When assessed value in a county diverges from the 20 percent of market value target by more than 2 percent, ACD can force the county to

reappraise all property. This ensures that the quality of assessment does not vary between school districts. Second, the state reallocates property tax revenues to poor school districts to help these districts increase their available revenue to a standard amount per student.³⁸ Each of these functions could be modified to raise additional property tax revenue for education.

One such approach would be **improving the quality of assessments**. As previously noted, the state monitors the extent to which assessed values in each district depart from the statutory 20 percent of market value. Counties are required to maintain an average assessment percentage of between 18 and 22 percent and are subject to penalties if assessed values fall outside these boundaries.

Additional revenue could be gained by decreasing the allowable difference between the assessments and market or actual value. For example, the ratio studies could use 19 to 21 percent as the new boundaries for acceptable performance by the assessors.

Another alternative would be to raise the current 20 percent assessment ratio to a higher percentage. An increase to a new assessment ratio of 25 percent would increase total revenue for all taxing jurisdictions by about \$250 million. At historical rates, about 76 percent of this amount—approximately \$190 million—would be available to local schools.

Either one of these changes would require a threefourths majority vote of the legislature, since it would be considered a rate change under the Constitution.

A more comprehensive approach to state-sponsored property tax expansion could include the introduction of a **state property tax**. Unlike local property taxes, state property taxes are collected and distributed by the state government—and states have the authority to use the property tax revenues in any way they see fit, including redistributing property tax collections between wealthy and poor school districts and using tax revenue for state expenditures. Statelevel property taxes are one of Arkansas's oldest revenue sources—but the state has not levied such a tax since 1958, when a constitutional amendment was passed providing that "no ad valorem tax shall be levied upon property by the State."

Prior to that time, a state property tax had been used since the post-Civil War era to help fund public schools. In 1867, a two-mill state property tax was

³⁷Calculations based on data from "Abstract of Adjusted Assessment," Assessment Coordination Department, June 2002.

³⁸See Arkansas Advocates for Children and Families: "How Are Public Schools Funded," (2001).

³⁹"Constitution of the State of Arkansas of 1874," p. 96.

Lake View and Amendment 74

The 25-mill tax mandated by Amendment 74 is affected by the *Lake View* decision in one important way: until now, the state has interpreted the 25-mill requirement to mean that local districts levying less than 25 mills for schools can count "excess revenues" from debt millages (that is, revenues from debt millages that exceeded the amount needed for bond payments)toward the 25-mill requirement. Most districts currently levy less than 25 mills for schools and use such an adjustment to meet the 25 mill requirement. The *Lake View* court ruled that this is no longer permissible—which means that most school districts may have to raise their millage rates to the 25 mill minimum, some by up to 20 mills.

established to help fund Arkansas schools. (Local property taxes were introduced a decade later by the Constitution of 1874.) A subsequent amendment raised the state rate to three mills.

In the past decade, Arkansas has taken one important step toward reintroducing a statewide property tax. A constitutional amendment passed in 1996, Amendment 74, requires all school districts to levy at least 25 mills for school maintenance and operations (M&O). This 25 mill tax has two elements of a state property tax: first, the 25 mills is remitted to the state, rather than being collected and spent immediately by governments. Second, while the state is obligated to return all of the collections from the 25 mill tax to school districts for local expenditures, the state may reallocate some of these funds between wealthy districts and poor districts.

The 25 mill tax created by Amendment 74 is not technically a state property tax, since the state does not have complete discretion in using the revenue for other areas of state spending: all revenues from the 25 mill tax must be given back to local districts. However, the state's ability to reallocate property tax revenues between districts makes it a limited form of state property tax.

Increasing the rate of this statewide minimum tax could generate considerable new funding for schools. A four mill levy on all real, personal, and utility property in Arkansas would yield approximately \$100 million for schools. Any increase in the tax rate, however, must be approved by a vote of the people.

Property Tax Limitations

Since the passage of California's Proposition 13 in 1978, legislators and voters in many states have enacted limits on the growth of property tax revenues. These limits tend to place artificial and sometimes arbitrary limits on the ability of local governments to provide the services demanded by their constituents. The growth of Arkansas property taxes is limited by two such constitutional amendments.

Amendment 59, enacted in 1980, limits property tax increases in a given district due to reappraisal to 10 percent annually and enables the "use value" tax breaks discussed earlier in this chapter.

A more recent constitutional change, Amendment 79 of 1999, limits annual growth in assessed value to five percent on homesteads and ten percent on all other properties.

Amendments 59 and 79 act as ceilings on the growth of property taxes. Amendment 74 of 1996, on the other hand, represents a floor on property tax rates. Amendment 74 requires every school district to levy at least a 25 mill tax rate for schools.

Neither of these constitutional limits on property taxes are unusual. As previously noted, many states have adopted such limits in the past two decades. However, most of the other states adopting such limits have done so in order to reduce comparatively high property tax burdens. Arkansas, by contrast, has never had high property taxes. Any effort to increase the balance of the Arkansas tax structure by increasing property tax burdens will require a constitutional change to overcome these limits.

Property Tax Relief

Arkansas property taxes are low—but regressive. Any effort to increase the state's reliance on these taxes must address the question of how to reduce the impact of property taxes on low-income taxpayers. This section discusses options for property tax relief.

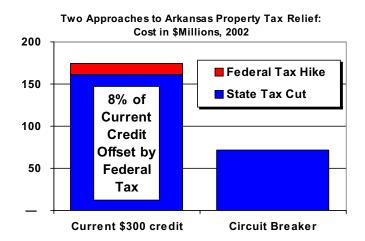
The most important property tax relief mechanism available to Arkansas homeowners is the \$300 homestead credit. Enacted in 1999, this credit allows all Arkansas homeowners a flat \$300 tax credit against property taxes on their owner-occupied home. While this credit has a progressive impact taken on its own, the credit's design is troubling for several reasons:

■ Because the credit is limited to homeowners, it is not available to taxpayers who rent their homes even though it is generally accepted that a substantial portion of property taxes on rental properties are passed through to renters. Arkansas offers no direct property tax relief to renters.

- The credit is available to taxpayers at all income levels—not just to low-income homeowners. This increases the cost of the credit and reduces the amount of state revenue available to fund low-income tax relief. This also means that a substantial portion of the property tax credits paid by Arkansas—8 percent overall, and more than 30 percent of the credits accruing to the wealthiest taxpayers—are immediately offset by federal income tax hikes for itemizers.
- The credit is funded by a half-cent increase in the state sales tax—so a cut in one regressive tax is offset by a hike in an even more regressive tax.

An increasing number of states now recognize the importance of extending property tax relief to renters. Wisconsin allows a \$300 property tax credit very similar to the Arkansas credit. Unlike the Arkansas credit, the Wisconsin credit is made available to renters by assuming that a fixed percentage of rental payments represent property taxes and allowing a credit for that amount. Chapter Ten of this report includes an estimate of the cost and distributional effect of enacting such a change in Arkansas.

A less expensive type of property tax credit—and one that existed in Arkansas prior to the introduction of the homestead credit—is a property tax "circuit breaker" for senior citizens. This type of credit is targeted only to taxpayers whose property tax burden exceeds their ability to pay. The Arkansas circuit breaker was targeted to elderly homeowners with income under \$16,000. When the homeowner credit was introduced, the elderly circuit breaker was repealed, and elderly taxpayers were made eligible for the \$300 credit.



Circuit breakers offer several important advantages over the current Arkansas homestead credit. First, circuit breakers address the "insensitivity problem" of property taxes. As already noted, property taxes are insensitive to yearly fluctuations in a taxpayer's ability to pay, since they are based on property value, not on income. But since circuit breakers allocate their benefits according to the relationship between taxes and income, their benefits are targeted precisely to low-income taxpayers.

Second, the better targeting of these credits means that they cost less than "across the board" property tax relief measures.

Third, a substantial portion of "across the board" property tax relief is never received by state residents at all, but is immediately offset by increased federal income taxes for itemizers.

The chart at left shows the cost savings from a reform that addresses each of these problems: limiting eligibility for the credit to taxpayers with income under \$30,000, and allowing a credit for the amount by which property taxes exceed 3.5 percent of household income. The cost of the current \$300 credit would be cut in half—and the loss of state tax cuts to the federal government would cease.

Conclusion

The state's low property tax burden means that increased property tax revenues are likely to be an important part of any revenue-raising solution to the *Lake View* adequacy crisis. However, simply increasing local property taxes will make the Arkansas tax structure even more regressive—and will not resolve the differences in local property wealth that make the current property tax structure a poor choice for funding schools. An increased statewide property tax, collected by the state and distributed to localities, could help diminish inequities in property wealth between districts—and the provision of targeted low-income property tax relief can help ensure that the burden of these tax increases will not fall most heavily on low-income Arkansans.

CHAPTER NINE

OTHER IMPORTANT REVENUE SOURCES

Previous chapters of this study have focused on the revenue-raising potential of the principal taxes currently levied in Arkansas. This chapter looks at several minor revenue sources that could help fund education, including severance taxes on natural gas, estate taxes, and a lottery.

Severance Taxes

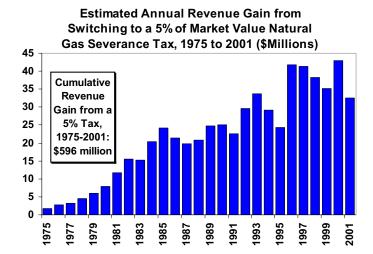
S tates that enjoy a large endowment of mineral resources usually levy a severance tax on the extraction of these resources. Arkansas levies severance taxes on the extraction of close to a dozen minerals. However, natural gas is the only resource with the potential to raise substantial revenues for the state.

Arkansas has the lowest natural gas severance tax in the nation. The following chart shows the severance tax rates on natural gas in gas-producing states.⁴⁰

Natural Gas Severance Tax Rates				
State	Tax Rate			
Arkansas	0.071% of market value			
Florida	12.5% of gross value			
Kansas	4.33% of gross value			
Louisiana	2.9% of market value			
Mississippi	6% of market value			
New Mexico	3.75% of gross value			
Ohio	0.6% of market value			
Oklahoma	7% of gross value			
Tennessee	3% of sales price			
Texas	7.5% of market value			

NOTE: Rates in Arkansas, Lousiana and Ohio are converted to a market value equivalent using current prices, to make a direct comparison possible.

