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THE BLINKEN REPORT

State Revenues From Gambling

Short-Term Relief, Long-Term Disappointment

Lucy Dadayan

April 2016

The Nelson A. Rockefeller Institute of Government, the public policy research arm of the State University of New York, was established in 1982 to bring the resources of the 64-campus SUNY system to bear on public policy issues. The Institute is active nationally in research and special projects on the role of state governments in American federalism and the management and finances of both state and local governments in major areas of domestic public affairs.

ACKNOWLEDGMENTS

First and foremost, we would like to thank Ambassador Donald Blinken for his support for this report and for the Institute more generally.

This report benefited from the insights and expertise of two external reviewers: Jonathan Griffin, senior policy specialist at the National Conference of State Legislatures, and Douglas Walker, professor of economics at the College of Charleston in South Carolina. Both provided valuable feedback on the report. They bear no responsibility for any errors that may remain, and neither they nor their organizations necessarily endorse its findings or conclusions.

The report also benefited from the feedback and guidance provided at various stages by Donald Boyd, director of the Fiscal Studies Program at the Rockefeller Institute of Government and Thomas Gais, director of the Rockefeller Institute of Government.

Fangning Li, graduate research assistant, supported with data collection and analysis. Other Rockefeller Institute staff contributing to the publication, dissemination, and communication of the report include Institute Deputy Director for Operations Robert Bullock, Director of Publications Michael Cooper, Assistant Director for Research Management Heather Trela, and Director of Information Systems Joe Chamberlin.

Finally, we thank the many state officials and other experts in the field who were so generous with their time and help in providing data and useful information.

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Preface

Readers of the Rockefeller Institute's fiscal reports know that recovery in state and local revenues has been slow since the deep drops in 2009. And though the national economy has shown fairly consistent rates of growth in jobs, economic output, and home prices in recent years, the strength of the recovery has varied greatly across localities.

In light of these facts, it is not surprising that states are looking for new ways to raise revenues and promote economic development in struggling regions — and many are turning to gambling activities and facilities as solutions. However, as Dr. Lucy Dadayan shows in this new *Blinken Report,* state authorizations and promotions of gambling offer little long-run relief to state revenue problems. New gambling activities may generate short-run increases in public revenues, but these increases are getting smaller and their duration shorter, perhaps as more and more states compete for a limited pool of gambling dollars.

This report is the Rockefeller Institute's third *Blinken Report* — an annual assessment of critical issues in state and local finances. The report honors one of the Institute's founders, Ambassador Donald Blinken. Over three decades ago, the Board of Trustees of the State University of New York — then chaired by Don Blinken — approved the proposal by SUNY Chancellor Clifton Wharton to establish a policy institute attached to the largest comprehensive university system in the U.S. Since then, Ambassador Blinken has been one of the Institute's most thoughtful advisers and continues to support its work as a member of our Board of Overseers. We at the Rockefeller Institute thank Donald and Vera Blinken for their enduring support for the Institute.

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Executive Summary

States expanded allowable gambling options significantly in the past two decades, particularly in the wake of the Great Recession when more than a dozen states authorized new options in an effort to generate more revenues. Despite these expansions, gambling revenue plays a small role in state budgets, ranging between 2.0 and 2.5 percent of state own-source general revenues in the typical state. Only a few states, including Nevada, Rhode Island, and West Virginia, have much higher reliance on gambling revenue.

State and local government gambling revenues have softened significantly in recent years. States and localities derive the bulk of gambling-related revenues from three major sources — lotteries, accounting for about two-thirds of gambling revenue; commercial casinos; and racinos. Lottery revenue declined by 0.7 percent in real (inflation-adjusted) terms in fiscal year 2015, with twenty-seven states reporting declines. This was the second consecutive decline. Casinos experienced dramatic growth during the 1990s, but that growth slowed over the past decade. In recent years, much of the growth has shifted to racinos — hybrids of casinos and racetracks — as more states have approved such facilities. Revenues from casinos and racinos combined increased by 1.1 percent in real terms in 2015, but that growth is mostly attributable to two states, Maryland and Ohio, which legalized casino/racino operations after the Great Recession and opened more facilities in fiscal year 2015.

The recent geographic expansion of gambling created stiff competition as facilities vie for the same pool of consumers, particularly in the northeastern region of the nation, where weakening growth has been partly attributable to market saturation and industry cannibalization. Between 2008 and 2015, inflation-adjusted tax and fee revenues from commercial casinos grew by more than $1.3 billion in states with newly authorized casinos, but declined by $1.4 billion in states with established casinos, for a net decline of 1.5 percent nationally.

State officials considering expansion of existing gambling activities or legalization of new activities should weigh the pros and cons carefully. History shows that in the long run growth in state revenues from gambling activities slows or even reverses and declines, so it's important to take into consideration market competition within the state and among neighboring states. Officials also should consider social and economic costs associated with gambling, which are hard to measure. Gambling expansion is understandably appealing to officials wishing to raise revenue without raising taxes, but the long-term revenue is uncertain and potential economic and social costs require careful consideration.

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Introduction

Gambling has become very popular as a way for states to raise revenue. Many states have been authorizing and expanding additional forms of gambling and finding ways to raise revenues from those activities. States are particularly likely to expand gambling in the aftermath of recessions and subsequent economic downturns in the hopes of raising more revenues.

In the short-run, states indeed do raise additional revenues due to expansion of gambling activities and facilities. However, history shows that in the long-run the growth in state revenues from gambling activities slows or even reverses and declines. In short, the revenue returns deteriorate—and often quickly. This pattern of deterioration may be due to competition with other states for a limited market (saturation), competition between different forms of gambling (substitution), or other factors. Despite the deterioration, the dynamic often continues, as states find new forms of gambling to authorize, open new facilities, and impose higher taxes on gambling. The results are short-run yields and longer-run deterioration.

In addition to the weak long-run growth of gambling revenues, the expansion of highly taxed gambling activities also raises equity issues, since the revenues come largely from low and moderate income households, whose incomes have declined (or not grown) in real terms along with their spending. A related equity issue may be the effects of expansion of state-sanctioned commercial casinos[1] on Native American casinos, which have been around since 1988. These are low-income communities that found a source of income in casinos, but the expansions of state-sanctioned commercial casinos may reduce their yields.

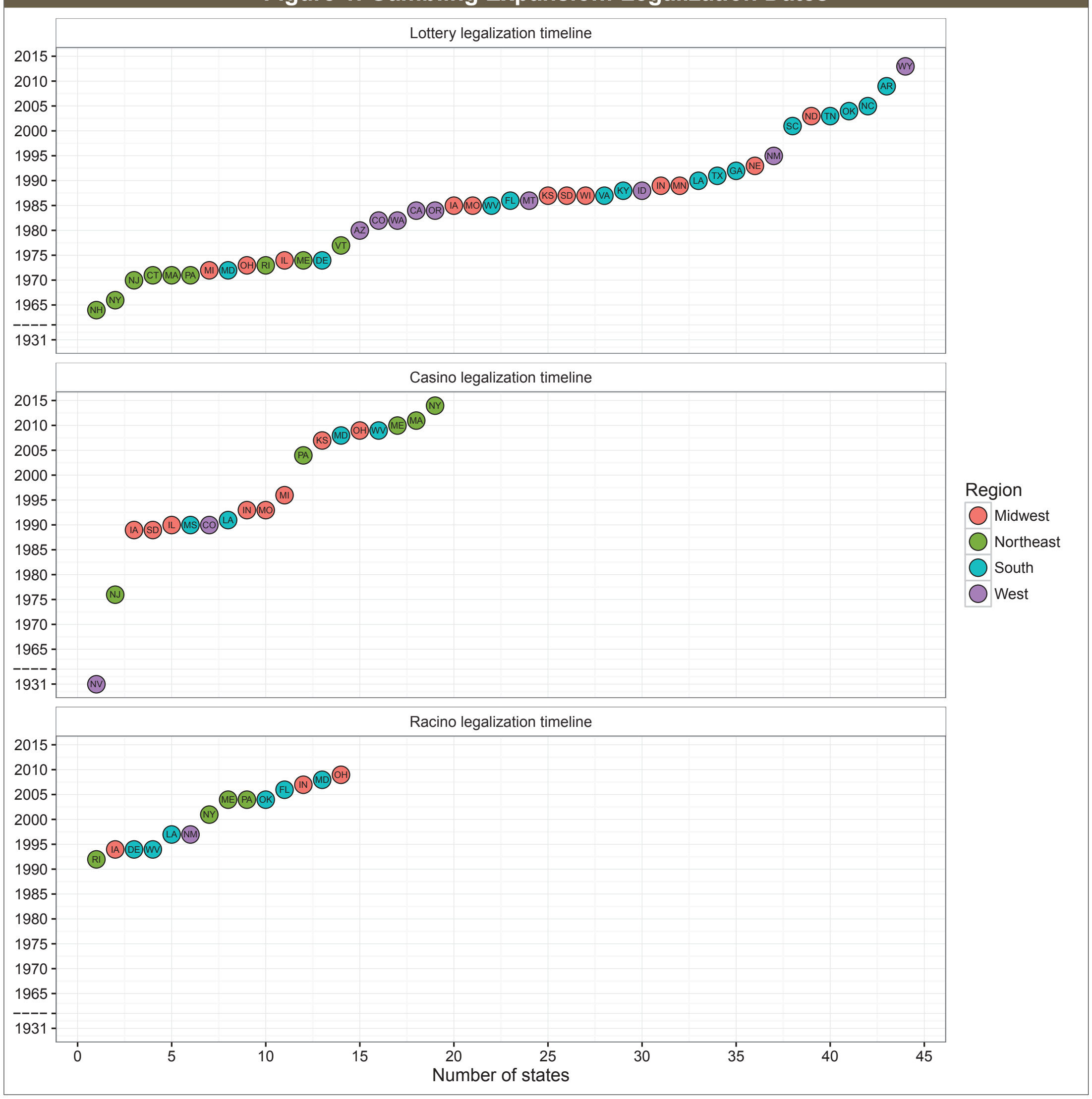
Finally, the research literature suggests that expansion of gambling activities has social and economic costs, although the findings are mixed on these points, and it's unclear whether the economic development impacts are strong enough to counter the costs and other weaknesses of these policies.

Availability of State-Sanctioned Gambling Activities in the United States

State-sanctioned legalized gambling has expanded gradually and continuously over the last four decades. All states except Hawaii and Utah collect revenue from one or more forms of gambling, such as lotteries, commercial casinos, racinos, pari-mutuel wagering, Native American casinos, and some less common types of gambling activities. Currently, forty-four states operate lotteries, nineteen have legalized commercial casino operations, thirteen have racinos, and over forty states allow pari-mutuel wagering. In addition, Native American casinos are legal in twenty-nine states.

Figure 1 shows gambling expansion over time for three major types: lotteries, commercial casinos, and racinos. The dates indicated on Figure 1 are for legalization rather than operations. In general, it takes months or even years of debate before any type of gambling activity is legalized. In addition, it takes months or even years before the legalized gambling activity becomes fully operational.

Figure 1. Gambling Expansion: Legalization Dates



As shown on Figure 1, lottery operations expanded before the 1990s and mostly in response to the 1973 recession and the 1980 double-dip recessions. Casino and racino operations became operational since the 1990s, mostly in response to the last three recessions. In addition, the IGRA of 1988 and legalization of tribal gambling encouraged some state governments to consider the legalization of commercial casinos.[2]

New Hampshire was the first state, in 1964, followed by New York in 1967 to legalize modern-day lottery operations. Overall, the Northeastern states were the early adopters of lottery operations, while the states in the South are the late adopters. By 1990, thirty-two states had legalized lotteries. Another five states legalized lottery operations between 1990 and 2000 and seven more states did so since 2001. Arkansas and Wyoming were the latest states to legalize a lottery in 2008 and 2013, respectively.

Commercial casino and racino gambling are now operating in nearly half of the United States. As of fiscal year 2015, nineteen states had legalized casino operations and fourteen states racino operations. Most of the states with casino and racino operations are located in the Midwest and Northeast regions.

Nevada was the first state to legalize casino operations in 1931, followed by New Jersey in 1976. South Dakota and Iowa were the next two states to legalize casinos in 1989. Another nine states legalized casinos between 1990 and 2007. Finally, six more states legalized casino operations since 2008, mostly in response to fiscal stress caused by the Great Recession.

The expansion of lotteries and casinos contributed to declines in revenues from pari-mutuel betting. Therefore, many racetracks were converted into so-called racinos: a hybrid of a casino and a racetrack. In other words, racinos are racetracks that host electronic gaming devices such as slot machines or VLTs. In the most recent years, racinos in some states started operating table games in the hopes of generating more revenues. Rhode Island was the first state to legalize racino operations in 1992, followed by eleven other states between 1994 and 2007. Finally, two more states legalized and opened racinos since 2008.

