

A REVIEW OF  
**THE AUM REPORT**  
ON THE LEGALIZATION OF  
**GAMBLING IN ALABAMA**

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# *A Review of the AUM Report on the Legalization of Gambling in Alabama*

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# Introduction

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In April 2015, the Institute for Accountability and Government Efficiency (IAGE) at Auburn University at Montgomery (AUM) completed a report entitled *Assessment of Lottery and Gaming Programs Across the United States*.<sup>1</sup> The AUM report was commissioned by the Office of the President Pro Tempore of the Alabama State Senate, which charged the authors with six tasks:

1. Prepare lists of states with and without lotteries[;]
2. Develop profiles of the lotteries in Alabama's border states and the [United States]...;
3. List the reasons states without lotteries do not offer them;
4. Profile states that have entered into gaming compacts with Indian tribes;
5. Research and summarize the literature on monetary issues related to lotteries; and
6. Draft a summary of the implications for Alabama if the [s]tate were to consider sponsoring a lottery and/or Class III casino gaming.<sup>2</sup>

These tasks—or most of them, with varying degrees of diligence<sup>3</sup>—are taken up in the AUM report, the findings of which have been widely broadcast since even before the report was released.<sup>4</sup> Proponents of gambling have claimed the report “clearly finds that casino gaming and a lottery would have a major economic impact on Alabama,” citing such statistics as “\$400 million in new revenue,” “11,000 new jobs,” and “a \$1.2 billion annual economic impact.”<sup>5</sup> These claims have been repeated uncritically in the media.<sup>6</sup>

The purpose of this review is to examine the AUM report to determine the validity of its analysis and, thereby, the utility of its conclusions as a source for policymaking. This is made short work by the fact that the entire report is fifteen pages in length, with only twelve of the pages substantive and a majority of the pages sparse.<sup>7</sup> (Compare this with a similar project, conducted for the Florida Legislature in 2013, that was over seven hundred pages in length.<sup>8</sup>) Furthermore, the discussion specific to the state of Alabama is limited to less than three pages.<sup>9</sup> This is merely an indication of the lack of rigor that defines the entire report.<sup>10</sup>

This review concludes that the findings of the AUM report are scientifically unsound and incapable of intelligently informing policymakers or the public as to the implications of legalizing gambling or adopting a lottery in the state of Alabama. Public policy based on unsound premises is inevitably bad public policy—and can have extremely harmful consequences.<sup>11</sup> Making sound, reliable policy decisions requires comprehensively and rigorously considering the implications

of those policy decisions. To that end, the AUM report is of essentially no value to Alabama policymakers.

### ***A Word on Structure***

This review proceeds in three parts. Part I examines issues with the discussion of other states in the AUM report.<sup>12</sup> The discussion of other states accounts for 75% (nine pages) of the discussion in the AUM report, yet is only tangentially related to Alabama.<sup>13</sup> Part II examines issues with the discussion of Alabama in the AUM report.<sup>14</sup> The discussion of Alabama accounts for 25% (three pages) of the discussion in the AUM report, yet encompasses the most important and complex tasks that the authors were charged with.<sup>15</sup> Part III examines issues of neglect in the AUM report.<sup>16</sup> Although the authors of the AUM report were charged with six tasks, the discussion in the AUM report ignores—in large part or in whole part—two tasks without explanation.<sup>17</sup> The result of all these issues, as noted in the Conclusion, is that the AUM report is incapable of intelligently informing policymakers or the public as to the implications of legalizing gambling or adopting a lottery in the state of Alabama.<sup>18</sup>

## **I. Issues with the Discussion of Other States**

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Examination of the AUM report reveals several issues with regard to consistency and sufficiency of the data used. A representative instance involves the authors' second task, "develop[ing] profiles of the lotteries in Alabama's border states and the [United States]"<sup>19</sup>—presumably yet confusingly meaning Alabama's *bordering states* and the United States.<sup>20</sup>

Figure 3 of the report gives the percentage breakdown for prizes, administrative costs, and proceeds available (i.e., tax revenue) from lotteries for five "bordering" states—Arkansas, Florida, Georgia, Louisiana, and Tennessee—as well as the U.S. average for all states with lotteries in 2013.<sup>21</sup> Profiles for the same five "bordering" states are provided in Tables 1–5.<sup>22</sup> The profiles, however, use data for 2014.<sup>23</sup> Consequently, the percentage breakdowns given in Tables 1–5 do not coincide with the percentage breakdowns given in Figure 3. While the differences in proceeds available are mostly small, comparison between 2013 and 2014 yields results that should be more closely examined but are completely ignored by the authors.

For example, administrative costs increased in each of the "bordering" states between 2013 and 2014.<sup>24</sup> Arkansas experienced the smallest increase in administrative costs at 62.5%, while Tennessee experienced the largest increase in administrative costs at 175%. Administrative costs increased

by 100% or more in Georgia and Florida and by approximately 83% in Louisiana between 2013 and 2014. Determinants for such increases in administrative costs would be important to identify before proceeding with implementation of a state lottery in Alabama. In addition to increasing administrative costs, prize payouts and proceeds available both decreased on a percentage basis for a majority of the “bordering” states.<sup>25</sup> Georgia did experience a 1% increase in proceeds available, and Tennessee increased prize payouts; yet, the increase in prize payouts in Tennessee, along with the increase in administrative costs, reduced proceeds available to the state by 12%. These changes between 2013 and 2014 are shown in Table 1 below.

**TABLE 1**  
*Allocation of Lottery Revenue by Alabama’s “Bordering” States, 2013–2014<sup>26</sup>*

	2013			2014		
	Prizes	Admin. Costs	State Funds	Prizes	Admin. Costs	State Funds
Arkansas	70%	8%	21%	67% (-3%)	13% (+5%)	20% (-1%)
Florida	67%	3%	30%	64% (-3%)	8% (+5%)	28% (-2%)
Georgia	68%	4%	27%	64% (-4%)	8% (+4%)	28% (-1%)
Louisiana	56%	6%	38%	53% (-3%)	11% (+5%)	36% (-2%)
Tennessee	56%	4%	38%	62% (+6%)	11% (+7%)	27% (-12%)

Observed variation in the allocation of lottery revenues between 2013 and 2014 in Alabama’s “bordering” states suggests that using a single year of data to develop a lottery profile provides only a snapshot, not the full picture. A time-series approach would be better suited to determining long-term trends in lottery-revenue allocation that could be used to construct more beneficial lottery profiles for states comparable to Alabama.