The Arkansas natural gas tax is also unusual in that it is calculated based on the volume of gas produced, rather than as a percentage of the value produced. This means that the Arkansas severance tax has the same flaw as the state's excise taxes on cigarettes and gasoline (see Chapter Seven): tax revenues increase only when production increases, not when prices increase. In an inflationary environment, this means



that the importance of natural gas tax revenues will decline continuously. During the 1970s, the nation's inflationary spiral convinced most states to change the basis of their energy-related severance taxes to a percentage of market value. Arkansas has not made this change. Special interests in Arkansas have, thus far, been successful in urging policy makers to resist eliminating this design flaw by changing to a market value basis—and Arkansas education has suffered as a result. If Arkansas had levied its gas tax based on five percent of market value since 1975, the state would have collected \$610 million through 2001 instead of the \$13 million actually collected over this period—enough to build 120 school buildings. This tax change would yield \$35 million in 2003.

Two observations can be made about the incidence of severance taxes on natural gas. First, if the taxes are passed on to consumers through higher costs, then most of the burden will be paid by residents of other states. Industry sources estimate that about 85 percent of the natural gas sold by Arkansas producers is consumed in other states.⁴¹

Second, since natural gas markets are fairly competitive and gas suppliers enter into long-term contracts with utilities at prevailing market rates, it may be difficult for producers to pass severance tax increases on to consumers. In this case, the burden of a natural gas severance tax increase would be passed through in the same manner as a corporate tax

⁴⁰While the Arkansas tax rate is calculated as 0.3 cents per thousand cubic feet of gas, the tax rate can be compared to that of "market value" states by applying market prices. As a share of market value, the Arkansas rate is about 0.071% of market value — lower than any other producing state.

⁴¹Personal communications from: Oil and Gas Commission, Sept. 9, 2002; Arkansas Department of Economic Development, Sept. 10, 2002; Arkansas Western Gas Company, Sept. 12, 2002.

increase—largely exported out of states, with the instate portion affecting primarily wealthier taxpayers.

Estate Taxes

Like almost all states, Arkansas levies an inheritance tax that is closely linked to the federal estate tax. The federal tax allows a dollar-for-dollar tax credit against estate taxes for a certain amount of state inheritance taxes. Most states—including Arkansas—define their estate tax to be exactly equal to the amount of this credit, which means that the Arkansas estate tax adds nothing to the amount of taxes paid by Arkansas estates.

Federal tax changes enacted in 2001, however, are scheduled to repeal the estate tax over ten years—and, more critically for Arkansas, will phase out the federal credit allowed for state estate taxes over the next four years. The credit is scheduled to decline in value by more than 25 percent in 2002, 50 percent in 2003, 75 percent in 2004, and will cease to exist in 2005. This means that the Arkansas estate tax, which is linked to this federal credit, will also cease to exist in 2005 unless the state takes steps to keep it. Estate tax repeal would result in the loss of \$23.4 million in state revenue in 2005.

While the estate tax represents a small share of Arkansas revenues, it has an important place in the state's tax structure. Like personal and corporate income taxes, the estate tax helps to offset the regressivity of the other taxes levied by Arkansas.

Lottery and Gaming in Arkansas

Lotteries, and gambling revenues more generally, have been a popular revenue-raising choice for lawmakers in recent years. Arkansas is now one of only 13 states without a lottery.

Lotteries are operated by non-profit agencies of the state government. No tax applies to lottery revenues; the government's revenue stream is derived from the amount wagered on tickets. However, substantial expenses are required to operate a lottery —such as prizes, marketing, administration, and auditing—and the net revenue received by states averages only 35 percent of the gross revenue.

Perhaps the best known of the lottery programs that is dedicated to funding education is the Georgia Lottery Commission, which funds four education programs including Project Hope. The Hope scholarships are for the in-state college education of Georgia

students who maintain a B average or higher. Since 1993 the Commission has generated revenue of more than \$10 billion and contributed almost \$4 billion to the state Education Trust Fund.⁴³

While the yield of an Arkansas lottery is difficult to predict, the experiences of similar states may prove instructive. Three of Arkansas's neighboring states (Louisiana, Missouri, and Texas) have lotteries, and six others with similar economies have them also (lowa, Kansas, Nebraska, West Virginia, New Mexico, and New Hampshire). Lottery sales in these states averaged 0.27 percent of state personal income, and available revenue was 33 percent of sales.⁴⁴ An Arkansas lottery with a similar yield would net \$55 million in 2002.

The yield of a state lottery could be affected by its interaction with other taxes. First, purchases of lottery tickets will be offset by reduced purchases of other goods and services, such as travel, recreation, and related items. This would decrease the state's sales tax revenue. Second, lottery winners are required to pay income taxes on those awards, which will increase state income tax collections. According to one analysis, these two factors would result in a net reduction of 15 percent of the lottery's yield.⁴⁵

Lotteries are also among the most regressive revenue-raising options available to states. Chapter Ten shows the distributional impact of imposing an Arkansas lottery.

Conclusion

This chapter has surveyed several revenue sources that could be used in combination with increases in major Arkansas taxes to help fund education. These include revenue sources that Arkansas has consistently under-taxed (the severance tax on natural gas), sources that may become even less important unless Arkansas lawmakers take steps to decouple from recent federal changes (the estate tax), and a revenue source that is problematic both in terms of its equity effects and its yield (the lottery). None of these sources can independently resolve the funding crisis generated by *Lake View*—but each could contribute to funding adequacy in Arkansas.

⁴²Dept. of Finance and Administration, memo to the General Assembly Committees on Revenue and Taxation, n.d., 2002.

⁴³Richard Sims, "The Georgia Lottery: Regional Economic Impact" ITEP, Nov. 2001, p. 7.

⁴⁴Census Bureau, "Income and Apportionment of State-Administered Lottery Funds: 1998-2000";

⁴⁵Arkansas Advocates for Children and Families, "The Lottery: A Bad Bet for Education Funding," Dec. 2002, p. 3.

OPTIONS FOR INCREASING EDUCATION FUNDING

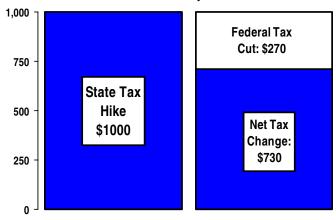
he spending requirements imposed by the *Lake View* case present a substantial challenge to law-makers seeking to raise adequate revenues to comply with the ruling. Arkansas lawmakers have three broad tax policy choices in meeting these revenue-raising demands: they can raise the tax rates of existing taxes, broaden the base of these taxes to include currently exempt items (for example, by expanding the income tax to include all capital gains or by including more services in the sales tax base), or enact entirely new revenue sources that the state does not currently use, such as a lottery. This chapter includes descriptions of various options that could help legislators resolve the state's fiscal needs.

While most of the proposals described here would increase Arkansas tax revenue, several revenue-reducing options are also included to show the impact of low-income tax-relief strategies that could be adopted in conjunction with revenue-raising reforms to mitigate the impact of these new tax revenues on low- and middle-income taxpayers. In each case, this chapter presents the annual revenue impact of the proposals.

For each option described below, the accompanying bar charts show the impact of these options on each Arkansas income group, expressed as a percentage of personal income. The solid portion of each bar represents the net tax change (after taking federal tax changes into account) for each income group. The transparent portion of each bar shows the amount of state tax change that is offset immediately by federal tax changes. We have presented our data in this way because for those Arkansans who itemize deductions on their federal tax returns, changes in state income and property taxes can produce offsetting changes in federal tax liability. When state and federal taxes interact in this way, it is important to assess the effect of state tax proposals on the *overall* taxes paid by Arkansans, including federal state taxes. The following example shows how to interpret these charts.

Suppose an itemizing Arkansas taxpayer in the 27 percent federal tax bracket is subject to a \$1,000 increase in Arkansas income taxes. The value of his or her federal itemized deductions will increase by \$1,000. This means that \$1,000 less of this taxpayer's income will be subject to federal tax after the Arkansas tax cut. Since this last increment of income is taxed at 27 percent, this person's federal tax liability decreases by \$270. So the *total* tax hike for this item-

How Increases in Federally Deductible Taxes Reduce Federal Tax Burdens: An Example



izing Arkansas taxpayer from a \$1,000 increase in state tax liability is actually \$730, not \$1,000. Our distributional analysis of this proposal (the second column in the chart above) shows that taxpayers do not pay the full \$1,000 tax hike, since \$270 of that hike is directly offset by federal tax cuts. An analysis that looked only at the *state* tax impact of the proposal (the first column in the chart) would overstate the additional tax burden on Arkansans.

State and local property taxes are also deductible on federal income tax returns, so a similar percentage of property tax increases on Arkansas taxpayers who itemize will be offset by federal tax cuts.

If, on the other hand, the same itemizing Arkansas taxpayer was subject to a \$1,000 sales tax increase, federal tax payments would not change, because sales taxes cannot be deducted. This means that the entire \$1,000 tax hike would be paid by the taxpayer. In this example, the choice between sales and income taxes does not affect state revenues—the state receives an extra \$1,000 with either approach—but the taxpayer fares much worse under the sales tax proposal than under the income tax proposal.

This federal tax interaction is most important to wealthier taxpayers, who are more likely to itemize their federal returns and tend to pay at higher marginal rates. Low-income Arkansans, who tend not to itemize their federal returns, are generally unaffected by this federal interaction.

Building Blocks for Tax Reform

This section shows the impact of a variety of individual tax changes that could be implemented to raise (or reduce) Arkansas tax revenues. Since none of these options are individually sufficient to meet the state's spending needs, the next section combines these "building blocks" into packages of revenueraising plans that could collectively fund the *Lake View* spending requirements.

Revenue Raising Options

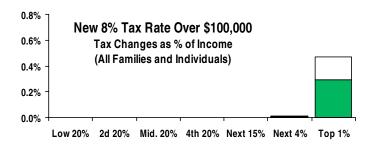
1. New 8% Top Tax Bracket Over \$100,000.

Principal Features

- Increases Arkansas taxes by \$34 million.
- Decreases federal taxes by \$12 million.
- Affects 1 percent of Arkansas taxpayers.

Discussion

This option creates a new top personal income tax bracket above \$100,000 of taxable income, imposing state tax hikes on just over 1 percent of the wealthiest Arkansas taxpayers. This option would raise \$34 million for elementary and secondary education, of which about \$12 million, or thirty seven percent of the state tax hike, would be offset by lower federal income tax payments for Arkansas itemizers.