Overall, casino and racino operations are more common in the Northeastern and Midwestern states and far less common in the Western region. Only three Western states — Colorado, Nevada, and New Mexico — have casino or racino operations. Seven states have operations of both types of facilities: Indiana, Iowa, Louisiana, Maryland, Ohio, Pennsylvania, and West Virginia. Maine legalized racino operations in 2004 and casino operations in 2010 but in 2012 converted its only racino facility into a casino.

GLOSSARY

Lottery: Lotteries allow patrons to guess winning numbers, or otherwise draw "lots" (such as those on scratch-off tickets) for cash prizes. New Hampshire was the first state to legalize modern-day lottery operations in the last 100 years, in 1964. (Several southern states authorized lotteries in the late 1800s to finance Reconstruction, but they were subsequently ended.) Six states enacted legislation that allows sale of lottery tickets over the internet.

Commercial Casino: A private gambling facility that is land-based, riverboat, or dockside and hosts the following types of activities: slot machines, video games, card games, or other games of chance such as keno, craps, and bingo. Nevada was the first state to legalize operations of commercial casinos, in 1931.

Native American/ Indian Casinos: These casinos comprise gambling businesses that are run by tribes and operate on Indian reservations. In 1987, the U.S. Supreme Court recognized that Native American tribal entities could operate gaming facilities free of state regulation. A year later, in 1988, the Congress enacted the Indian Gaming Regulatory Act (IGRA) to provide terms and conditions for gambling on Indian reservations. States usually do not have authority to regulate or profit from these Indian casinos. However, some states have negotiated special revenue sharing agreements with the tribes.

Racino: Racino is a hybrid of casinos and racetracks. In addition to racing, racinos also host other gambling activities such as slot machines, video lottery terminals, and table games. The first racino emerged in 1992, when Rhode Island legalized placement of video lottery terminals at racetracks.

Video Gaming Devices / Video Lottery Terminals (VLTs): These are special gaming machines that can be programmed to carry a variety of games, such as video poker. Some states count revenues generated from VLTs as lottery revenue, while other states count it as part of racino or casino revenues.

Pari-mutuel Wagering: Pari-mutuel wagering usually refers to gambling on an event such as horse racing, dog racing, jai-alai, or other sporting event with a relatively short duration in which participants finish in a ranked order.

iGaming (Internet Gambling): In general, iGaming or internet gambling refers to online casino gambling (including online poker). Nevada was the first state to legalize casino-style online gambling in 2013, followed by Delaware and New Jersey.

Fantasy Sports: Fantasy sport is a type of online game where participants assemble fantasy/virtual teams and compete against each other based on actual professional players' or teams' statistics.

Why Do States Legalize and Expand Gambling?

Desperate fiscal times often lead to desperate legislative measures, including legalization and expansion of gambling. However, fiscal stress is not the only motivation for gambling adoption.

Many researchers have examined factors leading to the legalization and adoption of gambling activities. The factors that have the strongest impact on gambling legalization are efforts to raise revenue in response to poor state fiscal conditions, efforts to stimulate economic development, an alignment of political interests in support of gambling, and efforts to counteract interstate competition for gambling revenue.

States often legalize and expand gambling activities during or after fiscal crises to generate new streams of tax revenues without increasing tax rates on income or sales. When state finances are depressed, legislators turn to gambling to attract tourism and keep gambling residents in-state.[3]

State voters and legislators may also turn to casinos and racinos in the hope of stimulating economic development and revitalizing distressed economies. However, there is no consensus on whether the operation of casinos and racinos leads to economic development.[4] Some studies have concluded that casinos and racinos create jobs and improve the regional economies in which they operate.[5] Other studies, on the other hand, found that casinos and racinos simply alter the mix of employment and income among industries and do not lead to real economic growth.[6]

Politics and interest group lobbying are also contributing factors to gambling adoption and expansion. Some researchers argued that the interests of the casino industry, state politicians, and legislators are often aligned.[7] The gambling industry is a significant contributor to politicians and political parties and plays a crucial role in the political process. However, according to Pierce and Miller, states with a large fundamentalist population are less likely to sanction gambling: "… legalized gambling offers a wonderfully varied set of political forces. From religious fundamentalists on the grassroots level to casino corporations and the horse-racing industry, legalized gambling spurs both mass politics and interest group politics."[8]

The rapid expansion and geographic proliferation of gambling activities have led to increased interstate competition for the gambling market.[9] State politicians and legislators often legalize gambling activities in response to interstate competition and in the hopes of keeping residents and gambling taxes within the state. Interstate competition is particularly relevant in the case of casino and racino legalization, and particularly for the states that are late adopters. Etzel classified states into four major categories:

- **Category I:** states without gambling, with low losses to neighbor states and with low economic cost;
- **Category II:** states without gambling, with high losses to neighbor states and with high economic cost;

- **Category III:** states with gambling, with a high percentage of tourist gamblers and with high economic gain;
- **Category IV:** states with gambling, with low percentage of tourist gamblers, and with volatile economic gain.[10]

According to Etzel, "Many early gambling states were in Category III, and new gambling states aspire to be the same. As legal casinos spread, however, more states will end up in Category IV, and the overall economic impact of casinos is less likely to be positive."[11] In other words, states expand gambling in the hope that they'll mimic the successes of early adopting states, but the more gambling expands, the more likely it is that economic and revenue gains will be eroded due to competition.

State and local government tax revenues declined significantly during the Great Recession. As a result, many states considered expanding gambling operations to help balance budgets. Since the Great Recession, more than a dozen states have expanded gambling. For example, states introduced new forms of gambling such as video games, sports betting, card rooms, iGaming, and fantasy sports betting. Four states — Maine, Maryland, Ohio, and West Virginia — legalized casino operations. Several states, including Delaware, Maine, Maryland, Pennsylvania, and Rhode Island, legalized poker and other table game operations at their casinos and racinos in the hopes of generating more revenues. New York and nine other states entered into an agreement to create a new multi-state lottery. Online lottery (i.e., sale of lottery tickets over the internet), iGaming, and fantasy sports betting appear to be the next targets for many states. At the end of fiscal year 2015, iGaming was legal only in three states — Delaware, Nevada, and New Jersey.

In addition to enacted proposals, gambling expansion proposals failed in a few states. For example, in Hawaii, one of two states with no state-sanctioned gambling, the governor gave serious consideration to a legalized gambling initiative but the measure has not been enacted.

The Impact of Gambling on State and Local Finances

State and local governments raised $27.7 billion in 2015 from major types of gambling. Two-thirds of gambling revenues came from lottery operations. Revenues from casinos and racinos accounted for 19.3 and 12 percent of the total gambling revenues. Revenues from video games and pari-mutuel wagering represented 2.4 and 0.5 percent of the total, respectively (see Table 1). States also raise revenue from Indian casinos. However, states cannot tax Indian casinos directly, and only raise revenue pursuant to negotiated revenue-sharing agreements. Revenues from Indian casinos are not reported comprehensively, and is considerably less than revenue from commercial casinos. Appendix Table 12 provides available data on state revenue from Indian casinos. This report focuses on commercial casinos and,

Table 1. Overview of Gambling Revenue				
Timeline	**Gambling revenue ($ millions) FY 2015**	**Percent of total**	**Gambling revenue per resident age 18 & above**	**Growth in inflation-adjusted gambling revenue, 2008 to 2015**
Lottery	$18,218	65.7%	$74.3	0.2%
Commercial casinos	$5,361	19.3%	$21.9	-1.5%
Racinos	$3,326	12.0%	$13.6	18.6%
Video gaming	$672	2.4%	$2.7	25.1%
Pari-mutuel	$135	0.5%	$0.5	-44.5%
Total Gambling	**$27,714**	**100.0%**	**$113.0**	**1.8%**

Sources: Rockefeller Institute analysis of gambling revenue data from state gaming regulatory agencies; Census Bureau (population), Bureau of Economic Analysis (GDP index).

except where noted otherwise, references to casinos are to commercial casinos.

Gambling revenue plays a relatively small role in state budgets. In most states, gambling revenue represents between 2.0 and 2.5 percent of state own-source general revenues. Only a few states, including Nevada, Rhode Island, and West Virginia, have much higher reliance on gambling revenue.

We analyzed three related measures of gambling tax and fee revenue in each state, including the state's share of the nationwide total, revenue per resident age eighteen and above, and revenue per $1,000 of personal income in the state (see Appendix Table 1).

States vary widely in terms of shares of nationwide gambling revenue. New York and Pennsylvania collect the largest shares of such revenue, at 11.5 and 8.8 percent of the national total, respectively.

State revenue from gambling also varies widely when adjusted for population. Nationwide, gambling revenue amounted to $113 per adult resident in 2015.[12] In Rhode Island and Nevada, such revenue amounted to over $400 per adult resident. In twenty-four states, gambling revenue was $100 or less per resident aged eighteen or above, and in another fifteen states it was $200 or less. Differences across states reflect differing degrees of gambling tourism, different tax regimes, different preferences for gambling, and other factors.

Nationwide, gambling revenue per $1,000 of personal income is $1.8. West Virginia and Nevada report the highest levels of gambling revenue by this measure, at $8.3 and $7.7, respectively.

Gambling revenues in five states — California, Florida, Illinois, New York, and Pennsylvania — have relatively high proportions of the national total, at 5.0 percent or above, but those figures are mostly driven by the states' comparatively high populations and economic activity. In fact, gambling revenue per resident is below the national averages in California and Florida. On the other hand, four smaller states — Delaware, Rhode Island, South Dakota, and West Virginia — have relatively low shares of the national total but rank well above national averages in gambling revenue per resident and per $1,000 of personal income.

The Rockefeller Institute of Government collected and analyzed revenue data from major types of gambling. In this report, we define gambling revenues as revenues from various taxes and fees transferred to state and local governments. We provide detailed data for the following types of gambling: lotteries, casinos, racinos, and pari-mutuel wagering. In addition, we provide revenue statistics for video gaming for five states that allow video gambling operations and report such data separately. Finally, we also provide some statistics for revenues from Native American casinos for seven of twenty-nine states that have Native American casinos.[13]

States derive the bulk of gambling-related revenues from three major sources — lotteries, casinos, and racinos. Casinos experienced dramatic growth during the 1990s. In the most recent years, much of the growth has shifted to racinos — hybrids of casinos and racetracks — as more states have approved such facilities.[14] Pari-mutuel betting, once the major source of gambling revenue for states, now represents less than one percent of overall gambling revenue for the nation.

Appendix Table 2 shows state-by-state revenue collections from major gambling revenue sources for fiscal years 2014 and 2015 and Appendix Table 3 shows the percent change in gambling revenues from fiscal year 2014 to 2015.

In fiscal year 2015 states' revenues from the major types of gambling grew by 1.5 percent compared to fiscal 2014. After adjusting for inflation,[15] revenues from major sources of gambling grew by 0.2 percent. Revenues from lottery operations, the most significant source of all gambling revenue, grew by 0.6 percent nationally in fiscal 2015. Revenues from commercial casino operations, the second largest source of all gambling revenue, grew by 1.3 percent. Revenue collections from racino operations and pari-mutuel wagering increased by 4.2 and 2.7 percent, respectively. We also provide revenue data collected from video gaming activities in the following five states: Delaware, Illinois, Louisiana, Montana, and West Virginia. These five states report revenues from video gaming separately, while some other states report revenues from VLTs as part of lottery, racino, or casino operations, as already discussed. The video gaming machines in these five states are not necessarily located at casino or racino locations, but at places such as bars, restaurants, clubs, hotels, etc. For example, West Virginia operates VLTs at racino locations and other video gaming devices (called limited video lottery) in other locations.[16] Similarly, revenues from video gaming machines in Delaware (called charitable video lottery) are reported separately as they are not necessarily located at the racinos.[17] In fiscal 2015, revenues from video gaming grew by 15.4 percent. The rapid growth in video gaming revenues is mostly attributable to Illinois, where video gaming operations were legalized only recently, in July of 2009.

The growth in overall gambling revenues is not distributed evenly among the regions. In fiscal year 2015, Mid-Atlantic states had the weakest growth in overall gambling revenues at 0.1

percent, while Far West and New England states had the strongest growth at 2.5 and 2.4 percent, respectively.

Of the forty-seven states with gambling revenue, eighteen states reported declines over the year, while twenty-nine states reported growth.

Lotteries

While casinos and racinos are the focus in many states, lotteries remain the primary source of gambling revenue to governments and represent about two-thirds of all gambling revenues. Currently, forty-four states have legalized state lotteries to raise revenues.[18]

Lotteries are regulated or operated by state governments. The gross revenue from lotteries is usually allocated among lottery administration, lottery prizes, and state funds. Most states transfer between 20 to 30 percent of the gross lottery revenues to the state funds. South Dakota and Oregon stand out as having the largest share of gross lottery revenues dedicated to state funds (see Appendix Table 4).

