

PAYCHECK S and POLITICS

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GAMBLING ON OUR FUTURE:

Why a State-Sponsored Lottery is Still a Bad Bet for Education & Families in Arkansas

By Ginny Blankenship

Executive Summary

Despite promises by lottery supporters that a lottery would be an economic windfall to the state, a lottery would not be good for Arkansas. It would not raise nearly as much money for the state as lottery proponents contend and would have a host of negative consequences for the state's poorest residents. Arkansas Advocates for Children and Families (AACF) estimates that a lottery could bring approximately \$61.5 million in revenue to the state to fund college scholarships-nearly 40 percent lower than Lt. Governor Bill Halter's latest estimate of \$100 million, and much more in line with the Department of Finance and Administration's estimate of \$55 million. AACF arrived at this estimate by analyzing lottery revenue in similar and surrounding states, subtracting the costs of prizes and administration of the lottery, and considering any tax implications for state revenue overall. The state could actually see even less of this revenue: as ticket sales rise, so do the social and economic costs associated with gambling, such as treatment for gambling addictions.

In "Gambling on Our Future: Why a State-Sponsored Lottery is Still a Bad Bet for Education and Families in Arkansas," AACF concludes that a lottery would hurt the economic security and well-being of Arkansas' families-regardless of how much money it raised. The report lays out the following reasons:

- Lotteries function as regressive taxes that disproportionately hurt the economic security of low-income families.
- If the state had a lottery, it would only get to keep about 30 percent of the revenue from ticket sales. The rest would go toward prizes, advertising, and administration.
- Lotteries are unstable sources of tax revenue that can decline from year to year. Overall, any positive effect on state budgets tend to fade over time.
- Lotteries and other forms of gambling often lead to negative social and economic consequences for children and their families—costs which must often be borne by the state.
- Researchers have found that Georgia's "Hope Scholarship" lottery, often cited as a model for lotteries in other states, is disproportionately funded by low-income households, while higher-income, more-educated households disproportionately benefit from the scholarships.
- A lottery would do little to improve access to higher education among the lowest-income citizens and would prey upon those who stand to lose the most from statesponsored gambling.
- If increasing access to higher education is indeed important to Arkansas's future economic success, then the state should commit to finding a stable, reliable and fair source of funding for it.

Introduction

Over the past few decades, there have been many attempts to pass a state lottery in Arkansas-all of which have been defeated. Under the latest lottery plan, proposed by Lt. Gov. Bill Halter, lottery revenue would be used for scholarships and grants for state residents attending any certified two-year or four-year college or university in Arkansas (the General Assembly would determine who was eligible). According to his "Hope for Arkansas" lottery website, a lottery is "expected to generate over \$100 million in net revenue which would supplement, not replace, existing college scholarship funding."1 However, Arkansas Advocates for Children and Families (AACF) estimates that number is more likely around \$61.5 million.

Regardless of the actual amount of revenue generated, is a lottery really a good method of funding education? Research and experience from other states overwhelmingly shows that lotteries not only fail to live up to their promised levels of revenue but also may make matters worse—especially for our most vulnerable children and families.

How Much Money Could a Lottery Generate?

It's hard to predict how much money any lottery could potentially generate. Estimates depend upon a wide range of factors, including the state's population base and personal income, the types and availability of other gambling options in the state and in surrounding states, and people's interest in playing them. Nevertheless, we can learn a great deal from experiences in other states. According to AACF's calculations of data from the U.S. Census Bureau for the 42 states that have lotteries, the median state lottery generated \$155 in sales per capita (per person) in 2006.²

However, since per capita measures of sales can be misleading, due to differences in personal income across states, it may be more accurate to look at lottery sales as a *percentage* of state personal income. In this case, the median lottery yielded less than half a penny for each dollar of personal income in the state (0.45%).

But even this estimate is skewed significantly upward, due to the fact that six of these 42 states generate revenue from video lottery terminals (VLT) in addition to "traditional" paper lottery tickets. VLTs are essentially video games that allow gamblers to play the lottery, similar to playing a slot machine. They have been shown to be far more profitable for states than traditional lotteries—and highly addictive for gamblers.