## II. Issues with the Discussion of Alabama

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The most important part of the AUM report arrives after its descriptive portion—relegated to its final three pages, entitled “Economic Assessment for Alabama.”<sup>27</sup> It is these three pages that provide the entirety of the evidence for the highly publicized predictions of “\$400 million in new revenue,” “11,000 new jobs,” and “a \$1.2 billion annual economic impact.”<sup>28</sup> That evidence, as the discussion hereunder demonstrates, is arrived at through unsophisticated analyses that render it scientifically unsound.

. . .

This section of the AUM report begins with a prediction of “[p]otential annual revenue from a state-run lottery system in Alabama,” which the authors estimate to be \$331.7 million.<sup>29</sup> The methodology for the lottery-revenue prediction is given in full as follows:

This was estimated based on per capita lottery revenues in 43 states with state-run lottery systems and Alabama population.<sup>30</sup>

The authors note that “average (weighted) annual per capita lottery revenue in these 43 states was \$69.11.”<sup>31</sup> While per-capita data can be appropriate for many statistical purposes, use of such a measure—

even as an average, weighted by population<sup>32</sup>—yields incomplete and therefore unreliable estimates in the instant case without controlling for other factors.<sup>33</sup>

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For example, different regions of the country may participate in gambling at different levels, which may increase or decrease the potential revenue available for a state in a low-participation region. In fact, results from a Gallup poll conducted in 2003 revealed that gambling participation was highest in the Midwest, where 72% of respondents said they had gambled in

the previous twelve months, and lowest in the South, where 63% of respondents said they had gambled in the last twelve months.<sup>34</sup> Furthermore, a paper published in the *Journal of Gambling Studies* found that the low level of gambling in the South was statistically different from the reference group at the 5% level for both those who gambled within the last year and those who gambled weekly.<sup>35</sup> Not adjusting for such factors would lead to an overestimation of the potential annual revenue available for Alabama. Using data for Alabama’s “bordering” states could possibly be a better solution than using an average of all forty-four states that currently offer a state-run lottery; however, even this would prove problematic if the “bordering” states do not have similar economic bases and social patterns.

For instance, consider the state-level gross domestic product (GDP) for Alabama and its “bordering” states.<sup>36</sup> Data from the Bureau of Economic Analysis reveals that the GDP for Alabama was \$200.4 billion in 2014.<sup>37</sup> That same year, Florida had the largest GDP and Arkansas had the smallest GDP of the “bordering” states, at \$838.9 billion and \$120.0 billion, respectively.<sup>38</sup> Estimates based on GDP and lottery proceeds for Alabama and each “bordering” state are located in Table 2.

**TABLE 2**  
*State Lottery Proceeds per Capita and as a Percentage of GDP, 2014<sup>39</sup>*

	<i>GDP (billions)</i>	<i>Lottery Proceeds (millions)</i>	<i>Lottery Proceeds per Capita</i>	<i>Lottery Proceeds as a % of GDP</i>
<i>Alabama</i>	\$200	No Lottery	No Lottery	No Lottery
<i>Arkansas</i>	\$120	\$411	\$28	0.34%
<i>Florida</i>	\$839	\$5,381	\$75	0.64%
<i>Georgia</i>	\$475	\$3,640	\$92	0.77%
<i>Louisiana</i>	\$252	\$447	\$34	0.18%
<i>Tennessee</i>	\$297	\$1,280	\$52	0.43%

Simple examination of Table 2 reveals that GDP varies widely among Alabama and its “bordering” states, as does lottery proceeds, lottery proceeds per capita, and lottery proceeds as a percentage of GDP. Lottery proceeds follow the same ranking, from largest to smallest, as GDP: Florida, Georgia, Tennessee, Louisiana, and Arkansas. Georgia and Florida switch places when ranking states by lottery proceeds per capita. Louisiana displays the lowest lottery proceeds as a percentage of GDP, at 0.18%. Arkansas ranks second in this category, at 0.34%, while lottery proceeds represent a percentage of GDP in Tennessee, Florida, and Georgia of 0.43%, 0.64%, and 0.77%, respectively.

Unfortunately, considering only these variables for Alabama’s “bordering” states will not allow for statistical testing with enough explanatory power to determine the relationship between lottery revenues, economic conditions, and a host of other political, demographic, and behavioral characteristics of states and their associated residents. From a simple review of variables contained in Tables 1 and 2, however, it appears that economic conditions, structural differences in lottery organization, state-level bureaucracy, demographics, and behavioral characteristics of residents could all be related to lottery proceeds. As such, a more serious study, further investigating these relationships, is required to ascertain reliable tax-revenue estimates for lottery gaming in Alabama.

For example, assume that the lottery-gaming decisions or functionality in Florida and Georgia are found to be statistically different from those in Arkansas, Louisiana, and Tennessee; and that those two states, therefore, should be removed from the weighted-average per-capita calculations used to calculate state-lottery revenues. Removing the effects of Florida and Georgia from

the calculations reduces the weighted-average lottery revenue per capita by more than 38%, from \$68.14 to \$41.09. Under this scenario, potential annual revenue for a state-run lottery in Alabama would total only \$197.2 million. (Recall that the AUM report projects potential annual revenue for a state-run lottery in Alabama to be \$331.7 million.<sup>40</sup>) On the other hand, if the assorted variables indicate that a lottery in Alabama would most closely resemble that of Arkansas, potential annual revenue would be even lower: \$133.7 million. Contrariwise, if Alabama's lottery functions more like Tennessee, the annual-tax-revenue estimate would be \$249.1 million—a figure greater than that based on Arkansas, yet still \$82.5 million less than the estimate included in the AUM report.<sup>41</sup>

Such variations demonstrate the importance of determining and controlling for factors such as the economic, demographic, behavioral, and political conditions in the states on which the estimates of revenue are being based. Absent consideration of such factors, the lottery-revenue estimates of the AUM report must be considered not only unsophisticated but also unreliable.