2. New Top Tax Bracket Over \$200,000

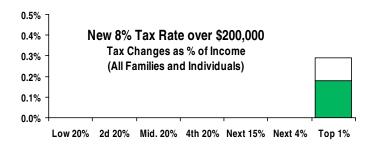
Principal Features

- Increases Arkansas taxes by \$20/\$40 million.
- Decreases federal taxes by \$8/\$15 million.
- Affects 0.4 percent of Arkansas taxpayers.

Discussion

This option creates a new top tax bracket over \$200,000 of taxable income. This approach imposes state tax hikes on just 0.4 percent of the wealthiest Arkansas taxpayers. This option would raise \$20

million if an 8 percent top rate were used, and \$40 million with a 9 percent rate. Thirty eight percent of the state tax hike from this option would be offset by lower federal income taxes for Arkansas itemizers.



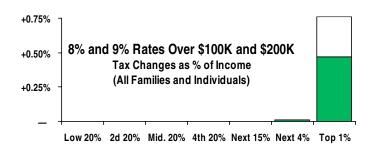
3. Two New Top Tax Brackets over \$100,000 and \$200,000

Principal Features

- Increases Arkansas taxes by \$54 million.
- Decreases federal taxes by \$20 million.
- Affects 1 percent of Arkansas taxpayers.

Discussion

This option creates not one but two new top income tax rates, with an 8 percent marginal tax rate applying to taxable income between \$100,000 and \$200,000, and a 9 percent rate applying to taxable income over \$200,000. Thirty eight percent of the state tax hike from this option would be offset by lower federal income taxes for Arkansas itemizers.



4. "Across the Board" Income Tax Increase

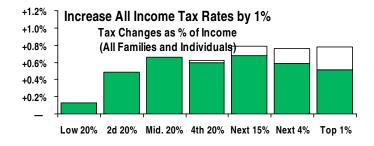
Principal Features

- Progressive tax change.
- Increases Arkansas taxes by \$344 million.
- Decreases federal taxes by \$50 million.

Discussion

This option increases each marginal income tax rate by 1 percentage point (for example, the bottom rate increases from 1 to 2 percent). This change would

make the state tax system more progressive, but would result in a tax hike for all those currently paying income taxes. Fourteen percent of the state tax hike would be offset by federal income tax cuts for Arkansas itemizers.



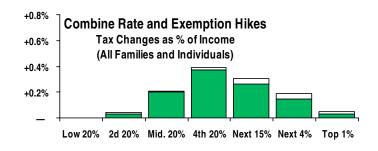
5. "Across the Board" Income Tax Increase Combined with Exemption Credit Hike

Principal Features

- Increases all Arkansas income tax rates.
- Increases the personal exemption credit.
- Increases Arkansas taxes by \$303 million.
- Reduces federal taxes by \$46 million.

Discussion

This option is more progressive than the "across the board" income tax hike in option 4 because part of the tax hikes on low-income taxpayers are offset by an expansion of the personal exemption credit. This change combines a 1 percent income tax hike with an increase in the personal exemption credit from \$20 to \$40. Fifteen percent of the state tax hike would be paid for directly by the federal government in the form of federal income tax cuts for Arkansas itemizers.



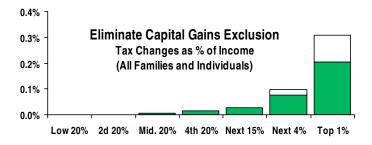
6. Repeal Capital Gains Tax Exclusion

Principal Features

- Eliminates 30% capital gains exclusion.
- Increases Arkansas taxes by \$34 million.
- Reduces federal taxes paid by \$9 million.

Discussion

This option eliminates the income tax exclusion for capital gains income. The benefits of the existing capital gains break are skewed toward the wealthy. The wealthiest one percent of Arkansans receive 63 percent of the benefits from the current tax break. A substantial portion of this tax break is never received by Arkansas investors, but goes directly to the federal government in the form of higher federal tax liability.



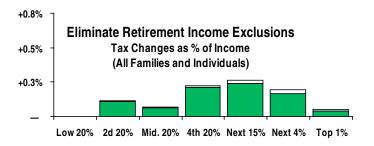
7. Eliminate Retirement Income Exclusions

Principal Features

- Conforms the Arkansas tax treatment of pensions and Social Security benefits to federal rules.
- Simplifies the Arkansas tax system by eliminating two special tax preferences.
- Increases Arkansas tax revenues by \$85 million.
- Decreases federal taxes by \$7 million.

Discussion

This option simplifies the Arkansas income tax by conforming to the federal income tax treatment of Social Security and pension income. Arkansas currently exempts all social security income and the first \$6,000 of pension and military income. Federal income tax rules currently exempt all Social Security benefits for taxpayers with income below \$32,000 for married couples, and subject less than twenty percent of elderly Arkansans to tax on their Social Security benefits, as discussed in Chapter Five.



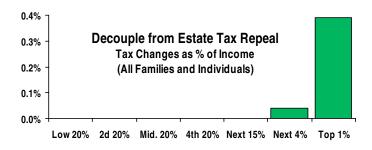
8. Decouple from Federal Estate Tax Repeal

Principal Features

- Preserves the Arkansas estate tax.
- Affects less than two percent of decedents.
- Increases Arkansas tax revenues by \$20 million.

Discussion

Decoupling from the federal estate tax would have very little impact on the taxes owed by most Arkansans, because of generous exemptions in the federal estate tax as it existed prior to 2001. The impact of decoupling would be borne primarily by the top one percent of taxpayers. While the precise revenue yield of this change is uncertain, it has been estimated that decoupling from the federal estate tax could yield more than \$25 million annually.



9. Increase Corporate Income Tax Rate

Principal Features

- Creates a new top tax rate on corporate income.
- Progressive tax change.
- Most of tax burden is exported to non-Arkansans.
- Increases Arkansas tax revenues by \$15 million.

Discussion

This option sets a new top tax bracket above the current top rate of 6.5 percent. Because most of the corporate tax burden is exported to non-residents, the impact of this option on Arkansans is minimal.

10. Increase Natural Gas Severance Tax

Principal Features

- Convert Arkansas severance tax to "percentage of value" taxation approach.
- Most of tax burden is exported to non-Arkansans.
- Increases Arkansas tax revenues by \$35 million.

Discussion

Arkansas has the lowest severance tax rate on natural gas of any producing state. Because severance

taxes are largely exported to residents of other states, the incidence of this tax increase on Arkansans is minimal. The tax is currently calculated based on the volume of production, which means that revenues only grow when production grows. Converting to a market-value based tax would ensure that the state's severance tax revenues will grow with inflation in future years.

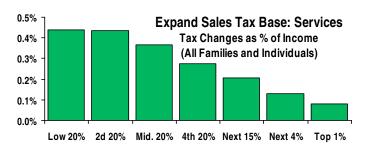
11. Eliminate Sales Tax Exemptions (Services)

Principal Features

- Includes certain business services in the state sales tax base.
- Regressive tax change.
- Increases Arkansas tax revenues by \$163 million.
- Federal taxes are not affected by this change.

Discussion

This option expands the state sales tax base by taxing various business services. The option would raise \$163 million for Arkansas schools. Although adding services to the sales tax base makes the sales tax less regressive, the impact of this tax option is nonetheless clearly regressive compared to income- or property-tax based options. Including business services in such a proposal would increase the yield of the sale tax, but it could also encourage businesses to produce these services themselves, leading to artificially high levels of vertical integration. Because sales taxes are not deductible on federal income tax forms, none of this tax hike would be offset by federal tax cuts.



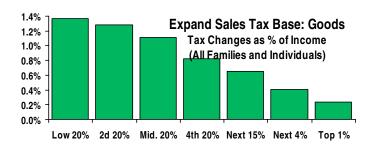
12. Eliminate Sales Tax Exemptions (Goods)

Principal Features

- Eliminates exemptions for tangible property.
- Regressive tax increase.
- Increases Arkansas tax revenues by \$582 million.
- Federal taxes are not affected by this change.

Discussion

This option augments the state sales tax base by eliminating exemptions for various goods. This is a regressive sales tax change—but one that yields \$582 million to help fund adequate schools. Because sales taxes are not deductible on federal income tax forms, none of this tax hike would be offset by federal tax cuts.



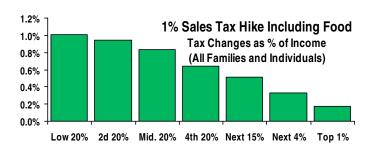
13. Sales Tax Rate Hike (Including Food)

Principal Features

- Raises state sales tax rate by 1 percent.
- Regressive tax increase.
- Increases Arkansas tax revenues by \$366 million.
- Federal taxes are not affected by this change.

Discussion

The general sales tax is the most regressive major tax levied by the state—and Arkansas already has a relatively high state sales tax rate. Including sales of groceries in the tax base makes this tax hike even more regressive. Increasing the sales tax rate without broadening the tax base to include currently exempt services exacerbates the differential treatment between the low-income taxpayers who tend to consume goods and the upper-income taxpayers who are more likely to consume untaxed services. Because sales taxes are not deductible on federal tax forms, none of the added sales tax burden would be offset by federal tax cuts.



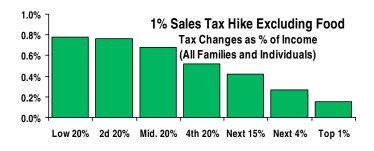
14. Sales Tax Rate Hike Excluding Food

Principal Features

- Raise sales tax rate by 1% on all items except food.
- Regressive tax increase.
- Increases Arkansas tax revenues by \$324 million.
- Federal taxes are not affected by this change.

Discussion

Excluding sales of groceries from this 1 percent sales tax rate hike makes this option less regressive than option 13—but also reduces the yield of this tax option by more than ten percent. This option introduces the same "horizontal equity" problems as option 13. Because sales taxes are not deductible on federal income tax forms, none of this tax hike would be offset by federal tax cuts.



15. Property Tax Increase

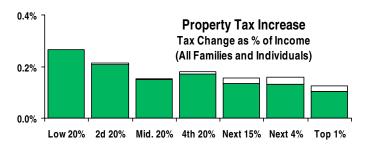
Principal Features

- Increase statewide property tax rate by 5 mills.
- Regressive tax increase.
- Increases Arkansas tax revenues by \$125 million.
- Federal taxes decrease by \$5 million.

Discussion

This option increases the tax rate on real and personal property. This represents a regressive tax hike.