For this reason, AACF conducted two sets of analyses: 1) an analysis of the 36 states with traditional lotteries only (see Table 1), and 2) an analysis of the six states with VLTs in addition to traditional lotteries (see Table 2). Not surprisingly, we confirmed that states with VLTs generated significantly higher revenue than did states with only traditional lotteries. In fact, over 69 percent of lottery revenue from these states is attributed solely to revenue from VLTs.

Since Lt. Gov. Halter's proposal to create a state lottery in Arkansas would not include VLTs, it is more appropriate to compare any projected revenue for a lottery in Arkansas to that of the 36 states that do not have VLTs. For these 36 states, the median traditional lottery yielded *only one-twelfth of a penny for each dollar of personal income in the state (0.12%)*.

An Arkansas lottery still might not even generate this level of revenue, since Arkansas is much poorer, smaller and may have more conservative attitudes about gambling than the typical state. Rather than compare Arkansas to the *average* U.S. lottery state, a more valid approach is to examine the experiences of states that are demographically or economically *similar* to Arkansas. AACF examined data from all five surrounding states with lotteries—Louisiana, Missouri, Oklahoma, Tennessee and Texas—as well as five states with similar demographic and economic profiles– populations between 1.5 million and 3 million, and total state personal incomes between \$50 and \$100 billion. These five states included Iowa, Kansas, Nebraska, New Mexico, and West Virginia (not including West Virginia's revenue from VLTs). To provide a more stable and reliable estimate, AACF examined the three most recent years of lottery data collected by the U.S. Census Bureau.

From 2004 to 2006, these 10 states had median lottery ticket sales of about 0.24 percent of state personal income (see Table 3). According to UALR's Institute for Economic Advancement, total state personal income for Arkansas is projected to be \$88.9 billion for 2008.³ At this level, an Arkansas lottery would have generated about \$213.4 million in total ticket sales—considerably lower than the median for all other states with traditional lotteries (\$584 million) as well as the median for similar/surrounding states (\$272.6 million).

While \$213.4 million in lottery revenue sounds impressive, it is important to distinguish between total (or gross) lottery sales and the revenues actually available to the state after administrative costs and prizes are paid out. For all states with traditional lotteries in 2006 (not including VLTs), prizes and administrative costs consumed about 70 cents of every dollar of lottery ticket sales (after vendor commissions). *The same result was found in AACF's three-year sample of ten similar/ surrounding states, leaving about 30 cents* (29.86 percent) in available revenues for governments to spend on public services.

At this rate, AACF estimates that an Arkansas lottery would generate about \$64 million in net lottery tax revenue that would be available to the state to fund college scholarships—also considerably lower than the median nationally (\$178.9 million) and the median for similar/ surrounding states (\$99.1 million). However, as the following sections will explain, other costs must be taken into account in order to arrive at a true estimate of revenue from a lottery.