. . .

The calculations in the AUM report of “[p]otential annual revenue from casinos in Alabama” suffer from the same problems of unsophistication and unreliability just described, *mutatis mutandis*, as well as additional ones.<sup>42</sup> The methodology used by the authors of the AUM report for their casino-revenue predictions is given in full as follows:

Potential gaming revenue generation in casinos was estimated based on gaming revenue per table and per slot machine in 11 states (Mississippi, New Jersey, Nevada, Illinois, Indiana, Iowa, Kansas, Ohio, Colorado, Missouri, and Pennsylvania) and the expected number of tables and slot machines in Alabama casinos.<sup>43</sup>

The authors do not explain the criteria used in selecting the states that they base their calculations on, yet other states could have been included. For example, Florida and Louisiana both offer riverboat gambling similar to that found in Mississippi; and Louisiana also has a land-based casino in New Orleans.<sup>44</sup> Moreover, Maine and Maryland offer casino-style gambling with electronic and table games similar to those described in the AUM report.<sup>45</sup> More problematic than the states excluded, however, are the states included. It is self-evident that Nevada—home of Las Vegas and hundreds of casinos that collectively bring in nearly \$1 billion per month<sup>46</sup>—is incomparable to Alabama.

The casino-revenue predictions are even more problematic because of the source they rely upon. The AUM report cites to a single source for its “[p]otential annual revenue from casinos in Alabama” predictions: “State of Alabama Gaming Market Assessment and Impact Study, Global Market Advisors, LLC (2015).”<sup>47</sup> The authors of the AUM report have not responded to requests to explain the provenance of this study,<sup>48</sup> which is proprietary and not publicly available.<sup>49</sup> The person or entity who commissioned the study has refused requests to allow the source to be reviewed.<sup>50</sup> Although the identity of the person or entity who commissioned the study is unknown, it can reasonably be deduced to be a gambling interest.<sup>51</sup> Without being able to review the study, its conclusions can only be considered suspect. As economist Douglas M. Walker of the College of Charleston observed in *The Oxford Handbook on the Economics of Gambling*: “Studies such as [one conducted by Arthur Andersen for the American Gaming Association], commissioned by the casino industry, are biased and amount to little more than static comparisons or listings of taxes paid and employees hired by the casino industry.”<sup>52</sup> Therefore, the conclusions of the AUM report based on the study must also be considered suspect.

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The invalidity of the predictions of “[p]otential annual revenue from casinos in Alabama”<sup>53</sup> in the AUM report has consequences for the AUM report’s other predictions with respect to casinos—namely, “[a]nnual economic impact of four casinos in Alabama”<sup>54</sup>—which are directly based on the former.<sup>55</sup> In short, all predictions in the AUM report with regard to casinos in Alabama are suspect or unsound.

. . .

Another problem with the AUM report revolves around gross versus net tax collections. While the report does not explicitly note the type of tax collections that it is calculating, it appears from examination of the projected lottery and casino tax revenues that the collections presented in the report are *gross* tax collections, not *net* tax collections.<sup>56</sup> This is important because gross tax collections do not reflect the “cannibalization” of existing tax revenue as Alabama residents redirect spending from current uses to gambling—from grocery stores to gambling halls, so to speak—an

effect also known as “spending displacement.”<sup>57</sup> In short, it is inevitable that at least some portion of resident spending on gambling will be displaced from areas of current spending that generate tax revenue, and failure to adjust for this spending displacement results in inaccurate tax-revenue projections.

To illustrate, recall that the AUM report projects that a state-run lottery in Alabama would generate revenue—that is, bring in gross tax collections—of \$331.7 million.<sup>58</sup> Based on the U.S. average (for all states with lotteries) proceeds available, which is given in the AUM report as 33% of lottery revenue,<sup>59</sup> generating this amount would require the people of Alabama (and visitors from other states) to spend in excess of \$1 billion on the lottery. A portion of that \$1 billion would come from money that is “recaptured” as residents who participate in the Tennessee, Florida, or Georgia lotteries instead participate in the Alabama lottery. Still another portion of this spending can be imputed to potential economic growth associated with gambling expansion in the state. While these two events represent new money available to Alabama, the remainder of the \$1 billion is displaced from residents current spending in the state. Given Alabama’s current state sales-tax rate of 4%, each \$1 million in spending that is displaced from expenditures on taxable items to expenditures on the lottery reduces state sales-tax collections by \$40,000.<sup>60</sup>

Casinos are also subject to spending displacement. Studies of casinos in other states have found, for example, that reduced non-gambling spending offsets gambling revenue.<sup>61</sup> Specifically, spending displacement was estimated to be approximately 50% in Missouri and approximately 30% in Iowa.<sup>62</sup> Table 8 from the AUM report estimates that “[p]otential annual revenue from casinos in Alabama” to be in excess of \$492.4 million.<sup>63</sup> This estimate, based on “average (weighted) annual casino gaming revenue” in eleven states,<sup>64</sup> is subject to the methodological issues that have already been discussed.<sup>65</sup> Those issues notwithstanding, the AUM report estimates that tax revenue from casinos in Alabama would be \$64.0 million (at a 13% tax rate) to \$73.9 million (at a 15% tax rate).<sup>66</sup> While Alabama’s percentage of spending displacement is unknown—and not accounted for by the predictions in the AUM report—each \$1 million displaced from sales-taxable items in Alabama will reduce net tax collections by \$40,000.<sup>67</sup>

Spending displacement is just one of many important factors that must be considered in any serious study of the effect of legalized gambling on tax revenue. A précis of this point is provided by economists Douglas M. Walker of the College of Charleston and John D. Jackson of Auburn University, who concluded:

Whether legalized gambling affects overall state government revenue depends on several factors. First, in many states there is more than one type of legal gambling [e.g., a lottery and casinos]. The extent to which the different gambling industries are substitutes (or complements) to each other will have an impact on the state revenues from gambling. The relationships between gambling industries and non-gambling industries are also important, for example, to the extent that consumers substitute gambling for other types of expenditure. The tax rates applied to the various types of spending are among a number of other important factors.<sup>68</sup>

Walker and Jackson warn that “voters and policymakers cannot simply assume that the introduction or expansion of legalized gambling will have a positive effect on net state revenues.”<sup>69</sup> Indeed, not only is “[l]egalized gambling . . . not always . . . the ‘golden egg’ that it is sometimes promoted to be,” it can actually prove “*counterproductive* . . . in terms of tax[-]revenue generation.”<sup>70</sup>

The AUM study ignores the many factors that must be considered in any serious study of the effect of legalized gambling on net tax revenue. Instead, the AUM study simply assumes that the introduction of legalized gambling will have a positive effect on net tax revenue. As such, the predictions of the AUM study are specious and lack any actual predictive power.