Because property taxes are deductible on federal income tax forms, some of the added property tax burden would be offset by federal tax cuts.



16. Cigarette Tax Increase

Principal Features

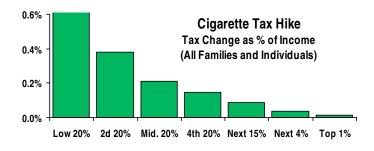
- Raise cigarette tax by \$0.34 per pack to \$0.93.
- Regressive tax increase.
- Increases Arkansas tax revenues by \$83 million.
- Federal taxes are not affected by this change.

Discussion

This option increases the state cigarette tax to 93 cents per pack. Because cigarette taxes are highly regressive, this tax hike would impact low-income tax-payers most heavily. Some argue, however, that increases in cigarette taxes may discourage smoking. There is some evidence that high cigarette tax rates encourage tax evasion.

Cigarette taxes are a poor choice for long-term revenue raising, since they are calculated based on the volume of sales rather than as a percentage of the sales price. This means that revenues will only grow when the rate increases or when consumption grows. The recent decline in cigarette consumption means that the revenue yield of this tax at any particular rate is likely to decline over time.

Because excise taxes are not deductible on federal income tax forms, none of the added excise tax burden would be offset by federal tax cuts.



17. Increase Gasoline Excise Tax

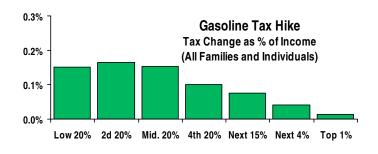
Principal Features

- Impose 5 cents per gallon tax hike on gasoline.
- Regressive tax increase.
- Increases Arkansas taxes by \$100 million.
- Federal taxes are not affected by this change.

Discussion

Currently, all of the revenue from the motor fuel tax goes to special revenue funds for highway aid or highway construction. This option would levy an additional five cents per gallon excise tax on motor fuels, with the revenues devoted to state general revenue funds. While this option is less regressive than the cigarette tax hike modeled above, this excise tax hike still hits low-income taxpayers most heavily.

Because excise taxes are not deductible on federal income tax forms, none of the added excise tax burden would be offset by federal tax cuts.



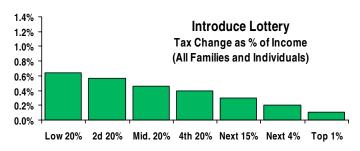
18. Impose Arkansas Lottery

Principal Features

- Increases Arkansas tax revenues by \$55 million.
- Federal taxes are not affected by this change.

Discussion

Lotteries are an increasing popular revenue-raising choice for states. However, a lottery is also among the most regressive revenue-raising options available to lawmakers. Low-income taxpayers would account for 16 percent of total in-state lottery spending. Establishing an Arkansas lottery could yield in excess of \$50 million annually for education.



19. Add Income Limits to Property Tax Credit, Extend to Renters

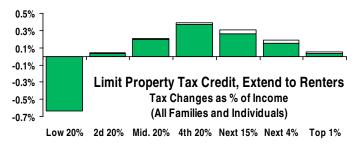
Principal Features

- Increases Arkansas tax revenues by \$100 million.
- Reduces federal taxes by \$13 million.

Discussion

This option makes the Arkansas \$300 property tax credit better targeted to achieve low- and middle-income property tax relief. The credit is currently available to homeowners at all income levels but is not available to renters—even though it is generally

accepted that renters pay property taxes indirectly in the form of higher rents. This option corrects this omission by limiting eligibility to homeowners earning less than \$30,000 and allowing a \$300 credit for renters under the same income limits. Because property taxes are deductible on federal income tax forms, some of the added property tax burden would be offset by federal tax cuts.



Tax Relief Options

Many of the options described in this chapter would increase tax burdens on low-income Arkansans. Some options would even make the state tax system more regressive. Recognizing that lawmakers may wish to shelter low-income taxpayers from some of the additional tax burdens imposed by the *Lake View* spending requirements, this section looks at several approaches to targeted low-income tax relief that could be used in conjunction with the revenue-raising options described above. Options are presented for each of the three major taxes levied in Arkansas—personal income, property and sales taxes.

20. Enact an Earned Income Tax Credit

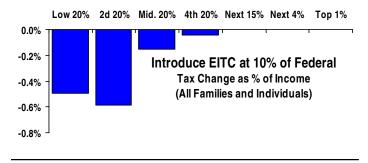
Principal Features

- A refundable EITC based on the federal credit.
- Reduces administrative costs of tax relief.
- Targeted to lower-income working families.
- Reduces Arkansas tax revenues by \$47, \$94, and \$188 million if enacted at 10, 20 and 40 percent.

Discussion

The Earned Income Tax Credit (EITC) is one of the most popular approaches to targeted state tax relief for working families. Seventeen states currently allow an EITC based on the federal credit. Most of these credits are refundable, meaning that if a family's credit is larger than the amount of taxes owed, the family receives a cash refund. The credit is easy for taxpay-

ers to calculate and easy for the state to administer, since it is designed as a flat percentage of the federal EITC.



21. Enact a \$150 Sales Tax Rebate

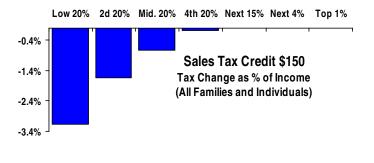
Principal Features

- \$150 per-exemption refundable tax rebate.
- Restricted to taxpayers earning less than \$30,000 annually.
- Targeted to lower-income working families.
- Reduces Arkansas tax revenues by \$190 million.

Discussion

This option partially offsets the regressivity of the Arkansas sales tax by allowing a grocery tax credit for taxpayers earning less than \$30,000. According to USDA data, a \$150 sales tax credit represents about two-thirds of the state sales tax that would be paid by a family of three on food purchases equivalent to the "Thrifty Food Plan," the food plan determined by USDA to provide a minimally-adequate diet.

Because eligibility is limited to low-income taxpayers, the sales tax credit is a less expensive way of reducing sales taxes than an exemption for groceries. However, sales tax credits must be applied for, while sales tax exemptions are automatically granted to all eligible consumers. Low-income taxpayers who are not aware of a sales tax credit will not receive its benefits.



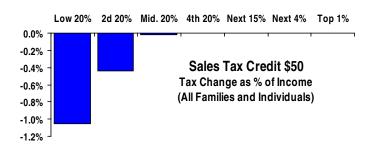
22. Enact a \$50 Sales Tax Rebate

Principal Features

- \$50 per-exemption refundable tax credit.
- Restricted to taxpayers earning under \$20,000.
- Targeted to lower-income working families.
- Reduces Arkansas tax revenues by \$43 million.

Discussion

This option allows a less generous sales tax credit than the previous option, limiting eligibility to \$20,000 and the maximum credit to \$50. An income limit of \$20,000 would be roughly equivalent to the 2003 federal poverty line for a family of four; roughly 40 percent of Arkansas taxpayers would be eligible. While still quite progressive, this credit provides less low-income relief than option 21.



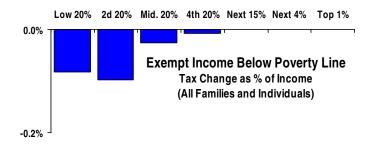
23. Exempt Poor Families from Income Tax

Principal Features

- Creates a "poverty exemption" by raising the income tax threshold to equal the poverty line.
- Provides low-income targeted tax relief.

Discussion

Arkansas currently imposes one of the highest income tax burdens on a family of four with an income at the federal poverty line (\$326 in 2001). This option raises the tax filing threshold so that all families with incomes below the federal poverty line would be exempt from state income taxes.



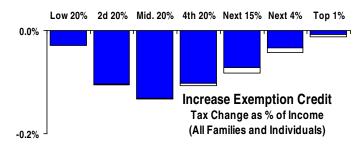
24. Increase Personal Exemption Credit

Principal Features

- Doubles the \$20 personal exemption credit
- Reduces Arkansas tax revenues by \$40 million.
- Increases federal taxes by \$3 million.

Discussion

The Arkansas personal exemption credit offers valuable tax relief to low- and middle-income Arkansans. However, the credit's value has declined substantially since the credit was last adjusted in 1987. This option doubles the credit, providing progressive tax relief. Because the credit is available to all Arkansans, regardless of income, this tax relief strategy is more expensive than the credits described so far.



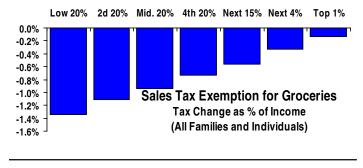
25. Exempt Food from Sales Tax

Principal Features

- Exempts sales of groceries from sales taxes
- Reduces Arkansas revenues by \$360 million.

Discussion

This is a progressive option for Arkansas—but an expensive one. The largest tax cut, as a share of income, goes to the very poorest Arkansans. Yet all Arkansas taxpayers receive a tax cut under this plan.



Putting It All Together:

As the charts at the beginning of this chapter make clear, none of the "building blocks" described so far can generate a sufficient amount of revenue to meet the *Lake View* funding requirements. This section presents a variety of ways in which revenue-raising and tax-relief options could be combined to yield \$650 million or more. The combinations presented here are chosen to represent the variety of options available to lawmakers and should not be understood as recommendations for tax reform.

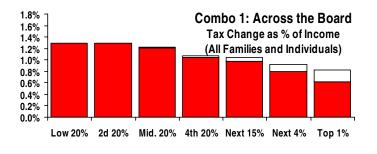
Combination 1: Across-the-Board Hikes

Principal Features

- Increases sales tax rate by 1 percent on all goods, but does not expand the sales tax base.
- Increases property tax rates statewide.
- Increases all personal income tax rates by 10%.
- Increases Arkansas revenues by \$655 million.
- Decreases federal taxes paid by \$36 million.

Discussion

This option takes the simplest possible approach to revenue-raising—it increases statewide tax rates in each of the "big three" revenue sources relied upon by Arkansas. This plan does not broaden the base of the personal income or sales taxes by eliminating exemptions, but simply increases the tax rates applied to the existing base. Because regressive revenue sources constitute the lion's share of the revenue from this plan, and because the income tax increase included in this plan simply increases rates on all taxpayers, the overall impact is regressive: the very poorest Arkansans would pay the most, as a share of personal income, if this set of tax increases were adopted to fund *Lake View*.