TABLE 1: SALES AND REVENUES FOR STATES WITH TRADITIONAL LOTTERIES ONLY, FY 2006

	Ticket Sales, minus Commissions (\$1000s)	Net Revenue Available (\$1000s)1	Personal Income (\$1000s)	Sales as % of Personal Income	\$ Sales Per Capita	Revenue as % of Personal Income	Revenue as % of Total Sales
AZ	\$437,502	\$140,645	\$196,909,423	0.22%	\$69.02	0.07%	32.15%
CA	\$3,333,306	\$1,248,810	\$1,436,445,919	0.23%	\$91.19	0.09%	37.46%
СО	\$424,090	\$120,390	\$188,221,719	0.23%	\$87.23	0.06%	28.39%
CT	\$916,276	\$290,535	\$177,452,995	0.52%	\$261.62	0.16%	31.71%
FL	\$3,711,751	\$1,224,456	\$663,077,399	0.56%	\$203.37	0.18%	32.99%
GA	\$2,751,918	\$816,170	\$299,834,187	0.92%	\$288.32	0.27%	29.66%
ID	\$121,448	\$34,403	\$43,799,635	0.28%	\$81.00	0.08%	28.33%
IL	\$1,819,280	\$605,685	\$490,754,851	0.37%	\$141.55	0.12%	33.29%
IN	\$759,628	\$218,414	\$203,501,883	0.37%	\$119.72	0.11%	28.75%
IA*	\$231,669	\$80,223	\$98,207,890	0.24%	\$77.53	0.08%	34.63%
KS*	\$212,404	\$58,422	\$95,900,828	0.22%	\$76.51	0.06%	27.51%
KY	\$695,594	\$206,994	\$124,993,289	0.56%	\$164.00	0.17%	29.76%
LA*	\$313,614	\$117,923	\$135,026,187	0.23%	\$73.05	0.09%	37.60%
ME	\$213,422	\$53,136	\$42,202,194	0.51%	\$162.03	0.13%	24.90%
MD	\$1,458,201	\$500,215	\$245,303,232	0.59%	\$259.54	0.20%	34.30%
MA	\$4,200,411	\$882,545	\$297,905,362	1.41%	\$651.25	0.30%	21.01%
MI	\$2,025,995	\$663,276	\$341,336,546	0.59%	\$201.15	0.19%	32.74%
MN	\$400,246	\$95,875	\$200,300,473	0.20%	\$77.01	0.05%	23.95%
MO*	\$857,143	\$250,062	\$191,413,213	0.45%	\$145.81	0.13%	29.17%
MT	\$37,600	\$9,702	\$29,151,987	0.13%	\$39.25	0.03%	25.80%
NE*	\$106,025	\$29,667	\$60,744,058	0.17%	\$59.75	0.05%	27.98%
NH	\$248,562	\$79,468	\$52,148,718	0.48%	\$188.90	0.15%	31.97%
IJ	\$2,272,321	\$837,930	\$405,254,344	0.56%	\$261.61	0.21%	36.88%
NM*	\$144,668	\$36,603	\$58,131,416	0.25%	\$73.44	0.06%	25.30%
NC	\$213,473	\$64,293	\$286,009,816	0.07%	\$23.56	0.02%	30.12%
ND	\$21,256	\$6,788	\$20,885,393	0.10%	\$33.23	0.03%	31.93%
ОН	\$2,081,086	\$674,843	\$381,962,608	0.54%	\$181.49	0.18%	32.43%
OK*	\$191,920	\$69,056	\$115,881,184	0.17%	\$53.06	0.06%	35.98%
PA	\$2,812,058	\$943,569	\$456,732,442	0.62%	\$226.18	0.21%	33.55%
SC	\$1,063,541	\$318,148	\$128,893,183	0.83%	\$241.29	0.25%	29.91%
TN*	\$930,895	\$258,371	\$195,440,739	0.48%	\$151.20	0.13%	27.76%
TX*	\$3,583,062	\$1,087,859	\$823,159,415	0.44%	\$149.89	0.13%	30.36%
VT	\$98,703	\$22,623	\$21,647,445	0.46%	\$158.88	0.10%	22.92%
VA	\$1,289,147	\$450,717	\$302,098,188	0.43%	\$167.16	0.15%	34.96%
WA	\$447,540	\$122,041	\$243,597,024	0.18%	\$69.19	0.05%	27.27%
WI	\$473,869	\$150,868	\$191,725,759	0.25%	\$84.59	0.08%	31.84%
MEDIA	N \$584,732	\$178,931	\$193,583,249	0.40%	\$143.68	0.12%	30%
AVERAG	E \$1,136,101	\$354,742	\$256,834,748	0.42%	\$153.76	0.13%	31%

¹After prizes and administrative costs

* = Similar and/or surrounding state

Source: AACF calculations of U.S. Census Bureau data.