### III. Issues of Neglect

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It was noted in the Introduction that the authors of the AUM report were charged with six tasks, and remarked *en passant* that these tasks were taken up “with varying degrees of diligence.”<sup>71</sup> The preceding discussion will have already given that comment color, but two of the tasks deserve further discussion for being particularly and importantly neglected.

. . .

The authors of the AUM report were charged with the task of “[r]esearch[ing] and summariz[ing] the literature on monetary issues related to lotteries.”<sup>72</sup> The writing center at the University of North Alabama, the Center for Writing Excellence, provides the following encapsulation of a “literature review” for students and faculty:

A literature review is the *synthesis* of the available literature regarding your research topic. This synthesis merges the conclusions of many different sources to explain the overall understanding of the topic, thus laying a foundation for both the research question and

primary research. Although a literature review will cite sources and should discuss the credibility of the sources included, it is more than an annotated bibliography. Your literature review needs to review *all the significant sources on a topic*, regardless of whether or not they support the claims you will eventually be working toward.<sup>73</sup>

It is easy to see why a literature review would be requested by elected representatives when a major change in state law or policy is being considered. For example, in the instant case, knowing how analogous events impacted other states could allow researchers to develop models, specific to Alabama, to evaluate the fiscal implications associated with instituting a state-run lottery.

Even a cursory review of the literature on gambling reveals an abundance of research concerning the fiscal implications of lotteries. Examples can be found within other literature reviews, such as the 2011 paper “Lottery Gambling: A Review,”<sup>74</sup> which “presents an exhaustive review of the literature on lottery gambling” and contains a section of references with 142 citations.<sup>75</sup> A 2011 report by three scholars for the Canadian Consortium of Gambling Research found 492 studies on the socioeconomic impacts of gambling, including lotteries.<sup>76</sup> And, given the continued research interest in gambling, the literature has undoubtedly grown and advanced since the beginning of the decade.

The authors of the AUM report, however, apparently ignored the task of “[r]esearch[ing] and summariz[ing] the literature on monetary issues related to lotteries.”<sup>77</sup> Indeed, not a single source of literature on monetary issues is cited, or even alluded to, within the pages of the AUM report.<sup>78</sup>

. . .

The authors of the AUM report were charged with the task of “[d]raft[ing] a summary of the implications for Alabama if the [s]tate were to consider sponsoring a lottery and/or Class III casino gaming.”<sup>79</sup> The AUM report, however, only addresses a handful of *economic* implications—all of which, it is important to note, are purported to be beneficial (more revenue, more jobs, etc.)—and completely ignores all of the *social* implications.<sup>80</sup>

The literature on gambling suggests that simply focusing on potential tax revenues and employment effects, as the AUM report does,<sup>81</sup> is not sufficient given the myriad important implications surrounding the introduction of gambling into a state. In fact, when gambling has been carefully

studied in the past, such as in the comprehensive study it received by the National Gambling Impact Study Commission (NGISC),<sup>82</sup> the implications of both the economic and social effects have been considered.<sup>83</sup>

Industries can carry with them various social, environmental, or other non-economic implications that must be addressed in order to ascertain the total impact of their introduction or expansion. A broad spectrum of gaming literature suggests this might especially be the case with the gambling industry. For example, Alan Mallach, a senior fellow at the Metropolitan Policy Program of the Brookings Institution, suggests that even though casinos may generate positive net tax gains for states, casinos also generate social costs that have a variety of fiscal implications which—although sometimes difficult to quantify—can turn net changes in tax revenue from positive to negative.<sup>84</sup>

Yet, the difficulty of quantification, as a 2011 report by three scholars for the Canadian Consortium of Gambling Research emphasizes, “does not preclude conducting meaningful socioeconomic analyses of gambling.”<sup>85</sup> Indeed, “there are many basic principles for conducting socioeconomic impact studies that can ensure that the obtained results are comprehensive, balanced, and scientifically rigorous.”<sup>86</sup> The organization of the impact areas suggested in the 2011 report is reproduced in Tables 3 and 4. “There are many different and equally legitimate ways of organizing and categorizing these impact areas,” the scholars noted.<sup>87</sup> What is of utmost importance, however, is that “all impacts of gambling have to be included.”<sup>88</sup>

In short, a gambling assessment must “comprehensively assess *all* potential economic *and* social impacts.”<sup>89</sup> The same is true, *mutatis mutandis*, when it comes to “[d]raft[ing] a summary of the implications for Alabama if the [s]tate were to consider sponsoring a lottery and/or Class III casino gaming.”<sup>90</sup> A summary, of course, can be both comprehensive and concise. The AUM report—which unmethodically addresses only a fraction of the many possible impact areas of gambling—is simply deficient.