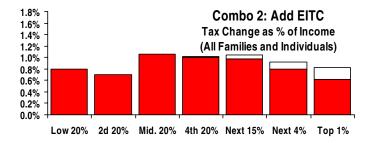
Combination 2: Add an EITC

Principal Features

- Adds a 10 percent EITC to Combination 1.
- Increases Arkansas revenues by \$608 million.
- Decreases federal taxes paid by \$36 million.

Discussion

This option adds one feature to the regressive Combination 1: a ten percent refundable EITC. This addition makes this option less regressive, although wealthy Arkansans still pay the least. Because the low-income beneficiaries of the EITC do not itemize federal tax returns, this option results in the same federal tax change as Combination 1—yielding a greater "bang for the buck" than the first option.



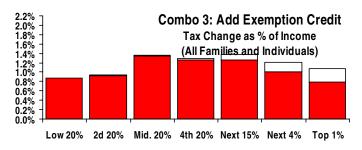
Combination 3: Increase Income Tax

Principal Features

- Changes from Combination 1: an EITC, a 14% income tax hike, and a \$20 exemption credit hike.
- Increases Arkansas revenues by \$747 million.
- Decreases federal taxes paid by \$54 million.

Discussion

This option starts with Combination 1, and increases income tax rates by an additional 4 percent, to a top rate of 8 percent. This change increases state taxes by an additional \$139 million over Combination 1. A substantial portion of this added state revenue is offset by federal tax cuts for itemizers.



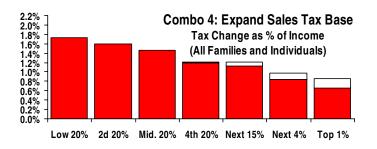
Combination 4: Sales Tax Base Broadening

Principal Features

- One change from Combination 1: instead of increasing the sales tax rate, broadens the tax base to include more goods.
- Increases Arkansas revenues by \$871 million.
- Decreases federal taxes paid by \$36 million.

Discussion

This option makes one change from the basic Combination 1: instead of increasing the state's already-high sales tax rate, the option broadens the sales tax base to include currently exempted goods. The distributional effects of this plan are quite similar to Combination 1, showing that sales tax hikes remain inherently regressive no matter how they are designed.



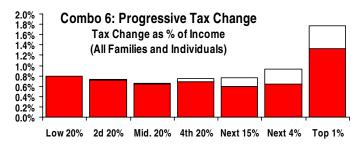
Combination 6: Progressive Tax Increase

Principal Features

- Increases income tax rates, but provides tax relief through exemption hikes and EITC.
- Increases property tax rates statewide.
- Retains estate tax.
- Increases Arkansas revenues by \$766 million.
- Decreases federal taxes paid by \$80 million.

Discussion

This study has shown that the major source of imbalance in the Arkansas tax structure is an over-reliance on regressive sales taxes. This option takes this lesson to heart, confining the tax increases to non-sales sources. The resulting tax increase is clearly progressive—alone among the combinations examined here.



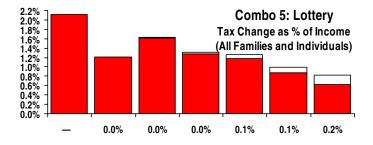
Combination 5: Lottery and EITC

Principal Features

- Imposes lottery; allows 20 percent EITC.
- Increases Arkansas revenues by \$658 million.
- Decreases federal taxes paid by \$36 million.

Discussion

This option adds a very regressive element to the basic Combination 1: a state lottery. Even with the addition of a 20% refundable EITC—one of the more generous credits currently allowed on the state level—this package remains regressive overall, a testament to the underlying regressivity of the sales tax and the lottery as revenue raising options.



Conclusion

A rkansas lawmakers can choose from a wide variety of tax options to satisfy the *Lake View* mandates, including options that reform the tax structure and options that simply raise rates. Any revenue-raising package that fully funds education in Arkansas will likely require some combination of these options, rather than relying entirely on one tax source.

This report does not recommend any particular option or combination of options—rather, the tax changes modeled here should be understood as representative of the range of options available to Arkansas lawmakers.

THE ECONOMIC IMPACT OF ACHIEVING ADEQUACY

his report has shown that the new state spending mandated by the *Lake View* decision will require revenue-raising tax reforms—and that these reforms can be designed in a progressive way. This chapter examines the long-term impact of this simultaneous infusion of new education spending and new tax revenue on the Arkansas economy.

Why Improved Education Matters

I nvestments in education produce economic benefits, both private and public. Individuals receive private benefits in the form of higher earnings and employment opportunities and expanded job-related benefits. Public benefits include higher tax revenues and improved social outcomes. For example, spending on early childhood education produces improved grade retention, reduced placement in special education, and improved social adjustment.⁴⁶

Additional spending on education would increase employment in the near future, and it would also have positive effects on the kinds of jobs that Arkansas can attract in the long run. As the U.S. economy continues its transformation from agricultural and manufacturing bases to greater dependence on knowledge-based industries, a better educated workforce will help the state to compete for these higher-skilled jobs.

A educated citizenry contributes to economic growth. A well-educated workforce can raise the productivity of an economy by allowing innovations to be implemented more quickly, encouraging the location of companies with the higher-skilled jobs that are a crucial ingredient in long-term growth.

Economic Impacts of Education Spending

In addition to these general benefits, state spending on education has other economic implications. New education spending means employing more teachers and other personnel, and the construction of new facilities. This spending stimulates the economy as school employees' wages are spent in the community; school construction employs local construction services, and school purchases increase sales by local businesses.

The economic impact of any fiscal policies enacted to achieve educational adequacy will include the direct spending associated with an increased education budget: wages for teachers and other personnel; transportation costs, public safety and facility maintenance; purchases of school supplies, material and equipment, and business services; and expanded outlays for school construction. These direct effects then produce indirect effects of their own. Wages paid to school employees generate consumer purchases from local businesses; school construction creates jobs for local construction firms and building supply services; and schools make purchases from local businesses.

This report has concluded that the most likely source of revenues to fund adequacy is an increase in taxes. Taken on their own, taxes tend to have a negative impact on the economy. Different taxes have different effects on the state in that they (1) place burdens on different sectors of the economy and (2) federal law treats various taxes differently. An individual income tax places the initial burden on individual income earners, lowering the returns from working and reducing household disposable income. A sales tax falls on the consumers of retail goods, raising the price of consumer items and lowering retail sales. Corporate income taxes fall initially on businesses, increase production costs in the region, lower the returns to investment, and reduce the income of owners of businesses in the region. Property taxes, which fall on homeowners, landlords, renters and businesses, increase the cost of home-ownership, increase property-related business costs and reduce the returns to investment in the region.

Federal law affects state taxes in that the federal tax code allows state income and property taxes to be taken as deductions in figuring federal taxes, while sales and excise taxes are not deductible. As a result, raising a given amount of revenue from an income or property tax will leave more money in the hands of state residents than would the same amount of revenue raised from a non-deductible sales tax.

To estimate the effects of the additional education spending and related increases in taxes on the state's economy, this report uses an economic model that is specifically designed to reflect Arkansas's particular economic and demographic structure. The model is a computer-based general equilibrium model, developed for ITEP by Regional Economic Models, Inc. It takes

⁴⁶Steven Barnett, "Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes," *The Future of Children*, Vol. 5, No. 3 Winter 1995.

Costs of Achieving Adequacy, 2004-2009 Millions of Inflation Adjusted \$2001											
	School Maintenance & Facility Construction										
	Year	Operations	Current Needs	Future Needs	Total						
	2003-04	\$69	\$100	\$0	\$169						
	2005	\$207	\$100	\$0	\$307						
	2006	\$345	\$100	\$50	\$495						
	2007	\$482	\$100	\$100	\$682						
	2008	\$689	\$100	\$150	\$939						
	2009	\$689	\$0	\$150	\$839						

Source: Blue Ribbon Commission (M&O), ITEP (renovation)

into consideration the linkages between the various industries in the state, between industries and the workforce and between demographic changes and the economy. The model allows for various tax policy measures to be analyzed simultaneously and to observe the interaction between policies with opposing tendencies, such as tax and spending increases.

Expanded employment in education produces an employment-ripple effect in secondary industries. The cause is straightforward: secondary industries service the education jobs and must expand to accommodate expansion in the education sector. For example, if a automobile plant is built, the company will hire new employees to work in the plant. New secondary employment is created as the plant buys supplies and services from local producers. The new auto workers will spend their earnings locally, creating secondary jobs at retail stores, restaurants and elsewhere.

The model used in this analysis can differentiate among the hundreds of industrial types in Arkansas and their employment impact.

Estimating the Costs of Adequacy

Responding to the *Lake View* mandate, the Arkansas legislature is currently developing a comprehensive estimate of the cost of achieving educational adequacy. However, the legislature has not yet completed this task—which means that the Blue Ribbon Commission's estimate that adequacy would cost \$689 million annually is the most recent usable estimate. Since the costs of renovating school facilities were not included in the Commission's estimate, we include our own estimate of these costs in order

to provide a rough estimate of the total cost of achieving adequacy. The table at left shows this estimate, with a hypothetical timetable through which the state could gradually fund these costs by 2008.

Our analysis assumes that renovating schools to comply with Lake View would cost \$500 million, with the cost spread equally across the five-year period from school years 2004 through 2008. The analysis assumes additional annual spending to address structural deficiencies that are likely to emerge in later vears. This additional amount of unforeseen construction spending is set at \$50 million in 2006, building up to \$150 million in 2008. It is assumed that this construction spending, and the ongoing expense for maintenance and operations, remains unchanged in real terms after 2008, so that the long-term annual cost of adequacy is \$839 million in 2001 dollars.

The table at the bottom of the page shows one possible array of tax increases that could be used to fund the year-by-year costs of achieving adequacy.

The required funding in the first year is \$169 million. This is approximately the yield of a half cent sales tax increase (\$183 million). The second year's state funding calls for an additional \$138 million, for a total new spending of \$307 million in that year. This second year increase is funded through an increase in the state severance tax on natural gas (\$35 million), a normalization of capital gains treatment (\$34 million), and the introduction of two new individual income tax brackets of eight and nine percent on income above \$100,000 and \$200,000 (\$54 million). By 2008, the first year during which adequacy is fully funded, these tax changes are augmented by increases in the corporate income tax, the cigarette tax, the creation of a lottery and certain restructuring and other savings recommended by the commission.