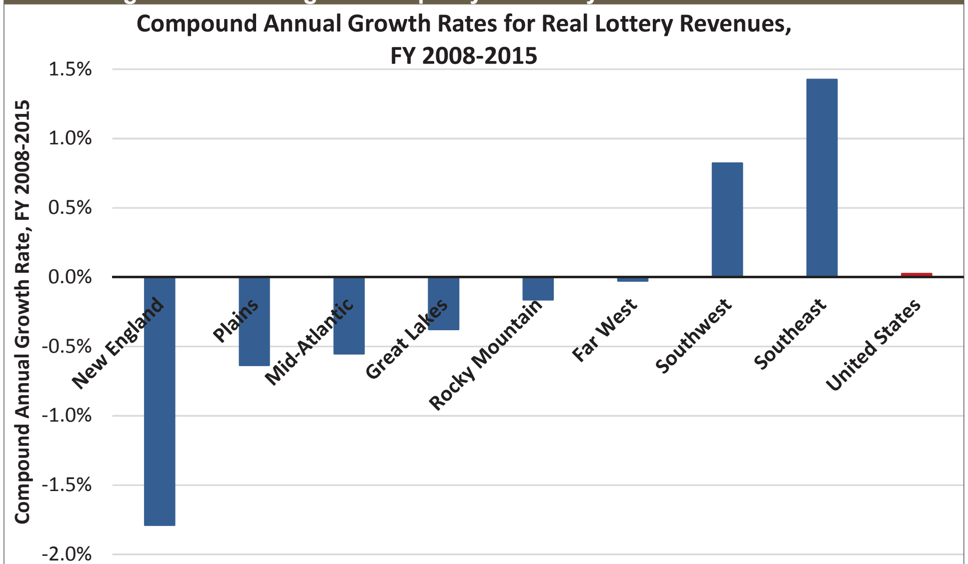
Lottery proceeds are often earmarked by law. States normally put revenues generated from the lottery in the general fund or in a dedicated fund targeted toward particular program areas, such as education, veterans' programs, environmental protection, and natural resources (see Appendix Table 4).

Appendix Table 5 shows state-by-state inflation-adjusted revenue collections from lottery operations for fiscal years 2008-15, percent change in lottery revenues between 2014 and 2015, compound annual growth rates[19] between 2008 and 2015, and percent and dollar change in lottery revenues between 2008 and 2015. Wyoming is excluded since the Wyoming Lottery Corporation has not transferred any revenues to the state yet. The Wyoming Lottery Corporation is a quasi-governmental agency and there were no state funds provided to the Lottery Corporation to begin operations; it secured a private loan to begin operations. Once the Lottery Corporation pays off the loan, they will start transferring revenues to the state, most likely in mid-2016.[20]

Inflation-adjusted lottery revenue collections declined by $31 million or 0.7 percent from fiscal 2014 to 2015. Twenty-seven states saw declines in real lottery revenues, with four states seeing double-digit declines. Sixteen states reported growth in real lottery revenues, with Louisiana reporting the largest growth at 6.9 percent, followed by Oregon at 6.3 percent. Michigan reported the largest dollar value increase of $43 million or 5.7 percent in fiscal year 2015.

Compound annual growth rates varied widely across the states and regions. New England states reported the largest declines while the states in the Southeast region reported the largest growth (see Figure 2). For the nation as a whole, the compound annual growth rate between fiscal 2008 and 2015 was 1.6 percent in nominal terms and less than 0.1 percent in real terms.

Figure 2. Wide Regional Disparity in Lottery Revenue Growth Rates



Sources: Rockefeller Institute analysis of lottery revenue from state lottery financial reports.

Inflation-adjusted compound annual growth rates were negative in twenty-one states.

State revenues from lotteries (excluding revenues from VLTs in Delaware, Maryland, New York, Ohio, Rhode Island, and West Virginia) grew by $1.9 billion or 11.4 percent between fiscal 2008 and 2015 in nominal terms. However, after adjusting for inflation, revenues from lotteries increased by 0.2 percent or $36.1 million for the same period.

Casinos and Racinos

Commercial casinos and racinos have been on the rise in the last decade. For this report, we have tracked the opening dates of each casino in fifteen of the seventeen states with commercial casinos[21] and for each racino that is operational in thirteen states. At the end of fiscal year 2015, there were 160 commercial casinos in fifteen states and fifty-five racinos in thirteen states (see Table 2). Nearly one-third of all 160 casinos and around 56 percent of all fifty-five racinos were opened in the last decade. As shown in Table 2, before fiscal year 1991, there were very few casinos around the nation outside of Nevada. About 50 percent of all casinos and racinos outside of Nevada and South Dakota were opened since 2001.

Table 2. Casino and Racino Opening Dates

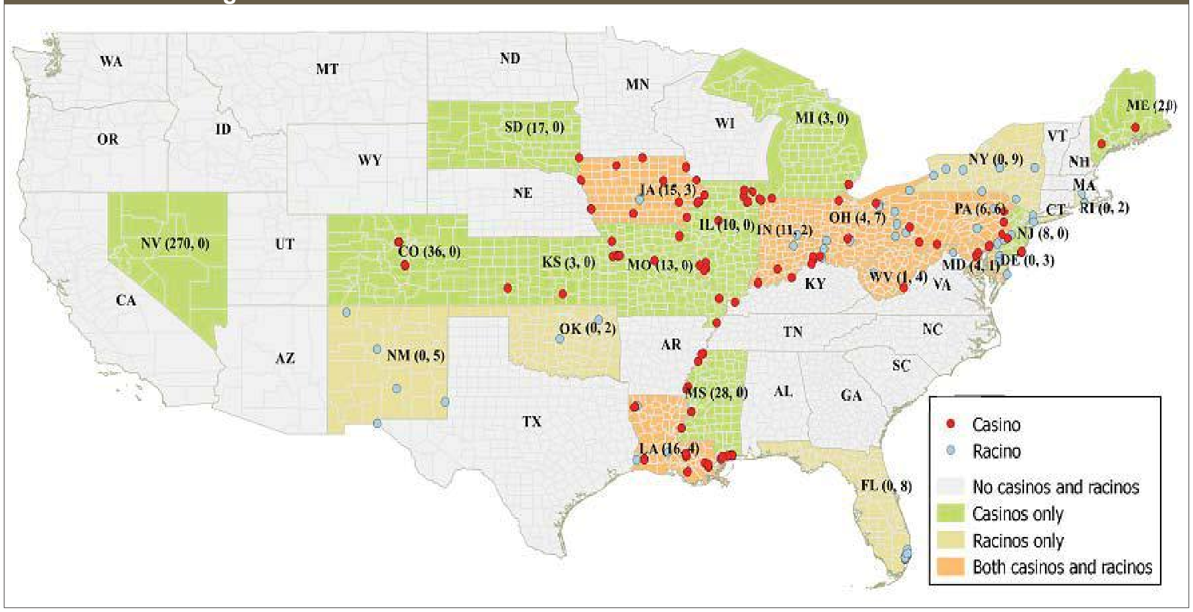
Timeline	Casinos	Racinos	Casinos & racinos	Casinos & racinos, % of total /1
FY 1978 - FY 1990	7	0	7	3%
FY 1991 - FY 1995	50	7	57	27%
FY 1996 - FY 2000	34	9	43	20%
FY 2001 - FY 2005	19	8	27	13%
FY 2006 - FY 2010	20	20	40	19%
FY 2011 - FY 2015	30	11	41	19%
Total	**160**	**55**	**215**	**100%**

Sources: Rockefeller Institute analysis of data retrieved from state gaming regulatory agencies.
1/ The total excludes previously opened facilities in Nevada and South Dakota.

Commercial casinos are more prevalent in eastern states and less prevalent in western states. Figure 3 shows the geographical location of commercial casinos and racinos by state. Most states usually open casino and/or racino facilities near their borders with other states to take advantage of border state-consumers. In addition, Figure 3 shows that quite a few casinos are located along the Mississippi river.

Figure 4 shows cumulative percent change since the Great Recession in inflation-adjusted tax and fee revenues for all commercial casinos and racinos by region.[22] Tax and fee revenues from

Figure 3. Location of Commercial Casinos and Racinos as of FY 2015



casinos and racinos are still below the prerecession levels in the Midwest and West regions and only slightly above the prerecession level in the South. The modest growth in the South is mostly attributable to a single state, Maryland, which legalized casino and racino operations only in 2008. The Northeast experienced steep growth in revenues from casinos and racinos since the start of the Great Recession, although the growth has softened in the last two fiscal years. The large growth in casino and racino revenues in the Northeast is almost exclusively attributable to a single state, Pennsylvania, and to a single racino located in New York City. Pennsylvania legalized casino and racino operations in 2004 and opened five racinos in fiscal year 2007. In addition, Pennsylvania opened an additional racino and six casinos since fiscal year 2008. While racinos in New York were operational since fiscal year 2004, the facility located in New York City was opened only recently, in fiscal year 2012.

Figure 5 shows cumulative percent change in inflation-adjusted casino and racino tax and fee revenues for all states versus late

Figure 4. Wide Regional Disparity in Tax and Fee Revenues from Casinos and Racinos

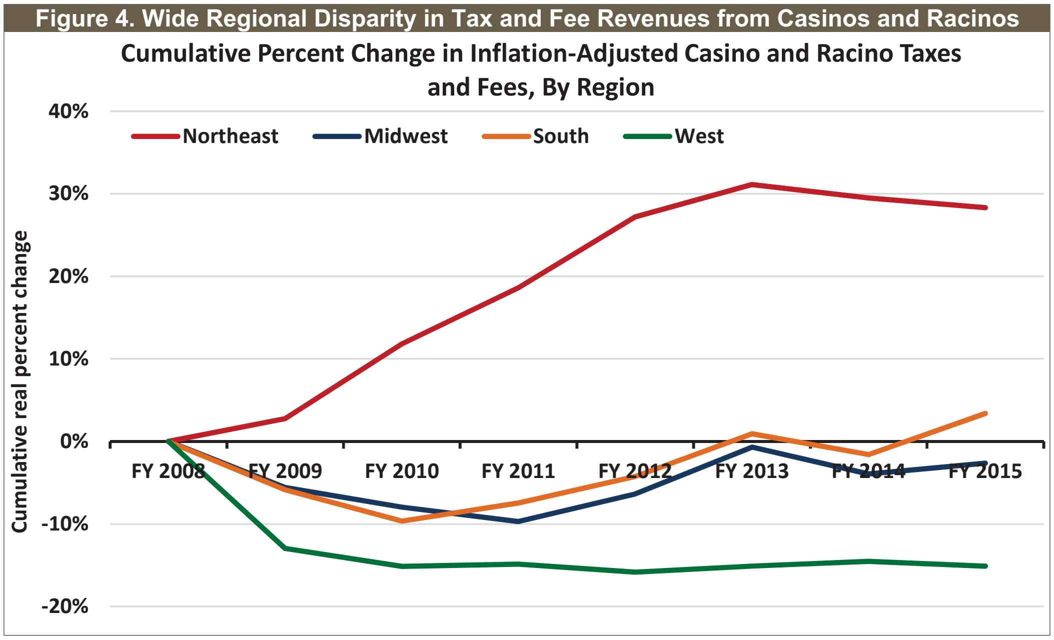
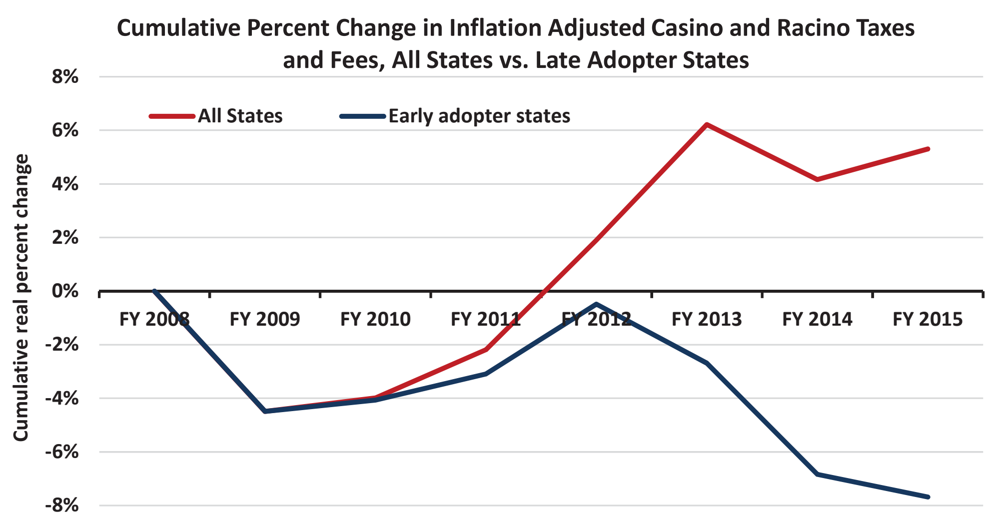


Figure 5. Steep Declines in Casino and Racino Tax & Fee Revenues in Early Adopter States



Sources: Rockefeller Institute analysis of data retrieved from state gaming regulatory agencies.
Note: The following three states - Kansas, Maryland and Ohio, are identified as late adopter states since all three states started casino/racino operations after FY 2008.

adopter states. The blue line excludes Kansas, Maryland, and Ohio as all three states started the operations of casinos and racinos after fiscal year 2008. As shown on Figure 5, after excluding tax and fee revenues for Kansas, Maryland, and Ohio, revenues for the rest of the nation declined steeply, particularly in the last three years. At the end of fiscal year 2015, casino and racino tax and fee revenues were 7.7 percent below the prerecession levels.