TABLE 2: SALES AND REVENUES FOR STATES WITH BOTH TRADITIONAL LOTTERIES AND VLTs, FY 2006

	Ticket Sales, Excluding Commissions (\$1000s)	Net Revenue Available (\$1000s) ¹	Personal Income (\$1000s)	Sales as % of Personal Income	\$ Sales Per Capita	Revenue as % of Personal Income	Revenue as % of Total Sales
DE	\$7,144,214	\$317,327	\$33,368,999	21.41%	\$8,261.46	0.95%	4.44%
NY	\$6,291,783	\$2,177,276	\$848,936,717	0.74%	\$326.04	0.26%	34.61%
OR	\$2,213,175	\$576,346	\$122,909,475	1.80%	\$590.58	0.47%	26.04%
RI	\$1,539,235	\$322,474	\$39,835,439	3.86%	\$1,455.08	0.81%	20.95%
SD	\$573,172	\$117,906	\$25,254,517	2.27%	\$719.87	0.47%	20.57%
WV	\$14,014,070	\$641,919	\$51,015,511	27.47%	\$7,733.88	1.26%	4.58%
MEDIAN				3.07%	\$1,087.48	0.64%	0.21%
AVERAGE				6.02%	\$2,270.61	0.59%	0.21%

Source: AACF calculations of data from the U.S. Census Bureau; La Fleur's 2007 World Lottery Almanac.

Note: * = Similar and/or surrounding state.

Money Spent on a Lottery Must Come From Elsewhere

While it's clearly difficult to estimate the amount of ticket sales that a new lottery could generate, it may be even more challenging to predict the tax implications as a result of these sales. Nevertheless, in our attempt to calculate the most plausible estimate of tax gains and losses as a result of lottery sales, AACF found that the gain in personal income taxes from lottery winners would roughly offset any loss of state and local sales tax revenue due to consumer spending transferred to lottery purchases; in other words, tax gains and losses would not significantly affect the overall revenue generated from a state-sponsored lottery. We summarize our methodology below.

AACF estimates that Arkansas could see \$213.4 million in ticket sales if it adopted a lottery, with about \$64 million in net lottery revenues. It is important to note, however, that money spent on purchasing Arkansas lottery tickets would have to come from somewhere else, either from savings or diminished purchases of other goods and services. Given the historically low rate of savings among Arkansas citizens (more than one in four Arkansas families have negative net worth), it's most likely that money for lottery purchases would come from reduced purchases of other goods. In fact, research has confirmed that household expenditures on state lotteries do, indeed, crowd out non-gambling expenditures, especially for low-income families:

"The introduction of a state lottery is associated with an average decline of \$46 per month, or 2.4 percent, in household non-gambling expenditures. Low-income households reduce nongambling household expenditures by 2.5 percent on average, 3.1 percent when the state lottery includes instant games. These households experience statistically

TABLE 3: LOTTERY SALES AND REVENUE FROM SURROUNDING / SIMILAR STATES

3-Year Average, FY 2004-2006

	Sales As % of Personal income	Revenue as % of Personal Income	Revenue as % of Total Sales
lowa	0.22%	0.07%	29.52%
Kansas	0.23%	0.07%	30.73%
Louisiana	0.25%	0.09%	38.41%
Missouri	0.43%	0.12%	29.17%
Nebraska	0.17%	0.04%	24.63%
New Mexico	0.26%	0.07%	26.58%
Oklahoma	0.06%	0.02%	35.98%
Tennessee	0.29%	0.09%	30.20%
Texas	0.47%	0.15%	31.68%
West Virginia	0.14%	0.20%	7.00%
MEDIAN	0.24%	0.08%	29.86%

Source: AACF calculations of data from the U.S. Census Bureau.

Note: OK's figures are from FY 2006 only; TN's figures are 2-year average of FY 2005 and 2006; WV's figures are an approximation of revenue from traditional lotteries only.

TABLE 4: POTENTIAL REVENUE FROM AN ARKANSAS LOTTERY

Lottery Revenue to the State	\$61.5 million
State & Local Sales Taxes	-\$2.5 million
Prizes & Administration	-\$149.4 million
Lottery Sales	\$213.4 million

significant declines in expenditures on food and on rent, mortgage, and other bills."⁴

As a result, lotteries reduce the amount of state and local tax revenue that would otherwise have been generated from these sales. AACF attempted to estimate the potential loss of state and local income tax revenue due to a lottery.⁵ Our results show that there could be a \$2.5 million sales tax loss to the state of Arkansas as a result of allowing a state lottery.