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TABLE 3

*Economic Impacts (Impacts That Are Primarily Monetary in Nature)<sup>21</sup>*

<i>Government Revenue</i>	Government revenue received directly from gambling provision or indirectly from taxation of businesses providing gambling. Taxes come in the form of licensing fees, property tax, corporate income tax, and goods and services taxes. It is also important to consider whether taxes may have risen if government had not received additional revenue from gambling.
<i>Public Services</i>	Changes in the quantity or quality of government- or charity-provided services (health care, education, social services, infrastructure, etc.) as a direct or indirect result of increased government revenue from gambling.
<i>Regulatory Costs</i>	Changes in the amount of government revenue directed to ensuring that the new form of gambling operates according to government regulation.
<i>Infrastructure Value</i>	The introduction of any buildings (e.g., casino), roads, and infrastructure upgrades which add to the capital wealth of the community and which are directly or indirectly attributable to the introduction of gambling.
<i>Business Starts and Failures</i>	The number of new businesses as well as business failures (commercial bankruptcy) associated with gambling introduction. Certain businesses should receive particular attention because research has shown them to be more likely impacted by gambling introduction. Specifically, these are other forms of gambling (i.e., bingo, horse racing, lotteries); the hospitality industry (i.e., hotels, restaurants, lounges); the construction industry; pawnshops; check-cashing stores; horse-breeding and -training operations; tourism; and other entertainment industries.
<i>Business Revenue</i>	Changes in overall business revenue/sales in industries that are typically affected by the introduction of gambling. This does not include revenue received by the new forms of gambling.
<i>Personal Income</i>	Changes in average personal income or rates of poverty associated with gambling introduction.
<i>Property Values</i>	Changes in property values in geographic areas proximate to new gambling venues.

**TABLE 4**  
*Social Impacts (Impacts That Are Primarily Non-Monetary in Nature)<sup>92</sup>*

<i>Problem Gambling</i>	Changes in the prevalence of problem gambling and the main indices potentially associated with problem gambling (i.e., personal-bankruptcy rates, divorce rates, suicide rates, treatment numbers). There are also monetary costs associated with changes in problem gambling that should be tabulated (and included in the economic-impacts section). Specifically, these are the amount of money spent on (1) treatment and prevention; (2) policing, prosecution, incarceration, and probation for gambling-related crime; (3) child welfare involvement for gambling-related family problems; and (4) unemployment and welfare payments and lost productivity because of gambling-related work problems.
<i>Crime</i>	Change in the rate of crime and gambling-related crime. This would also include any observed decreases in illegal gambling with the introduction of a legalized form.
<i>Employment</i>	The number of full- and part-time jobs that are directly or indirectly created as a result of gambling introduction and the percentage of the general workforce that this represents.
<i>Socioeconomic Inequality</i>	Evidence that the introduction of gambling has a differential financial impact on people of different socioeconomic levels (e.g., potentially making it more or less “regressive”).
<i>Leisure Activity</i>	Changes in the pattern of leisure behavior associated with gambling introduction.
<i>Public Attitudes</i>	Change in public attitudes associated with gambling introduction. This could include changed attitudes about gambling (e.g., perceived benefits/harms), or changed attitudes about government or the role of government for allowing/providing gambling, etc.
<i>Quality of Life/ Public Health/ Social Capital/ Values</i>	Change in the general quality of life, state of public health, societal interconnectedness, societal values, and related indices. These indices are often difficult to measure and also difficult to attribute to the introduction of gambling. Nonetheless, they are relevant impacts if they exist, and if they can be captured.

## Conclusion

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The findings of the AUM report are scientifically unsound and incapable of intelligently informing policymakers or the public as to the implications of legalizing gambling or adopting a lottery in the state of Alabama. Public policy based on unsound premises is inevitably bad public policy—and can have extremely harmful consequences.<sup>93</sup> Making sound, reliable policy decisions requires comprehensively and rigorously considering the implications of those policy decisions. To that end, the AUM report is of essentially no value to Alabama policymakers.

The purpose of this review has *not*, it is important to note, been to rewrite the AUM report so that it *is* of value to policymakers.<sup>94</sup> Although suggestions have been proffered throughout, these suggestions are incidental to reviewing the AUM report—that is, they are dictated by the content and conclusions of the AUM report and are, therefore, by necessity not exhaustive as to correcting the AUM report's defects.

## Notes

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- 1 Institute for Accountability and Government Efficiency, Auburn University at Montgomery, *Assessment of Lottery and Gaming Programs Across the United States* (2015), <http://www.alprotem.com/wp-content/uploads/2015/04/Assessment-of-Lottery-and-Gaming-Programs-Across-the-U.S.-April-2015.pdf> [<http://perma.cc/9F9C-EW9Y>] [hereinafter *AUM Report*].
- 2 *Id.* at 3.
- 3 See discussion *infra* pp. 9–13.
- 4 See Bill Britt, “AUM Study: Financial Impact of Gaming Shows Boom for State,” *Alabama Political Reporter* (Apr. 27, 2015), <http://www.alreporter.com/aum-study-financial-impact-of-gaming-shows-boom-for-state/> [<http://perma.cc/P2UZ-S8WD>] (“The *Alabama Political Reporter* has obtained a copy of a study on the financial impact of gaming in Alabama, which will be released ahead of a [g]aming [b]ill being introduced in the [Alabama State] Senate later this the week.”). Just recently, the findings were reported on the front page of one of the most-read daily newspapers in Alabama—the one serving the state capital. See Bryan Lyman, “No Sure Bet with Lottery,” *Montgomery Advertiser*, Feb. 15, 2016, at 1A.
- 5 Press Release, Alabama State Senate President Pro Tempore Del Marsh, “Lottery, Gaming Would Generate \$400 Million in Revenue[,] Creates [sic] 11,000 New Jobs, \$1.2 BILLION Economic Impact” (Apr. 27, 2015), <http://www.alprotem.com/2015/04/27/lottery-gaming-would-generate-400-million-in-revenue-creates-11000-new-jobs-1-2-billion-economic-impact/> [<http://perma.cc/6N2W-Q3UZ>].
- 6 See, e.g., Leada Gore, “\$332 Million from Lottery, 13,500 Jobs from Casinos: What Gambling Could Mean in Alabama,” *AL.com* (Apr. 28, 2015), [http://www.al.com/opinion/index.ssf/2015/04/332\\_for\\_lottery\\_13500\\_jobs\\_for.html](http://www.al.com/opinion/index.ssf/2015/04/332_for_lottery_13500_jobs_for.html) [<http://perma.cc/BU4U-33TH>]; Megan Miller, “Lottery Would Create Jobs, Over a Billion in Economic Impact,” *WIAT 42 News* (Apr. 27, 2015), <http://wiat.com/2015/04/27/lottery-would-create-jobs-over-a-billion-in-economic-impact/> [<http://perma.cc/T6F7-4DFG>].
- 7 The entire text excluding the preliminary material (viz., the title page, table of contents, and introduction) totals less than 2,000 words. See generally *AUM Report*, *supra* note 1, at 4–15.
- 8 See generally Spectrum Gaming Group, *Gambling Impact Study* (2013), [http://www.leg.state.fl.us/GamingStudy/docs/FGIS\\_Spectrum\\_28Oct2013.pdf](http://www.leg.state.fl.us/GamingStudy/docs/FGIS_Spectrum_28Oct2013.pdf) [<http://perma.cc/8KBA-5DFG>].
- 9 See generally *AUM Report*, *supra* note 1, at 13–15.
- 10 Readers may mistake the AUM report for being an executive summary or the like, as the author initially did, but the fifteen-page document has been confirmed to be the entire report. E-mail from Cathy Crabtree, Executive Director, Institute for Accountability and Government Efficiency, to Andrew A. Yerbey, Senior Policy Counsel, Alabama Policy Institute (Dec. 19, 2015) (on file with the Alabama Policy Institute).
- 11 For fifteen examples, see Mark J. Perry, “Ten Examples of the Law of Unintended Consequences,” American Enterprise Institute (Nov. 19, 2015, 5:06 PM), <http://www.aei.org/publication/ten-examples-of-the-law-of-unintended-consequences/> [<http://perma.cc/39S3-2QU4>]; Mark J. Perry, “Five Examples of the Law of Unintended Consequences,” American Enterprise Institute (Jan. 12, 2014, 11:41 AM), <http://www.aei.org/publication/five-examples-of-the-law-of-unintended-consequences/> [<http://perma.cc/7MMJ-ZSG7>].