One Approach to Funding Adequacy in Arkansas											
	Total	Funding	Sourc	ljusted \$2	2001)						
School Increases:			Sales	Pers.Inc.	Capital	Corp.Inc.	Nat. Gas	State		Tobacco	Restructure
Year	Needed	Supplied	Tax	Tax	Gains	Tax	Severance	Property	Lottery	Tax	and Other
2004	\$169	\$183	183								
2005	307	310	187	54	34		35				
2006	495	497	366	55	35		35				6
2007	682	711	373	56	36	15	35		90	83	22
2008	939	953	381	57	37	14	35	125	87	80	137
2009	839	859	388	58	38	14	35	128	85	76	37
2010	852	866	396	60	39	13	35	130	82	73	37
2011	864	873	404	61	41	12	35	133	80	70	37
2012	877	880	412	62	42	12	35	135	77	68	37
2013	890	888	420	63	43	11	35	138	75	65	37
2014	904	896	429	65	44	10	35	141	73	62	37

Economic Impact of Funding Lake View											
Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Employment, Total	+2,478	+6,409	+13,950	+22,820	+31,600	+32,100	+32,390	+32,800	+33,270	+33,830	+34,470
Personal Income (Mil Nom \$)	\$ +64	+187	+443	+773	+1,118	+1,288	+1,433	+1,566	+1,687	+1,805	+1,925
State Tax Revenue (Mil '01 \$)*	\$ <i>-</i> 19	-28	+3	+57	+102	+123	+142	+158	+173	+187	+200

^{*}This chart estimates the change in state tax revenues other than the tax increases described in Table 8.1.

These tax changes should not be construed as recommendations, but as one example of a pattern of incremental increases in multiple tax bases that could be used to pay for education adequacy in Arkansas.

The Impact of Achieving Adequacy

What effect would this package of tax increases have on the state's ability to compete with other states for jobs and economic expansion? Our analysis finds that Arkansas's economy would grow faster in both the short-term and the long-term. The table at the top of this page shows the impact of these tax and spending changes on Arkansas employment, personal income, and non-proposal related state tax revenues for each year from 2004 to 2014.

In 2004, the proposal would increase employment in Arkansas by 2,478, with personal income rising by \$64 million (in nominal dollars), and state tax revenues beyond those in the proposal itself falling by \$19 million (measured in constant 2001 dollars.) The employment and income increases reflect substantial increases in teachers and school personnel and in construction-related employment. State tax revenues not related to the proposal decline as the increased sales taxes in the proposal leaves consumers with less money available for other spending.

In 2005, the positive impact on employment and personal income both increase sharply, to 6,409 additional jobs and \$187 million in nominal personal income, while non-proposal taxes decline by \$28 million (in constant 2001 dollars). As the total value of the education adequacy package continues to rise in later years, so do employment and earnings. In the last year of the analysis, Arkansas would have 34,470 more jobs due to the proposal. Personal income would be \$1.9 billion higher in 2014 than would be the case without the proposal. In 2006 non-proposal state tax revenues turn slightly positive at \$3 million, and in the following years continues to rise, reaching \$199 million (2001 dollars) in 2014. For the entire elevenyear period, non-proposal tax revenues are almost \$1.1 billion higher than would be the case without the educational adequacy funding proposal.

These results relate to a particular package of spending and tax options and a different portfolio of funding measures could produce different results. In addition, it is important to recognize the inherent difficulty in making long-term economic projections. However, in experiments with alternative funding packages, the results remained significantly positive and the outcomes were not highly sensitive to changes in the composition of the proposed revenue structure. The net effect on the economy remains positive under alternative revenue mixes.

Conclusion

Few Arkansans look forward to the tax increases that may be necessary to fund educational adequacy. Yet, as this chapter has shown, the benefits from additional education spending in Arkansas would outweigh the costs. In the long run, the economy would emerge healthier and better able to compete for the information-age businesses that are so important to the state's future.

A critical observer might ask: if these benefits are so wonderful, why hasn't Arkansas been able to increase education spending before now? In fact, the state has made some significant attempts in the past to do just that. Legislation enacted in 1991 established the Educational Excellence Trust Fund, which used a half cent sales tax increase to fund education, and the 2001 legislature seriously considered increasing teachers' salaries by \$3,000 per teacher from general revenues—although the state's looming fiscal shortfall prevented this change.

However, there are significant roadblocks to enacting such reforms. The next chapter describes the political and legal obstacles that make tax reform more difficult to achieve in Arkansas.

BARRIERS TO TAX CHANGES

his report has identified the major revenueraising options available to Arkansas lawmakers. However, a variety of legal and political barriers will make implementing these changes a challenge for policy makers. This chapter identifies the main barriers facing efforts to fund educational adequacy.

Not a Level Playing Field: Amendment 19

The Arkansas constitution includes a provision that makes it comparatively easy for state legislators to enact increases in certain taxes—and much harder to enact other tax increases—for reasons that have no sound tax policy basis. Amendment 19, adopted in 1934, requires a three-fourths supermajority vote of each legislative house to increase the rate of any tax that was in effect as of 1934. Arkansas taxes affected by this rule include both of the major progressive taxes levied in Arkansas—the personal and corporate income taxes. Taxes enacted after 1934, most notably the general sales tax, are not subject to the Amendment 19 limits and can be increased by a simple majority vote of the legislature.

This means that when Arkansas lawmakers consider tax increases—as the current *Lake View* constraints will almost certainly require—the rules governing tax legislation make it easier for legislators to enact sales tax rate increases than to pass income tax hikes. As noted in Chapter Seven, Arkansas legislators have given in to this bias repeatedly in recent years, raising sales tax rates much more frequently than income tax rates.

In addition to making the tax system more regressive, Amendment 19 has another odd implication: it treats similar taxes differently. For example, the *wine* tax (enacted in 1935) can be increased by a simple majority vote, while the *beer* tax (adopted in 1933) requires a three-fourths vote.

The Amendment 19 limits can even derail tax reforms that are not designed to raise state revenues at all. For example, a revenue-neutral tax reform that increases low-income exemptions and introduces a new top income tax rate would run afoul of the Amendment 19 limits, even though it would leave the total taxes paid by Arkansans unchanged.

It is important to note, however, that Amendment 19 only applies to increases in tax rates. Base-broadening measures, such as eliminating the income tax break for capital gains, would not be subject to the three-fourths vote requirement.

The Amendment 19 limits thus allow a small group of legislators to defeat a tax increase if a handful of constituents or a powerful special interest group voice opposition. The distinctions created by Amendment 19 are an accident of history, not the result of a logical tax policy decision—but its impact is felt every day by low-income Arkansans.

Property Tax Limits

Several constitutional limitations make it more difficult for the state to fund education through the property tax. Amendment 59, adopted in 1980, poses a barrier to increasing the state's reliance on property taxes. Amendment 59 provides preferential tax treatment for agriculture or timber land, making it more difficult to increase local property tax revenues in communities with high concentrations of agricultural land. The amendment also limits the annual growth in school district property taxes to ten percent.

Amendment 79, which became effective in 2001, limits annual growth in assessed value to five percent on homesteads and ten percent on other properties. These limits mean that major property tax increases may require a constitutional amendment repealing the Amendment 59 and 79 limits. These amendments are discussed further in Chapter Eight.

Amendment 19 Vote Requirements	for Tax Rate Increases
Taxes Requiring 51%	Taxes Requiring 75%
General Sales Tax (1935)	Local Property Tax (1874)
Compensating Use Tax (1949)	Corporate Income Tax (1929)
Real Estate Transfer Tax (1969)	Individual Income Tax (1929)
Tobacco Products Tax (1969)	Motor Fuel Tax (1921)
Wine & Liquor Gallonage Taxes (1935)	Diesel Fuel Tax (1921)
L.P. Gas Special Fuel Tax (1965)	Cigarette & Cigar Tax (1929)
Alcohol On-Premise Consumption (1969)	Slot & Vending Machine Tax (1931)
Estate Tax (1941)	Severance Taxes (1923)
Beer Excise Tax (2001)	Beer Gallonage Tax (1933)
	Inheritance Tax (1909)

The Role of Public Opinion

The institutional constraints described so far are only the first hurdle for lawmakers seeking to fund schools. Lawmakers must also present potential tax increases to voters in a way that makes clear both the costs and the benefits of enacting these changes.

Poll results show that survey respondents are more likely to support tax increases when they are tied to particular purposes. According to a 2002 poll, 70 percent of registered voters were willing to support tax increases if the state did not have enough money to fund services for children, such as education, health care, or child-abuse services.⁴⁷

A 2001 poll by the Arkansas Kids Count Coalition found overwhelming public support for increasing taxes generally when the increases were tied to particular spending programs:⁴⁸

- To increase the minimum wage, 83% were willing to raise taxes;
- To provide financial assistance for child care expenses, 77%;
- To reduce health insurance costs, 85%; and
- To help fund public K-12 education, 85%.

These results suggest that voters will support tax hikes when they understand the use to which the new tax revenue will be put—a finding that is borne out by the November 2002 election, in which voters defeated a proposal to eliminate the sales tax on food because of legitimate concerns that funding for education and Medicaid would be jeopardized. Even when citizens are willing to support tax increases for particular purposes, however, they show a preference for certain tax increases over others. In general, the public is more likely to support taxes that it perceives as not directly affecting them (such as corporate taxes), those that are narrow in scope (such as "sin taxes" on tobacco and alcohol), or those that they consider to be voluntary (such as sales taxes). They are less likely to favor increases in taxes they consider to be mandatory or those that are paid in one lump sum during the year, such as income or property taxes.

The Kids Count poll also found varying degrees of support for different taxes to pay for quality early childhood education:

■ 86% favored tax hikes on alcoholic beverages;

- 81% favored increasing tobacco taxes;
- 72% favored hikes in the soft drink tax;
- 66% favored increasing severance taxes;
- 57% favored corporate tax hikes;
- 27% supported personal income tax hikes.

Tax Incidence Analysis: A Primer

This report has presented a series of "tax incidence analyses"—estimates of the tax burden on Arkansans at various income levels. Like most states, Arkansas does not currently use such analyses to help lawmakers evaluate their tax system. Only three states—Maine, Minnesota, and Texas—have legal requirements mandating the use of tax incidence analyses.

This means that Arkansas policy-makers are evaluating tax changes without knowing how their constituents are affected by these changes. This increases the likelihood that lawmakers will be persuaded by false claims about the fairness of various proposals—and also makes it less likely that tax equity will be a factor in tax policy decisions.