It is clear that the expansion of casino and racino operations leads to some growth in total revenues, but that much of the growth in expansion states appears to come at the expense of already-established operations. We see this clearly in data for casinos in Appendix Table 8. However, the growth is not sustainable and the evidence indicates that Americans are spending much less on gambling than they used to.[23] The Great Recession and its anemic recovery had a big impact on consumer discretionary spending behavior, including spending on gambling activities. Moreover, baby boomers have far less retirement savings after the 2008 stock market crash and Millennials and Generation Xers simply don't gamble as much as the baby boomers do.[24]

Commercial Casinos

Commercial casinos are operated by businesses and taxed by the states. Currently, nineteen states have legalized commercial casinos and as of the writing of this report, they are operational in eighteen states (see Appendix Table 6). Six of those nineteen states legalized commercial casino operations during or after the Great Recession. Maine, Maryland, Ohio, and West Virginia have all legalized casino operations since the start of the Great Recession. In addition, casino operations were legalized in Massachusetts and New York. Massachusetts had legalized casino operations in 2011 and opened the first casino in June 2015. New York had legalized casino operations in 2014 and expects to open four destination casino resorts.

At the end of FY 2015, there were about 450 casinos operating in seventeen states. Twenty of those casinos were located in the states that are new to the casino world and started casino operations during or after the Great Recession. Moreover, some states introduced table games at their casino facilities in the hopes of raising more revenues. Despite geographic expansion of casino operations and despite efforts to make casinos more attractive, tax revenues from casino operations did not pick up the growth that many state officials were hoping for. Three states — Colorado, Mississippi, and New Jersey — had closed the doors of some casinos in fiscal year 2015, mostly due to declining revenues and competition from neighboring states.

One state, Nevada, is home to 60 percent of U.S. casino facilities and in fiscal 2015 collected about 17 percent of all state revenue from commercial casinos nationwide, despite a tax on casino activity that is relatively low. Pennsylvania and Indiana also collected relatively large shares of overall casino revenue, at 11 and 9.5 percent, respectively, in fiscal 2015.

Casino tax rates vary widely across the states from as low as 0.25 percent in Colorado to as high as 67 percent in Maryland (see Appendix Table 7). The early adopters of commercial casinos, such as Nevada and New Jersey, have much lower tax rates compared to late adopters of commercial casinos such as Pennsylvania or Maryland. In fact, the states that legalized commercial casinos post-2000 have much higher tax rates at or above 27 percent. Among the rest of the states, nine states have much lower tax rates, at or below 22 percent. Illinois and Indiana are the only two early adopter states with higher commercial casino tax rates. In Illinois, the top tax rate is 50 percent for casinos with over $200 million adjusted gross revenues, while in Indiana the top tax rate is 40 percent for casinos with over $600 million adjusted gross revenues.

Illinois has a long history of legislated tax changes for casinos. Casino tax rates in Illinois were flat at 20 percent until 1997. In 1998, the Illinois legislature implemented a graduated tax rate ranging from 15 percent to 35 percent for five brackets. In 2002, the Illinois legislature revised the commercial casino tax structure, added two more brackets with a top rate at 50 percent to address revenue shortfalls caused by the 2001 recession. In 2003, casino tax rates were revised once again and the legislature added a top rate at 70 percent. The legislature reduced top rate from 70 percent to 50 percent in 2005.[25]

Casino tax structures went through legislated changes in Indiana as well. Before 2002, the casinos in Indiana were taxed at a 20 percent flat rate. In 2002, the legislature in Indiana introduced a graduated tax rate for casinos ranging from 22.5 percent to 35 percent for five brackets. The legislature once again revised casino tax structures in 2007 and added an additional bracket with a 40 percent tax rate.[26]

In addition to tax rates charged on adjusted gross revenues, some states also charge admission fees or gaming device fees or some other local fees. Moreover, most states adopted different tax rates for table games that are usually at a lower rate.

States use tax revenues collected from casinos for various purposes ranging from addressing issues created by problem gambling to education (see Appendix Table 7).

Appendix Table 8 shows state-by-state inflation-adjusted revenue collections from commercial casinos for fiscal years 2008-15, percent change in casino revenues between 2014 and 2015, compound annual growth rates between 2008 and 2015, and percent and dollar change in casino revenues between 2008 and 2015. The states are divided into two groups: the "older" casino states and the "new" casino states. The "older" casino states include those states that had casino operations in place before fiscal year 2008, while the "new" casino states include states that opened casinos in fiscal year 2008 or beyond.

In fiscal 2015, states took in just less than $5.4 billion from commercial casinos, nearly as much as in fiscal year 2014. Revenues declined in nine of seventeen states with commercial casinos in fiscal year 2015. West Virginia and Indiana reported the largest declines at 18.1 and 7.8 percent, respectively. The large declines in both states are mostly attributable to the opening of casinos and racinos in the neighboring state, Ohio, in fiscal year 2012. One of Ohio's four casinos is located in Cincinnati, which is in close proximity to three of Indiana's eleven casinos, ranging only from twenty-five to fifty miles away. The largest growth was reported in Maryland, where collections grew by 17.1 percent. The strong growth in Maryland is mostly attributable to the opening of a new casino in fiscal 2015. If we exclude Maryland, collections for the remaining sixteen states show a decline of 1.2 percent in real terms.

For the nation as a whole, the compound annual growth rate was negative 0.2 percent between fiscal years 2008 and 2015. Moreover, the compound annual growth rate was negative 4.4 in the "older" casino states. Pennsylvania opened its first casinos in fiscal year 2008 and the growth is mostly attributable to the opening of new casinos during the period between 2008 and 2015.

Inflation-adjusted tax and fee revenues from casinos declined by $83 million or 1.5 percent for the nation between 2008 and 2015. The "older" casino states saw much deeper declines at 26.9 percent. Declines were reported in all "older" casino states, indicating that casinos in those states either reached saturation or have been cannibalized by "new" casino states.

The regional competition for casino tax dollars is at its height, particularly for the northeastern region of the nation. When Pennsylvania legalized and opened the doors to casino and racino operations in mid-2000s, casino revenues in New Jersey saw declines and officials in New Jersey put the blame on the new competition in neighboring Pennsylvania. Pennsylvania enjoyed the boom of tax revenue growth from casino and racino operations for the next few years, until the neighboring states, Ohio and Maryland, legalized and opened their own casinos and racinos. Officials in Indiana blamed Ohio for the declines in casino tax revenues.

While the Great Recession had a big impact on state tax revenues in general, we believe that the softening of revenues from casino operations is mostly attributable to market saturation.

Racetrack Casinos or Racinos

Tax and fee revenue from racinos represents the fastest-growing element in states' gambling portfolio. At the end of fiscal year 2015 there were fifty-five racino facilities in thirteen states, with nine operating in New York and six in Pennsylvania (see Appendix Table 9). Six of thirteen racino states—Delaware, Maryland, New York, Ohio, Rhode Island, and West Virginia — host VLTs.

The format of racinos evolved over time. Many racinos now offer table games. In addition, some racinos no longer offer much or any live racing events. For example, the two racinos in Rhode Island were the forerunner of the racinos but they no longer offer any live racing events.

Racino tax rates, just like casino tax rates, vary widely across the states from as low as 10 percent in Oklahoma to as high as 70 percent in New York (see Appendix Table 10). However, unlike casino states, the high tax rates in racino states are not tied to the late legalization dates. Nine of thirteen racino states have a flat tax rate, while the remaining four states — Indiana, Iowa, New York, and Oklahoma – have graduated tax rates. In some states, such as New York and Rhode Island, the tax rate varies from one facility to another. The tax revenues collected from racino operations are earmarked for various purposes including education, infrastructure, property tax relief, tourism, and other state and local government services.

Appendix Table 11 shows state-by-state inflation-adjusted revenue collections from racinos for fiscal years 2008-15, percent change in racino revenues between 2014 and 2015, compound annual growth rates between 2008 and 2015, and percent and dollar change in racino revenues between 2008 and 2015. The states are again divided into two groups: the "older" racino states that had operations in place before fiscal year 2008 and the "new" racino states that opened racinos in fiscal 2008 or beyond.

In fiscal year 2015, states took in $3.3 billion from racinos. State and local government inflation-adjusted revenues from racinos increased by 2.9 percent in fiscal 2015 compared to fiscal 2014. Revenues declined in seven states. Delaware reported the largest declines at 9.1 percent, followed by Iowa and Louisiana at 3.5 and 3.0 percent, respectively. Ohio reported the highest growth at 74.4 percent, primarily attributable to the opening of two new racinos during fiscal 2015. If we exclude Ohio, inflation-adjusted tax revenues from racino operations show a 0.5 percent decline nationwide from fiscal 2014 to 2015.

For the nation as a whole, the compound annual growth rate was 2.5 percent between fiscal years 2008 and 2015. However, the compound annual growth rate was only 0.6 percent in the "older" racino states. The compound annual growth rate was negative in six of the ten "older" racino states. Indiana opened its first racinos in fiscal 2008 and the growth is mostly attributable to the opening of new racinos between 2008 and 2015.

Inflation-adjusted tax and fee revenues grew by $0.5 billion or 18.6 percent for the nation and 4.6 percent for the "older" racino states between 2008 and 2015. Declines were reported in six "older" racino states. New York had the largest growth in terms of dollar amount between 2008 and 2015, mostly attributable to the opening of the racino in New York City.

In fiscal 2015, about 28 percent of nationwide racino revenues were collected in a single state, New York, and another 23 percent were collected in Pennsylvania. Racino revenues in New York nearly doubled between fiscal 2008 and 2015, mostly due to opening of a new racino in New York City in October of 2011. The revenue collections in the New York City racino represent 40 percent of all racino revenues in the state of New York. The opening of the new racino in New York City certainly created competition for racinos in the neighboring state Pennsylvania, particularly for those racinos that are located in the eastern part of the state. Revenues from racino operations in Pennsylvania showed steady declines since 2011.

While revenues from racinos increased significantly between 2008 and 2015, particularly compared to the growth rates in lotteries and casinos, such growth is mostly attributable to legalization of racino operations in three states — Indiana, Maryland, and Ohio — as well as opening of new racino facilities in other states.

Native American Casinos

Native American casinos are run by tribes and operated on Indian reservations. In 1987, the U.S. Supreme Court recognized that Native American tribal entities could operate gaming facilities free of state regulation. A year later, in 1988, Congress enacted the IGRA to provide terms and conditions for gambling on Indian reservations. States usually do not have authority to regulate or profit from these Indian casinos. However, some states have negotiated special revenue sharing agreements with the tribes. Currently, there are around 400 Native American casinos operated by over 200 tribes in twenty-eight states.

Comprehensive data on state revenue from Native American casinos are not available. However, we provide data for seven states that have the largest share of the Native American casino revenue collections. We estimate that total state collections from Native American casinos are under $2 billion for the nation.

Appendix Table 12 shows inflation-adjusted revenue collections from Native American casinos for seven states for fiscal years 2008-15, percent change in Native American casino revenues between 2014 and 2015, compound annual growth rates between 2008 and 2015, and percent and dollar change in Native American casino revenues between 2008 and 2015.

The seven states for which we provide data comprise at least half of the nationwide revenue collections from the Native American casinos. The state of Florida signed an agreement with the Seminole Tribe of Florida in late 2010 and as part of the agreement the Tribe shares revenues with the state.[27]

Inflation-adjusted revenues from Native American casinos declined by 4.6 percent in fiscal year 2015 compared to 2014 in the seven states for which we have data. Three out of seven states reported declines.

The compound annual growth rate between fiscal 2008 and 2015 was a 0.6 percent decline in real terms for the subtotal of seven states with Native American casinos. Inflation-adjusted compound annual growth rates were negative in five states. We do not report compound annual growth rates for Florida since the Tribe in Florida started sharing revenues only starting fiscal year 2010.