- 12 *See infra* pp. 2–3.
- 13 *See generally AUM Report, supra* note 1, at 4–12.
- 14 *See infra* pp. 3–9.
- 15 *See generally AUM Report, supra* note 1, at 13–15.
- 16 *See infra* pp. 9–13.
- 17 *See generally AUM Report, supra* note 1, at 4–15.
- 18 *See infra* p. 14.
- 19 *AUM Report, supra* note 1, at 3.
- 20 The term “border states” has a handful of specific meanings, none of which apply here. *See, e.g., Webster’s Third New International Dictionary* 255 (1961) (defining “border state” as “a state . . . bordering on an antislavery state and favoring slavery before the Civil War,” “a state . . . just north of the Solid South and traditionally voting Democratic,” “a state . . . bordering on Canada,” or “a small country . . . bordering on a larger more powerful country”). A “bordering state” would be a state “adjoining . . . on the border” the state of Alabama. *See, e.g., 2 The Oxford English Dictionary* 412 (2nd ed. 1989) (defining “bordering” and giving “The bordering states must imitate the example” as an example sentence). Yet, the authors of the AUM report use “border states” and “bordering states” interchangeably to mean the states of Arkansas, Florida, Georgia, Louisiana, and Tennessee. *See, e.g., AUM Report, supra* note 1, at 4, 5 (shifting from “Lotteries in Alabama’s Bordering States” on one page to “Lotteries in Alabama’s Border States” on the next page). Arkansas and Louisiana, however, clearly do not qualify as either “border states” or “bordering states” with regard to Alabama. *See generally* Rand McNally, *Junior Classroom Atlas* 14–15 (2015).
- 21 *AUM Report, supra* note 1, at 5.
- 22 *Id.* at 6–10.
- 23 *Id.*
- 24 *Compare generally id.* at 5, *with id.* at 6–10.
- 25 *Compare generally id.* at 5, *with id.* at 6–10.
- 26 The percentages are from *AUM Report, supra* note 1, at 5, 6, 7, 8, 9, 10. The percentage changes are the author’s calculations.
- 27 *Id.* at 13.
- 28 Press Release, Alabama State Senate President Pro Tempore Del Marsh, *supra* note 5.
- 29 *AUM Report, supra* note 1, at 13. The number is given as “\$331,667,963” in the report. *Id.* Numbers, however, are inconsistently expressed in terms of rounding and style throughout the report. *Compare, e.g., id.* at 4 (using both ordinals and words for “\$423 million”), *with id.* at 4 (using both ordinals and words, but

rounding to one decimal point, for “\$4.8 billion”), *with id.* at 13 (using only ordinals for “\$331,667,963”). Here and hereinafter, numbers from the report are converted into a consistent style, with consistent rounding, as a courtesy to the reader.