Six states—Alabama, Colorado, Minnesota, Missouri, Texas and Washington—have incidence models for all major state and local taxes. Five other states—Delaware, Maine, Michigan, Nebraska and New Hampshire—are currently developing such models. Another 23 states are able to estimate incidence for income tax options only.

By following in the footsteps of these states and introducing a regularly-used tax incidence model, Arkansas can increase public understanding of tax policy issues—an important goal as the state struggles to fund education.

These findings beg the question of whether voters understand the imbalance and inequities in the current tax system. Some survey evidence indicates that voters understand the imbalance in the current tax structure, but have an inaccurate perception of the tax system's inequitable impact.

The AACF poll found that 46 percent of voters believe sales taxes take up the largest share of their income, compared to 25 percent for property taxes, and 22 percent for state income taxes. However, only 18 percent of respondents believed that families earning less than \$25,000 a year pay the highest taxes as a percent of their income. Most voters thought that families earning between \$25,000 and \$50,000 a year paid the most in state and local taxes.

⁴⁷Unpublished Zogby poll for AACF, August 8-11, 2002.

⁴⁸"What Voters Think About Issues Impacting Children & Families" AACF, (2001)

This inaccurate assessment of current tax inequities, however, exists side by side with a belief that regressive taxes are wrong. The same survey found that 67 percent of respondents think that families earning less than \$17,000 should be exempt from Arkansas taxes—when in fact, these taxpayers face the *highest* effective tax rates under current law.

These inconsistent survey results highlight the importance of public education on basic tax policy issues: while voters believe strongly in exempting low-income taxpayers from state and local taxes, they also believe that the current tax structure does not disproportionately burden these low-income taxpayers—and ardently support even more regressive taxes to fund education. This inability to "connect the dots" can only be remedied by more public discussion of tax equity issues—which can be fostered by the regular use of "incidence analyses" (see text box on the previous page) to help explain the equity impact of state tax proposals.

Conclusion

The legal and political obstacles discussed here have been instrumental in shaping the current Arkansas tax structure. At a time when state policy makers are putting all available revenue raising options on the table, Amendment 19 makes progressive personal and corporate income taxes appear to be the least appetizing item on the menu, simply because the "rules of the game" make it much harder for lawmakers to enact increases in these taxes. Further, the existing limits on property taxes make it harder for lawmakers to increase the state's relatively low property tax burden. Finally, voter education is critical to building support for a package of spending and tax increases that will meet the Lake View requirements. Frequent public disclosure of the tax incidence impact of the current tax system—and of proposals for change—will help achieve greater voter education.

CHAPTER THIRTEEN

CONCLUSION

he Arkansas Supreme Court's decision in the *Lake View* case signals a fundamental change in how the state pays for education. Implicit in the court's decision is that just as all Arkansans share in the benefits of public education, so we must share the burden of paying for these benefits.

Accepting this shared responsibility could require major changes in the Arkansas tax structure. The *Lake View* decision tells us not only that Arkansas does not currently provide an adequate education for its children, but that this educational failure is partially attributable to the state and local tax structure. By combining true tax reform with the effort to raise sufficient funds for education, Arkansas can help ensure the long term viability of the state's fiscal structure—and avoid crises of school funding adequacy in the future.

Faced with a series of judicial demands for adequate and equitable school funding stretching back to 1994, lawmakers have (so far) been able to avoid directly addressing the court's concerns. Yet the supreme court's November 2002 decision makes it increasingly difficult for lawmakers to ignore previous mandates for education finance reform. This study has demonstrated that alternatives to raising taxes—for example, cutting the budgets of other state agencies or consolidating school districts—cannot, by themselves, resolve the state's funding quandary and may have negative effects on the quality of education. This means that new tax revenue will be needed to adequately fund education in Arkansas.

The study's detailed analysis of the Arkansas tax system has also revealed that sensible tax reform can help fund adequacy in Arkansas while simultaneously making the tax system more equitable. The goals of tax adequacy and tax equity do not necessarily conflict with each other.

This study has argued that satisfying the *Lake View* decision's mandate for new education spending will require a transformation of the state's fiscal structure. The study has identified a series of reforms that could be enacted as a means of enabling educational adequacy, including tax reforms, procedural changes in the enactment of tax legislation, and efficiency gains through restructuring of the education system.

This study does not recommend any particular revenue-raising solution to the state's current fiscal

crisis. The study does provide detailed analyses of many options which could be part of the state's approach to funding *Lake View*, including:

- Imposing "across the board" budget cuts in areas of Arkansas spending other than education. In fiscal 2003, Arkansas will spend about \$1.7 billion on these other areas. Relying only on budget cuts to fund *Lake View* would result in draconian reductions in non-education spending—and would endanger federal matching grants that are contingent on the level of state spending. (Chapter Three)
- Restructuring Arkansas school districts. Continuing the long-term trend toward reducing the number of Arkansas school districts—by consolidating the smaller, rural districts—could potentially yield up to \$40 million for use in achieving adequacy. But the actual yield Arkansas could expect from such changes is uncertain—and some education experts fear that this policy change could adversely affect the quality of Arkansas education. (Chapter Three)
- Eliminating personal income tax exclusions. Current income tax exclusions for capital gains and Social Security benefits reduce the yield—and the perceived fairness—of the tax system. Making the income tax base broader will help fund education and other essential government services in the long run. (Chapter Five)
- Making the personal income tax more progressive. When the income tax was adopted in 1929, the top tax rate applied only to the wealthiest taxpayers. The top tax bracket has been adjusted since then, and many more Arkansans are now subject to the top tax rate. Introducing a new top income tax rate would help raise revenues and would restore the former progressivity of the income tax. (Chapter Five)
- Eliminating corporate income tax loopholes. The Arkansas corporate income tax is under siege. A host of creative accounting loopholes have reduced the yield of the corporate tax in recent years—but loophole-closing measures could be enacted to restore the tax. (Chapter Six)

- Decoupling from recent corporate tax cuts. Accelerated depreciation provisions in recent federal "stimulus" legislation threaten to further reduce the yield of the Arkansas corporate tax. Decoupling from the federal legislation would prevent these losses. (Chapter Six)
- Broadening the sales tax base to include more goods and/or services. Like most states, Arkansas excludes many personal and professional services from its sales tax base. These services are a growing part of the economy—which means that the long-term vitality of the sales tax depends on including these services in the tax base. The state could also eliminate expensive, poorly targeted exemptions for various goods. While these changes might increase the perceived fairness of the sales tax, the net impact of this change would still be regressive—and any further sales tax expansion would exacerbate the current imbalance in the Arkansas tax structure. (Chapter Seven)
- Increasing excise taxes on cigarettes, gasoline or alcohol. These options have recently become increasingly popular in other states—but are naturally declining revenue sources and will be insufficient to fund education in the long run. These options are also quite regressive. (Chapter Seven)
- Increasing the state's reliance on property taxes. Arkansas's property tax burden is among the lowest in the nation. This forces the state to rely more heavily on sales and excise taxes, which are among the highest in the nation. This imbalance could be rectified by bringing the state's property tax burden closer to the national average. Options for achieving this include a statewide property tax increase, eliminating tax preferences for agricultural land, and requiring improved assessment practices. (Chapter Eight)
- Offsetting regressive tax hikes with low-income protection. Many states reduce the regressivity of their tax systems through low-income Earned Income Tax Credits, sales tax credits, or property tax "circuit breakers." Any of these options would mitigate the impact of regressive tax hikes on low-income Arkansans—at a minimal cost to the state. (Chapters Five, Seven and Eight)
- **Increasing natural gas severance taxes.** Arkansas currently imposes the lowest tax rate in the nation

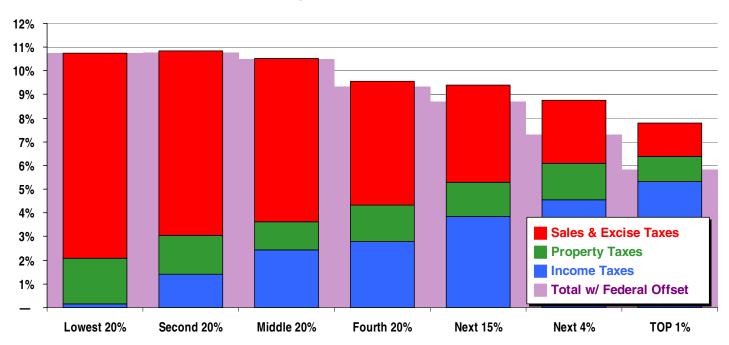
- on the extraction of natural gas. Increasing the rate and calculating the tax as a percentage of market value could help increase the yield of the tax while exporting much of the added tax burden to residents of other states. (Chapter Nine)
- Preserving the estate tax Recent federal estate tax repeal threatens the Arkansas tax. Acting to "decouple" the state tax from the federal estate tax would preserve a small, but important source of state revenue—and would maintain one of the few truly progressive taxes currently levied by the state. (Chapter Nine)
- Introducing an Arkansas lottery. Most states now allow a state lottery. The potential revenues from this approach are uncertain in the short run, and likely to decline in the long run—and the introduction of a lottery is among the most regressive revenue-raising options available. (Chapter Nine)
- Repealing Amendment 19, which makes it easier to increase sales taxes—and harder to increase any other major tax—for reasons which have no rational basis. Repealing this amendment would allow lawmakers to choose between various tax increases based on their merits—rather than basing these important decisions on arcane parliamentary rules. (Chapter Twelve)
- Repealing constitutional limits on property tax growth. A series of constitutional amendments, including Amendments 59, 74 and 79, have reduced the importance of the Arkansas property tax. Repealing these limits would make it easier to fund schools using property tax revenues and would increase the perceived equity of the property tax. (Chapter Eight)

None of these options would be easy to enact: as we have seen, institutional and political obstacles make tax increases unlikely and true tax reform even more unlikely. Therein lies the greatest cost of all for the state to consider in the aftermath of the *Lake View* case. If the inability of the different constituencies to agree on an equitable revenue-raising solution prevents policy makers from adequately funding public education, this institutional failure will impose a much larger social cost on the next generation—one that will have consequences beyond any dollar amounts that are currently under discussion.