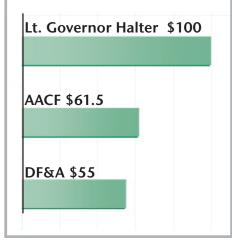
At the same time, the adoption of a lottery could slightly increase tax revenue from the very few winners whose payouts are large enough to increase the personal income tax they would have to pay to the state.Due to limitations in the available data, AACF was not able to estimate the potential impact of a lottery on state personal income tax revenue with any degree of certainty. In sum, AACF estimates that an Arkansas lottery would yield about \$61.5 million in new net tax revenue for Arkansas after taking into account decreases in sales tax revenue and an unknown—but likely insignificant—impact on state personal income tax revenue. (see Table 4).

AACF's final estimate of \$61.5 million is significantly lower than Lt. Governor Halter's estimate of \$100 million, and slightly higher than the \$55 million estimate produced by the Arkansas Department and Finance and Administration (DFA)⁶. It's plausible to arrive at any of these three estimates, depending upon the methodology used. In reality, a state lottery in Arkansas could produce higher or lower revenues than any of these estimates, and revenue would most likely fluctuate from year to year. However, it's worth noting that two of the three estimates were nearly half of the amount of revenue predicted by Lt. Governor Halter. As the next section will explain, this instability is not a good basis for sound tax and budget policy.

The Lottery is an Unreliable Source of Funding

One of the key principles of sound state tax policy is that the revenue generated by any given tax must be

Estimates of Potential Revenue From an Arkansas Lottery (in Millions)



reliable and predictable. While there may be extreme instances when the revenue from any tax may decline during a period of economic downturn (as occurred with many states during fiscal year 2000), it is very unlikely that the revenue generated from an established tax will see an actual decline during good economic times.

However, this is exactly what happened to lottery revenue during a four-year period from 1997-2000: Even during good economic times, the lottery proved to be an unstable and unreliable source of tax revenue from year to year. From 1997 to 1998, 17 of 37 lottery states saw lottery revenues decline from the previous year; from 1999 to 2000, 15 states had a decline in lottery tax revenue; and from 1999 to 2000, lottery tax revenues declined in 19 of 37 states.7 As state economies have taken more of a downturn in recent years, results have been mixed. From 2004 to 2005, 16 of 42 lottery states saw lottery revenues decline from the previous year; but from 2005 to 2006, only seven states had a decline in lottery revenue (see Table 5). Therefore, lottery revenue does not appear to reliably follow economic trends, making it a very unstable source of funding to rely upon from year to year.

Other recent research and news reports from across the country support the view that many state-operated lotteries have failed to meet expectations for generating additional education funds.8 In one neighboring state, Oklahoma, lottery revenue last year fell far below the original projections, creating funding problems for some education programs.⁹ When fewer lottery tickets are sold, more state money ends up being spent on advertising and prizes, leaving even less money for education. As a result, many states, including California, Illinois, Indiana, Massachusetts, New Jersey, and Texas, are now considering privatizing their state lotteries in the hope that private companies will be able to generate more tax revenues from the games.

TABLE 5: STATES WITH LOTTERY REVENUE DECREASES

2004-2005

2001 2009	
Montana	-21.1%
Massachusetts	-20.2%
Kentucky	-17.7%
Washington	-12.9%
Kansas	-12.2%
Louisiana	-11.3%
Indiana	-7.5%
Wisconsin	-7.5%
Colorado	-7.2%
New Hampshire	-6.4%
South Carolina	-4.6%
Connecticut	-4.3%
lowa	-4.1%
Missouri	-3.2%
Idaho	-3.1%
South Dakota	-1.1%
2005-2006	
Michigan	-28.6%
Texas	-13.1%
Kansas	-4.9%
Massachusetts	-4.1%
Colorado	-2.7%
Illinois	-1.9%
New Mexico	-1.3%

Source: AACF calculations of U.S. Census Bureau data

Other researchers have found lotteries to have no net benefit to state budgets at all.¹⁰ In fact, Fink, Marco, & Rork (2004) found that overall tax revenues actually *decline* with increased lottery sales, leading the authors to conclude: "The implication of these studies is that the adoption of lotteries does not appear to provide even a partial solution to a state's fiscal problems."¹¹

Who Will Pay for the Lottery?