- 30 *Id.* (footnotes omitted).
- 31 *Id.* at 13.
- 32 The authors do not explicitly say how the average is weighted, although the implication—confirmed by replicating the \$69.11 figure—is that the average is weighted by population.
- 33 *See generally, e.g.*, Christopher R. Thomas & S. Charles Maurice, *Managerial Economics: Foundations for Business Analysis and Strategy* 121–149 (12th ed. 2016) (discussing the methodology for successfully identifying quantitative relationships between variables).
- 34 Jeffrey M. Jones, “Gambling a Common Activity for Americans,” Gallup (Mar. 24, 2004), <http://www.gallup.com/poll/11098/Gambling-Common-Activity-Americans.aspx> [<http://perma.cc/3LR3-FPSC>].
- 35 John W. Welte et al., “Gambling Participation in the U.S.—Results from a National Survey,” 18 *Journal of Gambling Studies* 313, 324 (2002).
- 36 All data on the GDP of Alabama and its “bordering” states is provided by the Bureau of Economic Analysis, an agency of the U.S. Department of Commerce. *See generally* Fact Sheet on Personal Income and Gross Domestic Product in Alabama, Bureau of Economic Analysis, <http://www.bea.gov/regional/bearfacts/pdf.cfm?fips=01000&areatype=01000&geotype=3> [<http://perma.cc/Q67B-SYQB>] (last published Dec. 10, 2015); Fact Sheet on Personal Income and Gross Domestic Product in Arkansas, Bureau of Economic Analysis, <http://www.bea.gov/regional/bearfacts/pdf.cfm?fips=05000&areatype=05000&geotype=3> [<http://perma.cc/MJ2T-QFKY>] (last published Dec. 10, 2015); Fact Sheet on Personal Income and Gross Domestic Product in Florida, Bureau of Economic Analysis, <http://www.bea.gov/regional/bearfacts/pdf.cfm?fips=12000&areatype=12000&geotype=3> [<http://perma.cc/5XTY-PQE2>] (last published Dec. 10, 2015); Fact Sheet on Personal Income and Gross Domestic Product in Georgia, Bureau of Economic Analysis, <http://www.bea.gov/regional/bearfacts/pdf.cfm?fips=13000&areatype=13000&geotype=3> [<http://perma.cc/5WKU-RARJ>] (last published Dec. 10, 2015); Fact Sheet on Personal Income and Gross Domestic Product in Louisiana, Bureau of Economic Analysis, <http://www.bea.gov/regional/bearfacts/pdf.cfm?fips=22000&areatype=22000&geotype=3> [<http://perma.cc/E622-UH4U>] (last published Dec. 10, 2015); Fact Sheet on Personal Income and Gross Domestic Product in Tennessee, Bureau of Economic Analysis, <http://www.bea.gov/regional/bearfacts/pdf.cfm?fips=47000&areatype=47000&geotype=3> [<http://perma.cc/JPL3-HQMX>] (last published Dec. 10, 2015).
- 37 Fact Sheet on Personal Income and Gross Domestic Product in Alabama, *supra* note 36.
- 38 Fact Sheet on Personal Income and Gross Domestic Product in Arkansas, *supra* note 36; Fact Sheet on Personal Income and Gross Domestic Product in Florida, *supra* note 36.
- 39 The GDP figures are from the Bureau of Economic Analysis. *See* sources cited *supra* note 36. The lottery-proceeds figures are from the report. *See AUM Report, supra* note 1, at 6, 7, 8, 9, 10. All other figures were calculated by the author, with the per-capita calculations based on population estimates from the U.S. Census Bureau. *See* “Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2015,” U.S. Census Bureau, <http://www.census.gov/popest/data/>

state/totals/2015/tables/NST-EST2015-01.xlsx [<http://perma.cc/8CGR-7L8A>] (last visited Mar. 8, 2016).

40 *See supra* note 29 and accompanying text.

41 *See AUM Report, supra* note 1, at 13.

42 *Id.*

43 *Id.* (footnote omitted).

44 *See* Steve Bourie, “Florida Casinos,” *American Casino Guide*, <http://www.americancasinoguide.com/casinos-by-state/florida-casinos.html> [<http://perma.cc/55QE-H68A>] (last visited Mar. 5, 2016); Steve Bourie, “Louisiana Casinos,” *American Casino Guide*, <http://www.americancasinoguide.com/casinos-by-state/louisiana-casinos.html> [<http://perma.cc/7CB7-46HP>] (last visited Mar. 5, 2016).

45 *See* Steve Bourie, “Maine Casinos,” *American Casino Guide*, <http://www.americancasinoguide.com/casinos-by-state/maine-casinos.html> [<http://perma.cc/G8V7-XWE9>] (last visited Mar. 5, 2016); Steve Bourie, “Maryland Casinos,” *American Casino Guide*, <http://www.americancasinoguide.com/casinos-by-state/maryland-casinos.html> [<http://perma.cc/TR4K-QR9L>] (last visited Mar. 5, 2016).

46 Howard Stutz, “Gaming Revenue Tumbles in Nevada, on Strip for Third Straight Month,” *Las Vegas Review-Journal* (Sept. 30, 2015), <http://www.reviewjournal.com/business/casinos-gaming/gaming-revenue-tumbles-nevada-strip-third-straight-month> [<http://perma.cc/4VQ2-ZMXH>].

47 *AUM Report, supra* note 1, at 13 & n. 3.

48 E-mail from Andrew A. Yerbey, Senior Policy Counsel, Alabama Policy Institute, to Cathy Crabtree, Executive Director, Institute for Accountability and Government Efficiency (Jan. 12, 2016) (on file with the Alabama Policy Institute).

49 E-mail from Andrew Klebanow, Partner, Global Market Advisors, to Andrew A. Yerbey, Senior Policy Counsel, Alabama Policy Institute (Jan. 12, 2016) (on file with the Alabama Policy Institute).

50 *Id.*

51 Global Market Advisors describes itself as “one of the world’s leading consulting firms serving the casino gaming, hospitality, and airline industries.” “About Us,” Global Market Advisors, <http://globalmarketadvisors.com/about-us/> [<http://perma.cc/X98V-PRG2>] (last visited Mar. 6, 2016). Accordingly, a review of the publicly available gaming-market assessments conducted by Global Market Advisors suggests that they are usually commissioned by gambling interests. *See, e.g.*, Global Market Advisors, *Gaming Market Assessment: New Windsor, NY* (2014) (“Prepared for: Greenetrack Inc.”), available at <http://www.gaming.ny.gov/pdf/Redacted%20RFA%20Applications/The%20Grand%20Hudson/Revised%20Redacted%20102014/VIII.A.3-1.pdf> [<http://perma.cc/7KXC-BVR9>].

52 Douglas M. Walker, “Overview of the Economic and Social Impacts of Gambling in the United States,” in *The Oxford Handbook of the Economics of Gambling* 108, 110 (Leighton Vaughan Williams & Donald S. Siegel eds., 2013) (citation omitted).

53 *AUM Report, supra* note 1, at 13.

54 *Id.* at 15.

55 *Id.* at 15 n. 1.

56 *See generally* *AUM Report*, *supra* note 1, at 13. This conclusion is drawn from the fact that the lottery-revenue prediction can be replicated by simply multiplying the estimate by the population of Alabama and the casino-revenue predictions can be replicated by simply multiplying the estimates by the various tax rates.