Inflation-adjusted revenues for the subtotal of seven states declined by $42.5 million or 4.0 percent between 2008 and 2015. Declines were reported in five of the seven states.

Overall Trends in Tax and Fee Revenues From Major Types of Gambling

The overall trends over the past eight fiscal years indicate that the growth in tax and fee revenues from major types of gambling have not kept the pace with the growth in state and local government tax collections and overall economy. Moreover, the trends indicate that the growth in gambling revenues is mostly driven by the expansion of gambling activities.

Appendix Table 13 shows state-by-state inflation-adjusted tax and fee revenues for fiscal years 2008 through 2015 for major types of gambling — lotteries, commercial casinos, racinos, pari-mutuel wagering, and video gaming machines. Appendix Table 13 also shows the inflation-adjusted percent change in gambling revenues between 2014 and 2015, compound annual growth rates between 2008 and 2015, and percent and dollar change in gambling revenues between 2008 and 2015.

Compound annual growth rates varied widely across the states, with nearly half of the states reporting growth and the other half reporting declines. For the nation as a whole, the compound annual growth rate was 0.3 percent between 2008 and 2015.

Inflation-adjusted tax and fee revenues from gambling grew by 1.8 percent or $0.5 billion for the nation as a whole. Twenty-three states saw declines in overall inflation-adjusted gambling revenues between 2008 and 2015. The growth in the remainder of the states was mostly driven by the legalization or expansion of one or another kind of gambling activity. For example, the largest growth in terms of dollar amount was in Ohio and Pennsylvania where inflation-adjusted gambling revenues increased by $0.5 billion each. The strong growth in both states is primarily due to legalization and operation of commercial casinos and racinos in the recent years. If we exclude Ohio and Pennsylvania, inflation-adjusted gambling revenues show a decline of 2.1 percent for the rest of the nation between 2008 and 2015.

The trends speak for themselves: Gambling is not a reliable and sustainable source of revenue for the states. Moreover, there are various tangible and intangible costs associated with the gambling, which is the topic of the next section.

Costs of Gambling

Gambling is not just any other kind of entertainment. It creates costs that are paid by all taxpayers and not just by gamblers. Therefore, gambling is a rather controversial public policy topic. Supporters of gambling argue that it promotes local economic development. Opponents of gambling argue that gambling, particularly existence of casinos and racinos, leads to a higher crime and bankruptcy rates in the local community. Supporters of gambling argue that it creates employment. Opponents argue that gambling does not provide competitive or useful workforce skills. Supporters of gambling argue that it is a voluntary type of entertainment that is socially engaging. Opponents argue that a proportion of gamblers develop addiction problems, which results in tangible and nontangible costs.

If the benefits of gambling are not clear, and if the costs of gambling are too high, why do state legislators legalize gambling? As Earl Grinols pointed out twenty years ago, "The answer is partly that the costs do not appear instantaneously, partly that those who make money from gambling do not bear the costs they impose on others, and partly that gambling creates a classic regional Prisoner's Dilemma problem: Everyone is best off if no one has gambling, but one region can sometimes gain at another's expense if it deviates from the agreement to prohibit gambling everywhere."[28]

Expansion of gambling leads to potential social costs, which in turn leads to economic costs. Some researchers have developed classifications of problems associated with gambling such as problem or pathological gambling, bankruptcy, crime, mental illness, suicide, regulatory costs, family costs, arrests, job loss, divorce, poor health, etc.[29]

The purpose of this report is not to study social costs associated with gambling, but to provide a brief review of social costs that are salient. More specifically, we will briefly review the social costs related to problem and pathological gambling, bankruptcy, and crime.

Problem and Pathological Gambling

The social and economic costs related to problem and pathological gambling are reportedly substantial but hard to measure. There is a growing body of research studying the costs associated with problem and pathological gambling. Researchers usually attempt to study and measure social and economic costs that have "negative externalities" such as bankruptcy, crime, job loss, suicide, arrest, etc. The results of these studies are divergent and the findings remain inconclusive. Moreover, the estimates of costs vary widely. The differences in findings are often attributable to the differences in measurement criteria and the challenge of measuring certain intangible costs such as depression, the differences in the methodology, etc.[30]

Mallach distinguishes three different categories of costs associated with problem gambling: (1) costs borne by the problem gamblers themselves, (2) costs borne by the family and friends of the problem gamblers, and (3) costs borne by society.[31] The first category of the cost is not classified as a social cost since the gambler voluntarily and knowingly exhibits gambling behavior. The second category of costs is external, but is hard to quantify or measure. Researchers usually study the third category of costs: Costs that impose medical, police, legal and other social costs on society.[32]

Based on criteria developed by the American Psychiatric Association, the authors of a report to the National Gambling Impact Study Commission reported that there are approximately 2.5 million adults in the United States that are pathological gamblers and another three million that are problem gamblers. Moreover, another fifteen million adults are at risk for problem gambling. "Costs that could be measured on an annualized, present-value basis (poor physical and mental health, job losses/unemployment) sum to about $1,200 and $700 for each pathological and problem gambler, respectively."[33] According to Goodman, "The minimum estimated average cost to the combined public and private sector economies of a state is about $13,200 per problem gambler, per year."[34]

Despite the differences in research findings, one cannot deny that there are substantial social and economic costs related to problem and pathological gambling.

Gambling and Bankruptcy

The economics literature supports the argument that gambling activities, particularly lottery activities, are regressive in nature and attract poorer population. Therefore, gambling often leads to reduction of disposable income for low-income households, particularly at a time when their income is not growing and is even declining in real terms.

Several studies examined the possible impact of gambling on bankruptcy rates. The literature is divided on the relationship between casino/racino operations and bankruptcy rates. Some empirical studies found no significant relationship between casino operations and bankruptcy rates.[35] Study results conducted by Grote and Matheson reveal more mixed results. They used panel data from 1983 to 2010 and examined the relationship between legalized gambling and two types of bankruptcies: business versus personal. The authors find no correlation between legalized gambling and business bankruptcies. According to the authors, "States that adopted lotteries and casinos prior to 1995 experienced significantly higher personal bankruptcy rates while the effect of lottery and casino adoption on personal bankruptcies has disappeared since that time."[36] A study conducted by Nichols, Stitt, and Giacopassialso reveal mixed results. The authors examined per capita personal bankruptcy filings in eight jurisdictions that had adopted gambling compared to a set of matching control jurisdictions. Their study results revealed mixed results: Per capita bankruptcy filings increased in seven of eight jurisdictions with casino operations (in five of the seven, the increase was statistical significant) and decreased significantly in one jurisdiction.[37]

Other studies, however, reveal a statistically significant relationship between casino and other gambling operations and bankruptcies. For example, Goss, Morse, and Deskins utilize county-level data for 1990-2005 and reveal that there is a correlation between the presence of casinos and the bankruptcy rates. However, "the effect of a casino on bankruptcy may differ over the casino's lifespan. Results confirm this possibility, indicating that the impact of casinos on bankruptcy follows a 'U-shaped' curve over the life of the casino."[38] More specifically, study results by Goss, Morse, and Deskins indicate that the existence of a casino in a county substantially increases the bankruptcy rate in the first year of operation, followed by lower and declining bankruptcy rates during the second through seventh years after opening, and increasing once again in the eighth year and thereafter.[39]

Economists Garrett and Nichols from the Federal Reserve Bank of St. Louis raised the question of whether casinos export bankruptcy. While most previous studies examined the impact of local casinos on local bankruptcies, the study by Garrett and Nichols took a different approach and examined trends in bankruptcy rates in the gamblers' home county. The authors found "strong evidence that states having more residents who visit out-of-state casino resorts have higher bankruptcy filings."[40]

Gambling and Crime

There is a growing body of research examining the relationship between casino/racino operations and crime associated with casinos and racinos. The results are varied. Opponents often argue that the introduction of casinos and racinos leads to increased crime rates in the host communities, while proponents argue that legalization of casinos and racinos actually reduces the crime rates as it reduces illegal gambling activities.

In 1999 the National Council of Legislators from Gaming States established an eleven-member Public Sector Gaming Study Commission (PSGSC) that was comprised of state and local government leaders. The goal of the PSGSC was to objectively study issues related to the growth and expansion of gambling. In its final report, the PSGSC, among other issues, discussed the relationship between gambling and crime. According to the PSGSC final report, "Though much of the evidence that is available is anecdotal, the majority of the information collected during the past decade indicates that there is no link between gambling, particularly casino-style gambling, and crime."[41] The authors of the report argue that it is not the existence of casinos and gambling related activities that generates crime, but the mere fact that casinos bring in more visitors into the local community and the increased volume of people might lead to more crime.

Basham and White examined aspects of legalized gambling, including social and economic costs, in the following four countries: Australia, Canada, the United Kingdom, and the United States. According to the authors, the social benefits of gambling are underappreciated, the social costs are overstated, and the economic benefits outweigh the economic costs. "A common misconception about gambling is the perceived association between gambling facilities and the incidence of crime."[42] Based on the literature review, the authors argue that the crime rates dropped in all four countries, despite the proliferation of casinos.

Grinols and Mustard used county level data between 1977 and 1996 to examine the relationship between casinos and associated crime. The authors discussed the theoretical connections between casinos and crime as well as discussed factors through which casinos reduce crime as well as increase crime. They focused on the intertemporal effect of casinos and concluded that the effect of casinos on crime is low in the early years of casino operations but grows over time. The authors conclude that between 5.5 and 30 percent of the different crimes in casino counties is associated with the presence of casinos, which in turn translates into social crime costs. More specifically, "8.6% of property crime and 12.6% of violent crime in counties with casinos was due to the presence of the casino."[43]

Since gambling is a rather controversial public policy issue, so are the research results. An example is Walker's criticism of Grinols and Mustard article. Walker does not reject the fact that there is a link between casinos and crime. He states, "Overall, my research leads me to believe that there is some evidence that casinos may have a positive economic effect in the short-term, but the long-term effects are less certain."[44] However, Walker argues that the crime rates associated with casinos are likely overstated by Grinols and Mustard. Walker argued that the most significant problem with Grinols and Mustard paper is the measurement of the crime rate that does not count tourists, who often are popular targets for criminals. According to Walker, "… if one is considering a very small area, such as a county that has a large tourist attraction, then for the crime rate to represent accurately the risk of being victimized, it must be adjusted to account for the crimes committed by visitors and for the increase in the population at risk of being victimized by crime."[45]

In a follow-up study, Walker argues that differences in research findings associated with the costs related to casino operations is mostly due to differences in measurement criteria. Moreover, most of the research on gambling is done by researchers with a wide range of backgrounds encompassing psychology, sociology, law, public policy, public administration, political science, economics, etc. According to Walker, "…based on an overview of the literature, there is no conclusive evidence on the relationship between casinos and crime. More careful econometric analyses are needed."[46]

To make things more complicated, Mallach argues that the salience of accounting for visitor population for studying the relationship between casinos and crime depends on the measurement criteria. If the criteria is the incidence of crime, than certainly the visitor population should be considered. However, if the criteria "is the cost incurred by the public sector to deal with crime within the jurisdiction, it may be less relevant."[47] Moreover, the social costs of crime could go up even if the incidence of crime goes down. In other words, the perception that there is a correlation between casinos and crime, leads to a perception of increased frequency of criminal acts and results in unnecessary social and economic costs, such as decline in property values in the vicinity of casinos, outmigration, etc.

In summary, the social and economic costs associated with gambling are often hard to measure. However, the benefits of gambling should be viewed along with the costs of gambling both at state and local levels.[48] Even if it is hard or often impossible to precisely measure the social costs associated with gambling, neglect of such costs is not an option. Moreover, due to the changing nature of gambling activities and expansion of gambling, researchers should revisit and revise the measurement criteria, conceptual frameworks and models for estimating the social and economic costs and benefits associated with different forms of gambling.

The Future of Gambling: Saturation? Substitution?

Discussions surrounding gambling expansion policy often raise the issues of saturation and substitution. In general, *saturation* refers to the peak or flattening of all types of gambling activities while *substitution* refers to the shift in spending on one type of activity to another type. The substitution effect is also often referred as cannibalization. We can separate three different types of substitution: (1) substitution of spending on one type of gambling activity with another type (for example, the shift of spending on lottery to casinos); (2) the substitution of spending on any discretionary spending activity with gambling activity (for example, the shift of spending on cinemas to casinos or lotteries); and (3) the substitution of spending on the same gambling activity within different geographic locations (for example, the shifting of consumer spending on casinos in New Jersey to casinos in Pennsylvania).