Arkansas

State & Local Taxes in 2002

Shares of family income for non-elderly taxpayers



Income	Lowest	Second	Middle	Fourth	Top 20%			
Group	20%	20%	20%	20%	Next 15%	Next 4%	TOP 1%	
Income Range	Less than \$12,000	\$12,000 – \$20,000	\$20,000 – \$33,000	\$33,000 – \$55,000	\$55,000 - \$100,000	\$100,000 – \$242,000	\$242,000 or more	
Average Income in Group	\$7,000	\$16,200	\$26,800	\$43,400	\$71,700	\$137,900	\$498,100	
Sales & Excise Taxes	9.2%	8.1%	7.1%	5.4%	4.2%	2.7%	1.4%	
General Sales—Individuals	5.3%	5.0%	4.6%	3.5%	2.9%	1.9%	1.0%	
Other Sales & Excise—Ind.	2.1%	1.5%	1.1%	0.8%	0.5%	0.3%	0.1%	
Sales & Excise on Business	1.9%	1.7%	1.4%	1.1%	0.8%	0.5%	0.3%	
Property Taxes	1.9%	1.6%	1.2%	1.5%	1.4%	1.5%	1.1%	
Property Taxes on Families	1.9%	1.6%	1.2%	1.4%	1.2%	1.2%	0.6%	
Other Property Taxes	0.0%	0.1%	0.0%	0.1%	0.2%	0.3%	0.5%	
Income Taxes	0.2%	1.4%	2.4%	2.8%	3.9%	4.6%	5.3%	
Personal Income Tax	0.1%	1.4%	2.4%	2.7%	3.8%	4.5%	5.2%	
Corporate Income Tax	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	0.2%	
TOTAL TAXES	11.3%	11.2%	10.7%	9.7%	9.5%	8.8%	7.8%	
Federal Deduction Offset	_	-0.1%	-0.0%	-0.2%	-0.7%	-1.4%	-2.0%	
TOTAL AFTER OFFSET	11.3%	11.1%	10.7%	9.5%	8.8%	7.4%	5.8%	

APPENDIX B: PROPERTY VALUE BY COUNTY, 1999

Composition of Assessed Property Value by County in 1999

_	Rural Land as % of Acreage in:		age in:	Assessed Value Per		Rural Land as	% of Acreage in: Assessed		Assessed Value Per
County	% of Value	Timberland		Acre, Rural Land	County	% of Value	Timberland		Acre, Rural Land
Arkansas	27%	21%	64%	\$84	Lee	48%	18%	71%	\$83
Ashley	23%	62%	28%	\$96	Lincoln	38%	40%	50%	\$102
Baxter	22%	42%	28%	\$184	Little River	21%	51%	40%	\$86
Benton	22%	32%	53%	\$356	Logan	22%	31%	43%	\$98
Boone	22%	44%	67%	\$187	Lonoke	17%	14%	76%	\$191
Bradley	26%	85%	7%	\$62	Madison	22%	61%	53%	\$79
Calhoun	39%	95%	4%	\$83	Marion	13%	54%	34%	\$115
Carroll	10%	47%	59%	\$180	Miller	16%	65%	38%	\$214
Chicot	41%	14%	65%	\$100	Mississippi	20%	1%	83%	\$109
Clark	24%	74%	17%	\$93	Monroe	42%	31%	59%	\$76
Clay	33%	13%	79%	\$102	Montgomery	18%	22%	14%	\$68
Cleburne	9%	61%	31%	\$151	Nevada	17%	76%	18%	\$76
Cleveland	49%	75%	9%	\$88	Newton	25%	40%	21%	\$46
Columbia	17%	85%	12%	\$124	Ouachita	17%	71%	6%	\$89
Conway	15%	47%	46%	\$137	Perry	23%	52%	20%	\$67
Craighead	8%	12%	80%	\$169	Phillips	27%	12%	78%	\$110
Crawford	7%	51%	36%	\$156	Pike	28%	77%	19%	\$87
Crittenden	11%	7%	78%	\$109	Poinsett	33%	8%	82%	\$142
Cross	33%	11%	86%	\$137	Polk	14%	50%	24%	\$78
Dallas	40%	94%	5%	\$67	Pope	8%	17%	29%	\$177
Desha	34%	25%	53%	\$84	Prairie	51%	21%	70%	\$97
Drew	27%	69%	23%	\$78	Pulaski	1%	35%	21%	\$271
Faulkner	5%	36%	50%	\$212	Randolph	19%	44%	63%	\$85
Franklin	11%	29%	43%	\$113	Saline	6%	75%	12%	\$305
Fulton	17%	54%	57%	\$63	Scott	22%	23%	25%	\$56
Garland	7%	57%	9%	\$351	Searcy	27%	47%	33%	\$39
Grant	28%	88%	8%	\$114	Sebastian	3%	38%	27%	\$130
Greene	14%	23%	71%	\$136	Sevier	21%	70%	38%	\$160
Hempstead	20%	56%	40%	\$116	Sharp	22%	64%	47%	\$150
Hot Spring	16%	64%	19%	\$160	St. Francis	30%	15%	75%	\$144
Howard	19%	66%	18%	\$99	Stone	20%	65%	37%	\$143
Independence	14%	45%	57%	\$138	Union	15%	91%	5%	\$83
Izard	14%	60%	50%	\$61	Van Buren	13%	66%	29%	\$120
Jackson	33%	15%	82%	\$99	Washington	3%	41%	55%	\$91
Jefferson	10%	32%	49%	\$124	White	11%	25%	59%	\$84
Johnson	8%	33%	26%	\$84	Woodruff	52%	13%	75%	\$147
Lafayette	36%	76%	28%	\$77	Yell	17%	26%	31%	\$92
Lawrence	25%	21%	77%	\$90	Statewide	22%	48%	42%	\$122

Source: HISTECON Associates, Inc. Data are from the Arkansas Statistical Abstract and the Assessment Coordination Department.

Note: Farm and timber percentages may sum to more than 100 percent because some land is used for both purposes.

The Institute on Taxation & Economic Policy has engaged in research on tax issues since 1980, with a focus on the distributional consequences of both current law and proposed changes. ITEP's research has often been used by other private groups in their work, and ITEP is frequently consulted by government estimators in performing their official analyses. ITEP has built a microsimulation model of the tax systems of the U.S. government and of all 50 states and the District of Columbia.

What the ITEP Model Does

The ITEP model is a tool for calculating revenue yield and incidence, by income group, of federal, state and local taxes. It calculates revenue yield for current tax law and proposed amendments to current law. Separate incidence analyses can be done for categories of taxpayers specified by marital status, the presence of children and age.

In computing its estimates, the ITEP model relies on one of the largest databases of tax returns and supplementary data in existence, encompassing close to three quarters of a million records. To forecast revenues and incidence, the model relies on government or other economic projections.

The ITEP model's federal tax calculations are very similar to those produced by the congressional Joint Committee on Taxation, the U.S. Treasury Department and the Congressional Budget Office (although each of these four models differs in varying degrees as to how the results are presented). The ITEP model, however, adds state-by-state estimating capabilities not found in those government models.

Below is an outline of the ITEP model:

The Personal Income Tax Model analyzes the revenue and incidence of current federal and state personal income taxes and potential changes in:

- rates—including special rates on capital gains,
- inclusion of various types of income,
- inclusion of all federal and state adjustments.
- exemption amounts and phase-out methods,
- standard deduction amounts and phase-outs,
- itemized deductions and phase-outs, and
- credits, such as earned-income and child-care.

The Consumption Tax Model analyzes the revenue yield and incidence of current sales and excise taxes. It also has the capacity to analyze the revenue and incidence implications of a broad range of base and rate changes in general sales taxes, special sales taxes, gasoline

excise taxes and tobacco excise taxes. There are more than 250 base items available to amend in the model, reflecting, for example, sales tax base differences among states and most possible changes.

The Property Tax Model analyzes revenue yield and incidence of current state and local property taxes. It can also analyze the revenue and incidence impacts of statewide policy changes in property tax—including the effect of circuit breakers, homestead exemptions, and rate and assessment caps.

The Corporate Income Tax Model analyzes revenue yield and incidence of current corporate income tax law, possible rate changes and certain base changes.

Local taxes: The model can analyze the statewide revenue and incidence of aggregate local taxes (not, however, broken down by individual localities).

Addendum: Data Sources

The ITEP model is a "microsimulation model." That is, it works on a very large stratified sample of tax returns and other data, aged to the year being analyzed. This is the same kind of tax model used by the U.S. Treasury Department, the congressional Joint Committee on Taxation and the Congressional Budget Office. The ITEP model uses the following micro-data sets and aggregate data:

Micro-Data Sets:

IRS 1988 Individual Public Use Tax File, Level III Sample; IRS Individual Public Use Tax Files 1990-99; Current Population Survey: 1988-2003; Consumer Expenditure Survey, 1988-90 and later; U.S. Census, 1990 and 2000.

Partial List of Aggregated Data Sources:

Miscellaneous IRS data; Congressional Budget Office and Joint Committee on Taxation forecasts; other economic data (Commerce Department, WEFA, etc.); state tax department data; data on overall levels of consumption for specific goods (Commerce Department, Census of Services, etc.); state specific consumption and consumption tax data (Census data, Government Finances, etc.); state specific property tax data (Govt. Finances, etc.); American Housing Survey; Census of Population Housing; etc.

A more detailed description of the ITEP Microsimulation Tax Model is on the ITEP website at www.itepnet.org.

ABOUT THE AUTHORS

Matthew Gardner is State Tax Policy Director at the Institute on Taxation and Economic Policy. ITEP is a non-profit, non-partisan tax policy research group focusing on the impact of federal, state and local tax policy on low-and middle-income taxpayers. ITEP's Microsimulation Tax Model can estimate the impact of tax systems—and tax change proposals—on taxpayers at different income levels in all fifty states and at the federal level.

Rich Huddleston was Research Director at Arkansas Advocates for Children and Families during the writing of this report. The mission of Arkansas Advocates for Children & Families is to protect and promote through research, education and advocacy the rights and well-being of Arkansas children and their families, to assure that they have the opportunity to lead healthy and productive lives.

James Metzger is President of HISTECON Associates, Inc. HISTECON is a research and consulting firm specializing in economic and statistical studies. Since 1980, HISTECON has conducted more than 230 studies for businesses, government agencies, and not-for-profit groups nationally, involving economic development, educational finance, employment, and other social and economic data. HISTECON study teams have provided management advice and consulting numerous times to determine the appropriate responses to their analyses.

Richard Sims is the former State Tax Policy Director at the Institute on Taxation and Economic Policy. Over his career, he has worked as a tax and budget analyst for several state governments, including Arkansas.