Lottery supporters like to point out that playing the lottery is voluntary. Therefore, they argue, it is not the state's responsibility if some individuals abuse the privilege and get hurt in the process. What is unquestionably the state's responsibility, however, is the so-called "hidden" tax embedded in the price of lottery tickets, which is not transparent to consumers. Paying the implicit (hidden) tax on lottery tickets is no more voluntary than paying the sales or excise tax on other "voluntary" purchases, such as alcohol, books, or even ice cream. A wide range of researchers and organizations with varying viewpoints and goals all agree that the lottery still functions as a tax paid by consumers for the purchase of a good.¹²

The lottery tax is also highly regressive, meaning that poor people spend far more on lotteries as a percetage of their income than do those with higher incomes. In fact, research overwhelmingly demonstrates that lotteries are one of the most regressive forms of taxation in the country.¹³ For example, the National Gambling Impact Study Commission found that lottery players with incomes under \$10,000 spent almost three times as much money on lotteries as a percentage of their income as those with incomes over \$50,000.

Likewise, AACF's previous lottery analysis found that the state's poorest taxpayers (with incomes below \$12,000) would be hardest hit if they played a state lottery. Their taxes (as a percentage of income) would increase far more than those paid by the top 1 percent of taxpayers.¹⁴

Who Will Win? (And Who Will Lose?)

Although most state lotteries require that lottery proceeds supplement, rather than supplant, revenue that is intended to support education, many studies have found that state legislators are finding ways to subvert these rules, resulting in less money being allocated to education.¹⁵ Furthermore, earmarking lottery funds for public education often has the unintended consequence of making it more difficult to garner support for public school funding because policymakers and the general public often assume that schools are already getting a "windfall" from lottery profits.

In many states that set aside lottery funds for college scholarships, these lotteries are also failing to live up to expectations. Lt. Governor Bill Halter's proposal for an Arkansas lottery would set aside lottery proceeds for college scholarships. The hope is that this would help increase the number of college-educated citizens in our state, which has long lagged behind the rest of the nation in college graduates. However, one recent study of stateoperated lotteries in the South found that lotteries are not significantly correlated with increased enrollments in institutions of higher education.¹⁶ These findings support previous research showing that lotteries that raise money for college scholarships tend to subsidize people who would have gone to college anyway, without creating a net gain in the number of collegeeducated residents.¹⁷

To make matters worse, decades of research have also overwhelmingly shown that lotteries are played disproportionately by minorities and by those with lower levels of education.18 At the same time, these groups do not proportionately benefit from the college scholarships that they help pay for through purchasing lottery tickets.¹⁹ For example, Rubenstein & Scafidi's 2002 study suggests that lower-income and non-white households tend to have higher purchases of lottery products while receiving lower benefits-particularly in Georgia, whose "Hope Scholarship" has been used as a model for lotteries in other states.²⁰

Conclusion

Most low- and middle-income families in Arkansas are struggling just to make ends meet. A state-sponsored lottery would do far more to hurt than help the vast majority of them. At the same time, lotteries implicitly allow state policymakers to abdicate their responsibility to make difficult budgetary choices and raise adequate revenue for essential services. There are better ways to make college more affordable and generate revenue for the state without hurting low- and middle-income Arkansans, as AACF has identified in many other publications.

Beyond the financial impact, the social and moral costs of state-sponsored lotteries have been explored in many other studies and will only be mentioned briefly here. Just a few findings about the negative consequences of state lotteries include:

Exacerbating addictions to gambling, which pose real threats to players' mental health, family relationships, and economic security. Children of chronic gamblers are often the ones who pay the highest price.

- Increasing crime and other forms of illegal gambling.
- Teaching kids to view lotteries as their only way up the economic ladder.

In summary, implementing a lottery in Arkansas would make the state's already regressive tax system even more unfair, do little to improve access to higher education, particularly among the lowest-income citizens, and prey upon those who stand to lose the most from gambling in our state.

WHAT ARE THE ODDS?

The odds of winning state-sponsored lotteries have been estimated to be as high as 1 in 14 million.