Several scholars argued that the gambling market in the United States has either saturated or is fast reaching saturation,[49] while others argued that the expansion of gambling leads to a substitution effect. Over two decades ago, Cook and Yale warned that the casino gambling might follow the experience of lotteries and face problems of saturation and even decline. "Tax revenues may be diluted due to saturation resulting from the proliferation of locations and cross-border cannibalization of a finite pool of gaming participants."[50]

There is a growing body of literature examining the substitution effect in the context of gambling. For example, Elliott and Navin used pooled cross-section data for the period from 1989 to 1995 to examine the impact of casinos and pari-mutuel betting on lotteries. Their findings suggest that there is a significant cannibalization of lottery revenues by casinos and pari-mutuel betting. The authors argued that states still benefit from having both casinos and lotteries. However, states lose revenues from the substitution of lottery revenues by pari-mutuel betting.[51]

Kearney investigated the impact of the introduction of state lottery on household spending. Her empirical analysis is based on micro-level expenditure data from 1982 to 1988, during which time twenty-one states had implemented lotteries. According to Kearney's study results, spending on lotteries substitutes for other forms of discretionary spending, and not for alternative types of gambling. "The introduction of a state lottery is associated with a decline in household expenditures on non-gambling items of $137 per quarter.... The response is most pronounced for low-income households, which on average reduce non-gambling expenditures by approximately 2.5 percent. The impact of a state lottery is found to be more pronounced if no bordering state previously implemented a lottery and if instant games are offered. In addition, the decline in non-gambling consumption is sustained in the long run."[52]

The expansion of casinos in recent years spurred concerns among policy makers about the "cannibalization effects" within the casino industry itself. Several studies examined the cannibalization effect of casinos within certain geographic regions, including Illinois, Missouri, and Pennsylvania.

Gallagher examined the cannibalization effects within the casino industry in Illinois region, using panel data covering every commercial casino in or around Illinois between 1994 and 2006. His research findings show strong evidence of cannibalization effects between competitors. "Evidence suggests cannibalization effects do indeed exist and are largely a function of new casino development, not the expansion of pre-existing casinos. These effects also attenuate rather quickly with distance."[53]

Walker and Nesbit conducted a similar study for the casinos in Missouri region. The authors used quarterly data for all Missouri casinos for the time period spanning from 1997 to 2010 with the purpose of examining how competing casinos affect the revenues of a particular casino. Their study results indicate that " casinos are competitive in nature (i.e., are substitutes), as there is no evidence to suggest that there is any positive agglomeration effect from casinos being clustered."[54]

Condliffe conducted a study examining Pennsylvania casinos' cannibalization of regional gambling revenues, particularly for neighboring states Delaware and New Jersey. The purpose of the study was to examine the growth in the total casino gambling in the three states as well as whether casinos in those states cannibalize each other's gambling revenues. The study results indicate that "in the area of arguably the greatest competition (the Southeastern Pennsylvania-Atlantic City-Delaware Park market) the impact of Pennsylvania gambling may have reduced overall revenue."[55]

Conclusions

Revenue from legally sanctioned gambling plays a small, but politically important, role in states' budgets. States are most likely to expand gambling operations when tax revenues are depressed by a weak economy, or to pay for new spending programs. Many states expanded and encouraged gambling during and after the Great Recession in response to historic declines in tax revenues. Still, the growth in revenue collections from gambling is not nearly as strong as it once used to be.

The softening in the growth in gambling revenues is partially due to the impact of the Great Recession and due to changing consumer behavior in most recent years. In the wake of the Great Recession, many consumers became more conservative in their spending behavior, particularly when it comes to discretionary spending.[56] Since spending money on gambling activities is discretionary, consumers are less likely to spend significantly more on gambling despite the expansion of gambling activities.

The recent geographic expansion of gambling created stiff competition, particularly in certain regions of the nation where states and facilities are competing for the same pool of consumers. Therefore, the weakening of the growth in gambling revenues is also attributable to market saturation and industry cannibalization. For example, Pennsylvania enjoyed strong growth in revenues from casino and racino operations until the opening of new casinos and racinos in neighboring Maryland, New York City, and Ohio.

If history is any lesson, gambling is only a short-term solution to state budget gaps. Gambling legalization and expansion leads to some revenue gains. However, such gains are short-lived and create longer-term fiscal challenges for the states as revenue growth slows or declines. In addition, gambling is associated with social and economic costs that often are hard to quantify and measure.

Appendix: Data Tables

Appendix Table 1. Gambling Revenue: Ranking the States						
State	State share of gambling revenue, FY 2015		Gambling revenue per resident age 18 & above		Gambling revenue per $1000 personal income	
	Percent	Rank	Dollars	Rank	Dollars	Rank
United States	**100.0%**		**$113.0**		**$1.8**	
West Virginia	2.0	17	383.6	3	8.3	1
Nevada	3.3	13	418.2	2	7.7	2
Rhode Island	1.4	21	457.2	1	7.4	3
Louisiana	3.3	14	256.6	5	4.6	4
Delaware	0.7	29	265.7	4	4.4	5
Pennsylvania	8.8	2	241.0	6	3.9	6
South Dakota	0.5	35	200.0	9	3.3	7
Oregon	2.0	18	176.3	11	3.3	8
Indiana	3.1	15	172.1	13	3.2	9
Maryland	3.5	11	210.4	7	2.9	10
New York	11.5	1	205.1	8	2.8	11
Missouri	2.6	16	152.5	15	2.8	12
Iowa	1.4	22	161.0	14	2.7	13
Michigan	3.9	9	140.1	18	2.6	14
Ohio	4.6	6	142.2	17	2.6	15
Georgia	3.5	10	128.9	19	2.4	16
Mississippi	0.9	26	110.6	21	2.4	17
Massachusetts	3.5	12	179.3	10	2.4	18
Illinois	5.2	4	145.2	16	2.3	19
New Jersey	4.3	8	173.4	12	2.3	20
Maine	0.4	37	100.5	23	2.0	21
Florida	6.1	3	107.0	22	1.9	22
South Carolina	1.2	24	91.7	24	1.9	23
Montana	0.3	41	90.3	25	1.7	24
New Mexico	0.4	36	71.1	29	1.4	25
Kentucky	0.9	28	70.3	30	1.4	26
Connecticut	1.2	25	115.8	20	1.4	27
North Carolina	1.9	20	68.8	32	1.3	28
Kansas	0.6	31	79.6	27	1.3	29
Tennessee	1.3	23	68.8	31	1.3	30
Virginia	1.9	19	82.7	26	1.2	31
New Hampshire	0.3	39	72.7	28	1.1	32
Texas	4.5	7	63.0	33	1.0	33
Colorado	0.9	27	58.2	34	0.9	34
Idaho	0.2	42	40.4	37	0.8	35
Vermont	0.1	44	45.1	36	0.8	36
California	5.1	5	47.4	35	0.7	37
Arizona	0.6	30	34.5	39	0.7	38
Arkansas	0.3	40	33.5	40	0.7	39
Wisconsin	0.6	32	37.6	38	0.6	40
Minnesota	0.5	34	32.6	41	0.5	41
Oklahoma	0.3	38	28.2	42	0.5	42
Nebraska	0.1	43	26.3	43	0.4	43
Washington	0.5	33	26.1	44	0.4	44
North Dakota	0.0	45	14.2	45	0.2	45
Wyoming	0.0	46	5.7	46	0.1	46
Alabama	0.0	47	0.4	47	0.0	47

Sources: Rockefeller Institute analysis of gambling revenue data from state gaming regulatory agencies; Census Bureau (population), Bureau of Economic Analysis (personal income).

Notes: Gambling revenue is based on the sum of revenues from lottery, casinos, racinos, pari-mutuels, and video gaming machines for FY 2015.

Population numbers are based on July 1, 2014 estimates.

Personal income data is based on quarterly averages between July 2014 and June 2015.

Appendix Table 2. Government Tax & Fee Revenues from Major Types of Gambling, FY 2014 & FY 2015

State	Fiscal Year 2014 ($ millions)						Fiscal Year 2015 ($ millions)					
	Lottery	Casino	Racino	Video gaming	Pari-mutuel	Total	Lottery	Casino	Racino	Video gaming	Pari-mutuel	Total
United States	**$18,107**	**$5,294**	**$3,190**	**$582**	**$131**	**$27,304**	**$18,218**	**$5,361**	**$3,326**	**$672**	**$135**	**$27,711**
New England	**1,454.3**	**50.8**	**320.3**		**10.2**	**1,835.7**	**1,486.7**	**51.7**	**327.2**		**13.8**	**1,879.4**
Connecticut	319.5				6.1	325.6	319.7				6.9	326.6
Maine	51.9	50.8			1.8	104.6	54.0	51.7			1.9	107.6
Massachusetts	929.8				0.3	930.1	959.0				1.2	960.2
New Hampshire	72.4				0.8	73.2	74.3				2.7	77.0
Rhode Island	58.1		320.3		1.2	379.6	56.9		327.2		1.1	385.1
Vermont	22.6					22.6	22.8					22.8
Mid-Atlantic	**4,847.0**	**1,187.1**	**1,897.5**	**1.4**	**37.2**	**7,970.3**	**4,809.3**	**1,251.7**	**1,888.9**	**1.3**	**29.6**	**7,980.9**
Delaware	44.4		163.9	1.4	0.1	209.8	41.9		151.0	1.3	0.1	194.3
Maryland	521.1	353.8	25.1		3.1	903.1	526.5	419.6	26.0		1.1	973.2
New Jersey	965.0	257.7				1,222.7	960.0	241.2				1,201.2
New York	2,235.0		937.7		22.3	3,195.0	2,220.0		943.7		18.1	3,181.8
Pennsylvania	1,081.5	575.7	770.8		11.8	2,439.8	1,060.9	591.0	768.2		10.3	2,430.3
Great Lakes	**2,709.7**	**1,596.6**	**259.3**	**145.6**	**18.1**	**4,729.4**	**2,639.7**	**1,544.7**	**372.6**	**241.4**	**18.4**	**4,816.9**
Illinois	777.4	516.6		145.6	6.5	1,446.2	690.3	498.3		241.4	6.4	1,436.4
Indiana	251.1	542.7	111.3		2.3	907.4	242.7	506.8	111.1		2.3	862.9
Michigan	746.8	264.0			4.3	1,015.1	799.4	273.5			4.0	1,076.9
Ohio	764.9	273.4	148.0		5.0	1,191.4	739.9	266.0	261.5		5.8	1,273.2
Wisconsin	169.3					169.3	167.5					167.5
Plains	**704.9**	**749.2**	**100.8**		**6.3**	**1,561.1**	**712.2**	**762.0**	**98.5**		**6.3**	**1,579.1**
Iowa	74.0	198.6	100.8		3.9	377.3	74.5	206.5	98.5		3.9	383.4
Kansas	74.3	95.6				169.9	75.0	98.6				173.6
Minnesota	127.0				0.6	127.6	135.5				0.5	136.1
Missouri	277.5	438.8				716.3	271.3	440.9				712.2
Nebraska	38.0				0.1	38.1	37.1				0.1	37.3
North Dakota	7.8				1.2	9.0	6.7				1.4	8.1
South Dakota	106.2	16.2			0.5	122.9	112.1	16.1			0.4	128.5
Southeast	**4,688.8**	**692.6**	**524.7**	**377.9**	**31.8**	**6,315.8**	**4,783.1**	**730.6**	**547.2**	**369.3**	**33.7**	**6,464.0**
Alabama					1.6	1.6					1.5	1.5
Arkansas	81.7				3.1	84.8	72.8				2.8	75.6
Florida	1,495.4		174.0		16.3	1,685.7	1,496.4		182.6		15.5	1,694.5
Georgia	945.1					945.1	980.5					980.5
Kentucky	226.1				2.4	228.5	236.1				3.0	239.1
Louisiana	170.7	441.0	58.7	175.9	6.2	852.3	184.8	477.3	57.7	178.9	8.6	907.2
Mississippi		247.8				247.8		250.2				250.2
North Carolina	503.1					503.1	526.4					526.4
South Carolina	326.6					326.6	343.5					343.5
Tennessee	337.3					337.3	347.8					347.8
Virginia	538.6					538.6	533.8					533.8
West Virginia	64.2	3.8	292.0	202.1	2.3	564.4	61.1	3.2	307.0	190.3	2.3	563.9
Southwest	**1,504.6**		**87.6**		**9.2**	**1,601.4**	**1,520.5**		**91.2**		**9.5**	**1,621.2**
Arizona	175.6				0.2	175.9	176.0				0.2	176.2
New Mexico	40.9		67.0		0.6	108.5	41.1		70.6		0.9	112.6
Oklahoma	67.4		20.6		1.1	89.1	60.6		20.6		1.2	82.4
Texas	1,220.7				7.3	1,228.0	1,242.7				7.2	1,249.9
Rocky Mountain	**191.4**	**104.9**		**56.9**	**2.2**	**355.4**	**185.4**	**110.1**		**59.7**	**7.4**	**362.6**
Colorado	130.1	104.9			0.6	235.6	128.0	110.1			1.3	239.3
Idaho	49.1				1.2	50.3	45.1				3.5	48.6
Montana	12.2			56.9	0.0	69.2	12.4			59.7	0.0	72.1
Wyoming					0.4	0.4					2.5	2.5
Far West	**2,006.2**	**912.4**			**16.1**	**2,934.7**	**2,080.8**	**909.9**			**16.1**	**3,006.8**
California	1,349.6				13.8	1,363.4	1,391.7				13.9	1,405.6
Nevada		912.4				912.4		909.9				909.9
Oregon	508.9				0.7	509.7	547.8				0.7	548.5
Washington	147.7				1.5	149.2	141.3				1.5	142.7

Sources: Rockefeller Institute review of state lottery and gaming regulatory agencies' financial reports for lottery, casino, racino, and video gaming revenues; U.S. Census Bureau (pari-mutuels).