57 An illuminating discussion of the displacement effect in the context of casino gaming is found in John E. Anderson, “The Economics of Casino Taxation,” in *The Oxford Handbook of the Economics of Gambling*, *supra* note 52, at 18. An excerpt:

The introduction of casino gambling in a region yields a new source of tax revenue, but that revenue is not entirely new. There are important interactions among the various preexisting taxes that are collected by state and local governments. Thomas Garrett has studied casino start-ups and warns that the new tax revenue a new casino generates cannot be considered as new money to the region in which it is located. His review of the evidence on revenue interactions indicates that the effects of casino revenue on other state revenue sources have to be examined carefully with particular attention paid to local conditions. Charles Leven and Donald Phares estimated the spending displacement caused by casinos introduced in the [s]tate of Missouri. . . . Their evidence indicates that spending on casino gaming comes at the expense of reduced spending on other goods and services, including other forms of gambling . . . , as well as from reduced savings. Since the displaced spending may have also been taxable, the net revenue gains to the state and local governments are smaller than they first appear.

*Id.* at 25–26 (citations omitted). Therefore, as Anderson states, “[i]t is important to disentangle the significant revenue interactions in order to get an accurate picture of the net revenue generated by new casinos.” *Id.* at 26.

58 *AUM Report*, *supra* note 1, at 13.

59 *Id.* at 5.

60 This figure, of course, represents only the decrease in state-level sales-tax collections. Reallocation of spending will also decrease sales taxes collected by cities and counties; however, these changes must be estimated on a case-by-case basis.

61 *See generally* Deepak Chhabra, “Estimating Benefits and Costs of Casino Gambling in Iowa, United States,” 46 *Journal of Travel Research* 173 (2007); Charles Leven & Donald Phares, “Casino Gaming in Missouri: The Spending Displacement Effect and Net Economic Impact,” in *Proceedings of the 90th Annual Conference on Taxation* 431 (1998).

62 Chhabra, *supra* note 61, at 178; Leven & Phares, *supra* note 61, at 436.

63 *AUM Report*, *supra* note 1, at 13.

64 *Id.*

65 *See* discussion *supra* pp. 4–7.

66 *AUM Report*, *supra* note 1, at 13.

- 67 See *supra* note 60 and accompanying text.
- 68 Douglas M. Walker & John D. Jackson, “The Effect of Legalized Gambling on State Government Revenue,” 29 *Contemporary Economic Policy* 101, 103 (2011).
- 69 *Id.* at 113.
- 70 *Id.* (emphasis added).
- 71 See discussion *supra* p. 1.
- 72 *AUM Report*, *supra* note 1, at 3.
- 73 Amber Huett et al., Center for Writing Excellence, *Introduction to Literature Reviews* 1 (2011), <http://www.una.edu/writingcenter/docs/Writing-Resources/Literature%20Reviews.pdf> [<http://perma.cc/G67J-2MQ9>] (second emphasis added).
- 74 Vanchai Ariyabuddhiphongs, “Lottery Gambling: A Review,” 27 *Journal of Gambling Studies* 15 (2011).
- 75 *Id.* at 15, 28–33.
- 76 Robert J. Williams, Jürgen Rehm & Rhys M.G. Stevens, Canadian Consortium for Gambling Research, *The Social and Economic Impacts of Gambling* 26 (2011), [http://www.uleth.ca/dspace/bitstream/handle/10133/1286/SEIG\\_FINAL\\_REPORT\\_2011.pdf](http://www.uleth.ca/dspace/bitstream/handle/10133/1286/SEIG_FINAL_REPORT_2011.pdf) [<http://perma.cc/78UA-NHNU>].
- 77 *AUM Report*, *supra* note 1, at 3.
- 78 Nowhere does the report “summarize the literature on monetary issues related to lotteries.” See generally *id.* at 1–15. Notwithstanding, it should be noted that its authors claim the contrary. E-mail from Cathy Crabtree, Executive Director, Institute for Accountability and Government Efficiency, to Andrew A. Yerbey, Senior Policy Counsel, Alabama Policy Institute (Jan. 7, 2015) (on file with the Alabama Policy Institute) (claiming that “[p]oints five and six in the [i]ntroduction are embodied in the analysis portions of the report”).
- 79 *AUM Report*, *supra* note 1, at 3.
- 80 See generally *id.* at 13–15.
- 81 See discussion *supra* Part II.
- 82 See generally National Gambling Impact Study Commission, *Final Report* (1999). For background on the NGISC, see William N. Thompson, *Gambling in America: An Encyclopedia of History, Issues, and Society* 249–51 (2001).
- 83 See generally Douglas M. Walker, “Overview of the Economic and Social Impacts of Gambling in the United States,” in *The Oxford Handbook of the Economics of Gambling*, *supra* note 52, at 108. But see generally Douglas M. Walker, *Casinonomics: The Socioeconomic Impacts of the Casino Industry* 177–96 (2013) (discussing the general problems with social-cost research).
- 84 Alan Mallach, “Economic and Social Impact of Introducing Gambling: A Review and Assessment of the

Literature” 9 (Federal Reserve Bank of Philadelphia, Discussion Paper, 2010), [http://www.philadelphiafed.org/community-development/publications/discussion-papers/discussion-paper\\_casino-gambling.pdf](http://www.philadelphiafed.org/community-development/publications/discussion-papers/discussion-paper_casino-gambling.pdf) [<http://perma.cc/H7JN-4NN3>].

85 Williams, Rehm & Stevens, *supra* note 76, at 12.

86 *Id.* (emphasis omitted).

87 *Id.* at 13.

88 *Id.*

89 *Id.*

90 *AUM Report*, *supra* note 1, at 3.

91 Williams, Rehm & Stevens, *supra* note 76, at 14.

92 *Id.* at 15.

93 *See* sources cited *supra* note 11.

94 *See* discussion *supra* p. 1 (giving the purpose).



### *About the Author*

Keith D. Malone received his Ph.D. in economics from the University of Alabama in 2006. His fields of specialization are in public economics and applied microeconomics, focusing on income distribution, tax policy, and regional economic development. He has served as a faculty member at the University of North Alabama (UNA) since 2004 and has taught as a professor of economics since 2015. Dr. Malone has contributed to numerous peer-reviewed journals and research monographs, as well as conducted a number of economic-impact studies for companies such as Boeing.

## ABOUT API

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