Endnotes

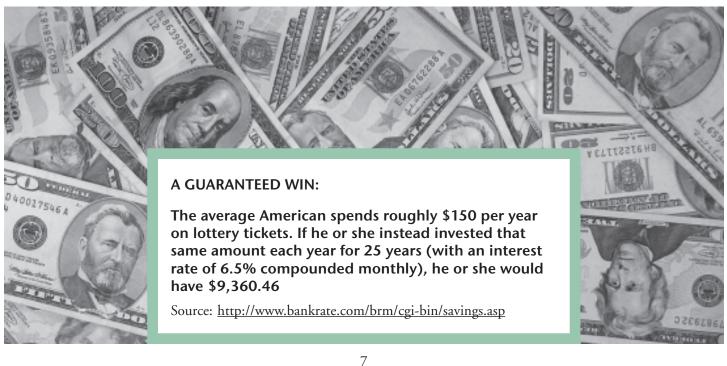
¹ Halter's original estimate of \$250 million in lottery revenue was later revised to \$100 million. No details are provided on Halter's website about how this \$100 million estimate was obtained: http:// www.hopeforarkansas.org. See "Arkansas Gov. candidate's lottery figures appear unrealistic," January 24, 2006, Arkansas News Bureau.

² U.S. Census Bureau, "State Government Finances." Data does not include lottery revenue for the District of Columbia.

³ Personal communication, Dr. Gregory L. Hamilton, Research Director, IEA Economic Research, April 28, 2008.

⁴ Kearney, M.S. (2005). "State lotteries and consumer behavior." Journal of Public Economics, 89(11-12), 2269-2299.

⁵ In FY 2006, the effective sales tax rate was 3.58%, meaning that the average taxpayer spent about 3.58% of his or her income on state and local sales taxes. Richard Sims, formerly with the Arkansas Office of Tax Research and the Institute on Taxation and Economic Policy (ITEP), estimates that 84% of all lottery tickets would be bought in-state, with the remaining 16% of tickets bought out of state; therefore, one can assume that 84% of that \$213.4 million would have been spent back in the state of Arkansas if it were not spent on a lottery tax. This amount would have then been taxed at an effective rate of 3.58%, which would have resulted in \$6.4



million in tax revenue for the state. However, it is likely that those few Arkansas residents who might actually win the lottery would then spend those winnings back in the state of Arkansas, and this potential revenue must then be subtracted from the total state sales tax loss.

⁶ Personal communication with DFA officials, May 20, 2008.

⁷ Huddleston, R. (2002). "An Arkansas lottery: A bad bet for education and families?" Arkansas Advocates for Children & Families, Issue XV.

⁸ Erekson, O. H., DeShano, K. M., Platt, G., & Ziegert, A. L. (2002). "Fungibility of lottery revenues and support of public education." Journal of Education Finance, 28(2), 301-12; Kaplan, J. (2007). "The California lottery: A small and declining share of school funding." The California Budget Project; Stanley, R.E., & French, P.E. (2003). "Can students truly benefit from state lotteries: A look at lottery expenditures towards education in the American states." The Social Science Journal, 40(2), 327-333; See also Lyon, J., "Some state lotteries fall short of expectations." Arkansas News Bureau, October 7, 2007; Stodghill, R. & Nixon, R. "For schools, lottery payoffs fall short of promises," The New York Times, October 7, 2007.

⁹ Hinton, M. "State budget standstill stated for 2009." *Tulsa World*, April 17, 2008.
¹⁰ ITEP. (2005). "Uncertain benefits, hidden costs: The perils of state-sponsored gambling," Issue No. 19.

¹¹ Fink, S. C., Marco, A. C., & Rork, J. C. (2004). "Lotto nothing? The budgetary impact of state lotteries." *Applied Economics*, *36*(21), 2357-67.

¹² See, for example, the Tax Foundation, National Center for Policy Analysis, the John Locke Foundation of North Carolina, and the Family Council of Arkansas, to name a few.

¹³ Clotfelter, C., & Cook, P. (1989). *Selling Hope: State Lotteries in America*. Cambridge, MA: Harvard University Press; National Opinion Research Center (1999), "Gambling impact and behavior study: Report to the National Gambling Impact Study Commission," University of Chicago.

¹⁴ Huddleston (2002).

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