Notes: VLT revenues for the following six states are included in racino revenues: Delaware, Maryland, New York, Ohio, Rhode Island and West Virginia. Video gaming revenues for Oregon are included in lottery revenues.

Appendix Table 3. Percent Change in Gambling Tax & Fee Revenues, FY 2014 to FY 2015

State	Lottery	Casino	Racino	Video gaming	Pari-mutuel	Total
United States	**0.6%**	**1.3%**	**4.2%**	**15.4%**	**2.7%**	**1.5%**
New England	**2.2**	**1.8**	**2.1**		**34.5**	**2.4**
Connecticut	0.1				13.0	0.3
Maine	4.1	1.8			3.7	2.9
Massachusetts	3.1				257.0	3.2
New Hampshire	2.7				228.2	5.2
Rhode Island	(2.2)		2.1		(6.5)	1.5
Vermont	0.9					0.9
Mid-Atlantic	**(0.8)**	**5.4**	**(0.5)**	**(8.3)**	**(20.4)**	**0.1**
Delaware	(5.5)		(7.9)	(8.3)	(13.4)	(7.4)
Maryland	1.0	18.6	3.5		(62.9)	7.8
New Jersey	(0.5)	(6.4)				(1.8)
New York	(0.7)		0.6		(18.8)	(0.4)
Pennsylvania	(1.9)	2.7	(0.3)		(12.5)	(0.4)
Great Lakes	**(2.6)**	**(3.3)**	**43.7**	**65.8**	**1.2**	**1.8**
Illinois	(11.2)	(3.5)		65.8	(2.7)	(0.7)
Indiana	(3.4)	(6.6)	(0.2)		0.0	(4.9)
Michigan	7.0	3.6			(7.7)	6.1
Ohio	(3.3)	(2.7)	76.6		14.6	6.9
Wisconsin	(1.1)					(1.1)
Plains	**1.0**	**1.7**	**(2.3)**		**0.4**	**1.1**
Iowa	0.7	4.0	(2.3)		(0.5)	1.6
Kansas	1.0	3.1				2.2
Minnesota	6.7				(16.2)	6.6
Missouri	(2.3)	0.5				(0.6)
Nebraska	(2.4)				4.2	(2.3)
North Dakota	(14.1)				17.7	(10.0)
South Dakota	5.5	(0.8)			(13.9)	4.6
Southeast	**2.0**	**5.5**	**4.3**	**(2.3)**	**5.9**	**2.3**
Alabama					(2.6)	(2.6)
Arkansas	(10.9)				(9.7)	(10.8)
Florida	0.1		4.9		(4.8)	0.5
Georgia	3.7					3.7
Kentucky	4.4				22.5	4.6
Louisiana	8.3	8.2	(1.7)	1.7	40.0	6.4
Mississippi		0.9				0.9
North Carolina	4.6					4.6
South Carolina	5.2					5.2
Tennessee	3.1					3.1
Virginia	(0.9)					(0.9)
West Virginia	(4.9)	(17.0)	5.1	(5.8)	0.0	(0.1)
Southwest	**1.1**		**4.2**		**2.9**	**1.2**
Arizona	0.2				(2.2)	0.2
New Mexico	0.4		5.5		46.8	3.8
Oklahoma	(10.0)		0.1		3.8	(7.5)
Texas	1.8				(0.7)	1.8
Rocky Mountain	**(3.1)**	**5.0**		**4.9**	**231.1**	**2.0**
Colorado	(1.6)	5.0			111.2	1.6
Idaho	(8.2)				190.4	(3.4)
Montana	1.3			4.9	95.0	4.3
Wyoming					553.9	553.9
Far West	**3.7**	**(0.3)**			**0.1**	**2.5**
California	3.1				0.5	3.1
Nevada		(0.3)				(0.3)
Oregon	7.6				(0.6)	7.6
Washington	(4.3)				(3.5)	(4.3)

Sources: Rockefeller Institute review of state lottery and gaming regulatory agencies' financial reports for lottery, casino, racino, and video gaming revenues; U.S. Census Bureau (pari-mutuels).

Notes: VLT revenues for the following six states are included in racino revenues: Delaware, Maryland, New York, Ohio, Rhode Island and West Virginia.

Video gaming revenues for Oregon are included in lottery revenues.

Appendix Table 4. States Vary in Lottery Contributions to the State Funds, FY 2015			
States are sorted based on lottery contributions to the state			
State	**Lottery start date**	**% transferred to the state**	**Where does the money go to?**
South Dakota	1987	74%	General Fund (K-12 education, state universities, technical institutes); Capital Construction Fund (water & environment; ethanol fuel; state highway)
Oregon	1985	49%	Economic Development Fund (education; job creation & economic development; state parks; watershed enhancement); General Obligation Bond Fund
Louisiana	1991	41%	Minimum Foundation Program (K-12 public education); Department of Health & Hospitals, Office of Behavioral Health (problem gambling)
Oklahoma	2005	35%	Education
West Virginia	1986	34%	Education; Senior Citizens; Tourism & State Parks
New Jersey	1970	31%	Education; Higher Education; Human Services; Military and Veteran's Affairs; Agriculture
New York	1967	31%	Education
New Mexico	1996	30%	Lottery Tuition Fund
Kansas	1987	30%	Economic Development Initiatives Fund; General Fund; Correctional Institutions Building Fund; Juvenile Detention Facilities Fund; Problem Gambling Grant Fund
Maine	1974	30%	General Fund (local schools, higher education, health services, other programs)
Maryland	1973	30%	General Fund (pre-K-12 & higher education, public health, public safety, environment); Maryland Stadium Authority; Veterans Trust Fund
Wisconsin	1988	29%	Funding for Property Tax Credits
Virginia	1988	29%	Education
Michigan	1972	29%	School Aid Fund; General Fund; Commmunity Health (gambling addiction programs)
Connecticut	1972	28%	General Fund (public health, libraries, public safety, education)
Delaware	1975	28%	General Fund (Education; Health & Social Services; Natureal Resources & Environmental Control; Public Safety, Judicial & Corrections; Various Children, Youth & Family Organizations)
Pennsylvania	1972	28%	Local Services, Senior Centers & Meals; Low-Cost Prescription Assistance; Free & Reduced-Fare Transportation; Property Tax & Rent Rebates; Care Services
Texas	1992	27%	Foundation School Fund; Fund for Veterans' Assistance & Other State Programs
Florida	1988	27%	Educational Enhancement Trust Fund
North Carolina	2006	27%	Education
Kentucky	1989	27%	General Fund (college scholarship and grant programs)
Minnesota	1990	27%	General Fund (education, local gov. assistance, public safety, environmental protection); Game & Fish Fund; Natural Resources Fund; Environment & Natural Resources Trust Fund
New Hampshire	1964	26%	Education Trust Fund
Ohio	1974	26%	Education
Tennessee	2004	25%	Education
California	1985	25%	Education Fund
Georgia	1993	25%	Education Account
North Dakota	2004	25%	General Fund, Multi-Jurisdictional Drug Task Force Fund, Compulsive Gambling Fund
South Carolina	2002	24%	Education
Missouri	1986	24%	Education
Illinois	1974	24%	Common School Fund; Capital Projects Fund; Other State Funds
Colorado	1983	24%	Great Outdoors Colorado (GOCO); Conservation Trust Fund; Colorado Parks and Wildlife; Public School Capital Construction - Building Excellent Schools Today (BEST) program
Washington	1982	24%	Washington Opportunities Pathways Account; Education Legacy Trust Fund; Stadium and Exhibition Center Account; Economic Development; Problem Gambling
Arizona	1981	23%	General Fund; Healthy Arizona; Mass Transit; University Bond Fund; Heritage Fund; Commerce Authority Arizona Competes Fund; Court-appointed Special Advocate Fund; Economic Security Homeless Services; Department of Gaming
Rhode Island	1974	23%	General Fund (for human services, education, public safety, general government, debt services, natural resources)
Indiana	1989	23%	Build Indiana Fund (for reducing motor vehicle excise tax & funding parks, roads & local infrastructure projects); Local Police & Firefighters' Pensions; Teachers' Retirement Fund
Nebraska	1993	23%	Education Innovation Fund; Environmental Trust Fund; Opportunity Grant Fund; State Fair; Compulsive Gamblers Assistance Fund
Montana	1987	23%	General Fund
Iowa	1985	23%	General Fund (education, natural resources, health & family services, public safety); Iowa Plan; CLEAN Fund; Veterans Trust Fund; Gambling Treatment Fund; Special Appropriations
Idaho	1989	21%	State Permanent Building Fund; Public School Building Fund; Bond Equalization Fund
Vermont	1978	20%	Education
Massachusetts	1972	19%	Lottery funds are not earmarked for specific programs. Lottery revenues are distributed to the cities & towns, allowing them to choose how they would like to spend the funds
Arkansas	2009	18%	Education Trust Account
Wyoming /1	2014	0%	

Sources: Rockefeller Institute review of state lottery agencies' reports.

1/ Wyoming Lottery Corporation has not transferred any revenues to the state yet.

Appendix Table 5. State Lottery Net Revenue, FYs 2008-15

State	$ millions, adjusted for inflation								% change	CAGR	% change	$ change
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2014-15	FY 2008-15	FY 2008-15	FY 2008-15
United States	**$18,182**	**$17,539**	**$17,854**	**$17,410**	**$18,376**	**$18,557**	**$18,337**	**$18,218**	**-0.7%**	**0.0%**	**0.2%**	**$36.1**
Arizona	160.7	141.2	154.4	156.3	172.6	183.0	177.9	176.0	(1.0)	1.3	9.5	15.3
Arkansas	N/A	N/A	90.3	79.5	102.4	93.1	82.7	72.8	(12.0)	NM	NM	NM
California	1,217.5	1,147.3	1,185.7	1,205.7	1,383.6	1,322.2	1,366.8	1,391.7	1.8	1.9	14.3	174.2
Colorado	136.0	130.9	122.9	121.1	129.1	139.6	131.8	128.0	(2.9)	(0.9)	(5.9)	(8.0)
Connecticut	314.7	309.6	310.6	309.1	324.8	321.3	323.6	319.7	(1.2)	0.2	1.6	5.0
Delaware	43.9	40.9	40.1	40.8	42.1	44.6	44.9	41.9	(6.7)	(0.6)	(4.4)	(1.9)
Florida	1,427.1	1,409.0	1,356.6	1,273.2	1,384.5	1,466.2	1,514.5	1,496.4	(1.2)	0.7	4.9	69.3
Georgia	964.8	954.1	961.7	903.9	944.2	954.8	957.1	980.5	2.4	0.2	1.6	15.7
Idaho	39.3	38.6	39.9	39.6	43.6	49.7	49.7	45.1	(9.3)	2.0	14.7	5.8
Illinois	721.1	694.4	709.6	714.1	794.3	843.5	787.3	690.3	(12.3)	(0.6)	(4.3)	(30.7)
Indiana	241.4	195.8	206.4	201.1	215.0	231.7	254.3	242.7	(4.6)	0.1	0.5	1.3
Iowa	62.9	66.2	63.0	72.6	82.5	87.4	74.9	74.5	(0.5)	2.5	18.5	11.6
Kansas	77.9	74.6	75.1	74.8	75.4	76.7	75.2	75.0	(0.3)	(0.5)	(3.7)	(2.9)
Kentucky	213.6	223.6	233.1	226.8	226.7	230.4	229.0	236.1	3.1	1.4	10.5	22.5
Louisiana	146.6	148.7	145.5	145.7	164.4	164.9	172.8	184.8	6.9	3.4	26.0	38.1
Maine	55.0	54.5	56.8	52.9	56.3	54.5	52.6	54.0	2.8	(0.3)	(1.9)	(1.0)
Maryland	588.7	539.6	555.6	554.9	582.7	561.3	527.7	526.5	(0.2)	(1.6)	(10.6)	(62.2)
Massachusetts	1,141.9	988.1	1,032.3	948.6	1,030.6	983.9	941.7	959.0	1.8	(2.5)	(16.0)	(182.9)
Michigan	836.6	806.6	776.5	788.1	824.4	761.6	756.3	799.4	5.7	(0.6)	(4.5)	(37.2)
Minnesota	129.3	129.4	133.0	130.2	129.7	139.1	128.6	135.5	5.4	0.7	4.8	6.3
Missouri	296.5	280.4	282.5	273.3	286.6	288.2	281.1	271.3	(3.5)	(1.3)	(8.5)	(25.3)
Montana	12.3	11.1	11.5	11.6	13.7	13.6	12.4	12.4	0.1	0.1	0.8	0.1
Nebraska	34.5	33.1	34.8	34.2	37.8	41.2	38.5	37.1	(3.6)	1.1	7.6	2.6
New Hampshire	84.1	74.8	72.1	66.5	69.9	76.5	73.3	74.3	1.4	(1.7)	(11.6)	(9.8)
New Jersey	980.8	970.7	1,005.4	993.5	995.3	1,116.9	977.3	960.0	(1.8)	(0.3)	(2.1)	(20.8)
New Mexico	45.4	44.7	47.4	44.1	43.3	45.0	41.5	41.1	(0.8)	(1.4)	(9.4)	(4.3)
New York	2,354.0	2,277.5	2,410.3	2,252.3	2,249.5	2,267.9	2,263.5	2,220.0	(1.9)	(0.8)	(5.7)	(134.0)
North Carolina	387.3	452.9	470.3	466.0	481.3	492.6	509.5	526.4	3.3	4.5	35.9	139.1
North Dakota	6.6	7.0	6.2	6.3	8.0	8.2	7.9	6.7	(15.1)	0.3	2.1	0.1
Ohio	747.4	768.4	792.8	789.3	807.7	774.6	774.6	739.9	(4.5)	(0.1)	(1.0)	(7.5)
Oklahoma	78.9	75.6	76.2	74.3	73.5	72.3	68.2	60.6	(11.1)	(3.7)	(23.2)	(18.3)
Oregon	722.5	650.2	588.7	585.9	550.1	564.6	515.4	547.8	6.3	(3.9)	(24.2)	(174.6)
Pennsylvania	1,032.0	996.1	996.4	1,026.2	1,111.4	1,098.8	1,095.3	1,060.9	(3.1)	0.4	2.8	28.9
Rhode Island	66.1	64.8	60.4	57.5	59.7	65.3	58.9	56.9	(3.4)	(2.1)	(13.9)	(9.2)
South Carolina	295.0	286.1	296.5	289.9	314.4	314.2	330.7	343.5	3.9	2.2	16.4	48.5
South Dakota	137.1	131.2	130.3	115.4	108.6	110.9	107.6	112.1	4.2	(2.8)	(18.3)	(25.0)
Tennessee	318.2	306.5	314.3	313.5	338.8	349.7	341.6	347.8	1.8	1.3	9.3	29.6
Texas	1,150.8	1,162.1	1,156.7	1,093.7	1,210.5	1,249.8	1,236.3	1,242.7	0.5	1.1	8.0	91.9
Vermont	25.3	23.1	23.5	22.9	23.4	23.6	22.8	22.8	(0.4)	(1.5)	(9.9)	(2.5)
Virginia	506.2	480.4	468.1	474.6	510.2	500.8	545.4	533.8	(2.1)	0.8	5.4	27.5
Washington	144.9	131.7	155.0	160.4	144.6	143.3	149.6	141.3	(5.6)	(0.4)	(2.5)	(3.6)
West Virginia	73.0	71.7	66.4	63.9	70.3	68.3	65.1	61.1	(6.1)	(2.5)	(16.3)	(11.9)
Wisconsin	164.0	145.9	139.4	155.4	158.1	161.4	171.5	167.5	(2.4)	0.3	2.1	3.4

Source: Rockefeller Institute review of state lottery financial reports.

Notes: VLT revenues are excluded for Delaware, Maryland, New York, Ohio, Rhode Island & West Virginia. Those revenues are reported under racinos or casinos. N/A = Not applicable. NM = not meaningful.

Appendix Table 6. Commercial Casino Legalization & Opening Dates, Distribution & Format

States are sorted based on casino legalization date

State	Legalization date	First casino opening date	# of operating casinos, FY 2014	# of pperating casinos, FY 2015	Casino format
Nevada	1931	1931	270	271	Land-based
New Jersey	1976	1978	11	8	Land-based
South Dakota	1989	November 1989	17	17	Land-based
Iowa	1989	September 1991	15	15	Riverboat, Land-based
Illinois	1990	September 1991	10	10	Riverboat
Colorado	1990	October 1991	39	36	Land-based
Mississippi	1990	August 1992	29	28	Dockside, Land-based
Louisiana	1991	October 1993	15	16	Riverboat, Land-based
Missouri	1993	May 1994	13	13	Riverboat
Indiana	1993	December 1995	11	11	Riverboat, Land-based
Michigan	1996	July 1999	3	3	Land-based
Pennsylvania	2004	October 2007	6	6	Land-based
Kansas	2007	December 2009	3	3	Land-based
Maryland	2008	September 2010	3	4	Land-based
West Virginia	2009	July 2010	1	1	Land-based
Ohio	2009	May 2012	4	4	Land-based
Maine	2010	June 2012	2	2	Land-based
Massachusetts /1	2011	June 2015	0	0	Land-based
New York /2	2014				

Source: Rockefeller Institute review of state gaming regulatory agency information**.**

Notes: 1/ Massachusetts legalized casino operations in 2011 and opened the first casino on June 24, 2015.

2/ New York legalized casino operations in 2014 and expects to open four destinations casinos.

Appendix Table 7. Commercial Casino Tax Rates & Tax Uses, By State					
States are sorted based on casino legalization date					
State	**Legalization date**	**Tax type**	**Tax rates and fees**	**Tax rate details**	**Tax uses**
Nevada	1931	Graduated	3.5% to 6.75% annual & quarterly fees	3.5% of the first $50,000 during the month + 4.5% of the next $84,000 + 6.75% of revenue exceeding $134,000	Education, local governments, general fund, problem gambling programs
New Jersey	1976	Flat	9.25%	8% gross revenue tax 1.25% Casino Reinvestment Dev. Authority	Senior citizens, disabled, economic revitalization programs
Iowa	1989	Graduated	5% to 22%	5.0% tax on $0 to $1 million 10.0% tax on $1 to $3 million 22.0% tax on over $3 million	Infrastructure, education, environmental causes, tourism projects, cultural initiatives, general fund
South Dakota	1989	Flat	9% $2,000 device fee		Department of Tourism, Lawrence County, Commission Fund
Colorado	1990	Graduated	0.25% to 20%	0.25% tax on $0 - $2 million 2.0% tax on $2 - $5 million 9.0% tax on $5 - $8 million 11.0% tax on $8 - $10 million 16.0% tax on $10 - $13 million 20.0% tax on above $13 million	Local communities, historic preservation, community colleges, general fund, state tourism promotion, among other things
Illinois	1990	Graduated	15% to 50% $2 or $3 admission fee	15.0% tax on $0 to $25 million 22.5% tax on $25 to $50 million 27.5% tax on $50 to $75 million 32.5% tax on $75 to $100 million 37.5% tax on $100 to $150 million 45.0% tax on $150 to $200 million 50.0% tax on over $200 million	Educational assistance and local government needs
Mississippi	1990	Graduated	4% to 8% Municipalities can impose an additional 4% tax	4.0% tax on $50,000 6.0% tax on $50,000 to $134,000 8.0% tax on over $134,000	Housing, education, transportation, health care services, youth counseling programs, local public safety programs
Lousiana	1991	Flat	21.5% some local fees		Education, City of New Orleans, compulsive & problem gambling fund, public retirement systems, state capital improvements, rainy day funds, etc.
Indiana	1993	Graduated	15% to 40% $3 admission fee	15.0% tax on $0 to $25 million 20.0% tax on $25 to $50 million 25.0% tax on $50 to $75 million 30.0% tax on $75 to $150 million 35.0% tax on $150 to $600 million 40.0% tax on over $600 million	Economic development and local government needs
Missouri	1993	Flat	21% $2 admission fee		Education, local public safety, compulsive gambling treatment, veterans' programs, early childhood
Michigan	1996	Flat	20%	8.1% state share 10.9% local share 1.0% daily fee to the city	State school aid fund, city (Detroit) general fund
Pennsylvania	2004	Flat	55%	34% state tax 4% local share assessment 5% Economic Development & Tourism Fund 12% Race Horse Development Fund	Property tax relief, economic development, tourism, horse racing and host local government
Kansas	2007	Flat	27%	22% state share 3% local share	Debt reduction, problem gambling, infrastructure, property tax relief
Maryland	2008	Flat	50% to 67% on slots depending on the casino facility	50% for Rocky Gap Casino and Resort 61% for Horseshoe Casino Baltimore 67% for Maryland Live! Casino & Hollywood	Education trust fund, local impact grants, small, minority and women-owned businesses
Ohio	2009	Flat	33%		Local governments, education, casino control & racing commissions, law enforcement training, problem gambling
West Virginia	2009	Flat	35%		64% General Revenue Fund; 19% State Debt Reduction Fund; 3% Tourism Promotion Fund; 14% counties and municipalities
Maine	2010	Flat	40% or 46%	46% for Oxford casino 40% for Hollywood casino	Education, health care, agriculture, gambling control board administration, city of Bangor, among other things

Sources: (1) Rockefeller Institute review of state gaming regulatory agency information and (2) 2013 Casino Tax and Expenditures, NCSL available at: http://www.ncsl.org/research/financial-services-and-commerce/casino-tax-and-expenditures-2013.aspx

Appendix Table 8. Commercial Casino Tax & Fee Revenues to State-Local Governments, FYs 2008-15												
State	$ millions, adjusted for inflation								% change	CAGR	% change	$ change
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2014-15	FY 2008-15	FY 2008-15	FY 2008-15
United States	**$5,444**	**$4,923**	**$4,907**	**$4,993**	**$5,168**	**$5,524**	**$5,361**	**$5,361**	**0.0%**	**-0.2%**	**-1.5%**	**($82.9)**
"Older" casino states	***$5,376***	***$4,797***	***$4,552***	***$4,427***	***$4,409***	***$4,231***	***$3,991***	***$3,931***	***-1.5%***	***-4.4%***	***-26.9%***	***($1,445.3)***
Indiana	903.4	840.2	818.7	784.6	744.9	665.4	549.6	506.8	(7.8)	(7.9)	(43.9)	(396.6)
New Jersey	523.5	440.9	373.1	330.0	292.4	258.0	260.9	241.2	(7.6)	(10.5)	(53.9)	(282.3)
Illinois	776.4	582.3	525.6	488.6	574.4	574.4	523.2	498.3	(4.8)	(6.1)	(35.8)	(278.1)
Nevada	1,089.8	938.7	902.3	911.8	905.8	918.3	924.0	909.9	(1.5)	(2.5)	(16.5)	(179.9)
Mississippi	383.2	341.5	312.3	293.3	294.9	271.5	251.0	250.2	(0.3)	(5.9)	(34.7)	(133.0)
Michigan	332.2	307.9	287.7	300.8	299.4	281.3	267.3	273.5	2.3	(2.7)	(17.7)	(58.6)
Louisiana	531.6	504.7	463.6	459.4	449.5	444.9	446.6	477.3	6.9	(1.5)	(10.2)	(54.4)
Missouri	476.6	499.7	516.5	521.2	503.3	477.8	444.4	440.9	(0.8)	(1.1)	(7.5)	(35.7)
Iowa	221.3	219.6	216.3	207.9	219.7	214.1	201.2	206.5	2.7	(1.0)	(6.7)	(14.8)
Colorado	120.3	103.8	117.1	112.0	107.0	107.2	106.2	110.1	3.6	(1.3)	(8.5)	(10.2)
South Dakota	17.7	17.4	18.5	17.7	17.9	17.6	16.4	16.1	(2.0)	(1.4)	(9.3)	(1.6)
"New" casino states	***$68***	***$127***	***$355***	***$566***	***$759***	***$1,294***	***$1,370***	***$1,430***	***4.4%***	***54.6%***	***2014.3%***	***$1,362.4***
West Virginia			0.9	3.6	3.8	4.3	3.9	3.2	(18.1)			3.2
Maine					12.3	52.0	51.5	51.7	0.5			51.7
Kansas			6.1	11.6	55.8	100.3	96.8	98.6	1.8			98.6
Ohio					20.7	232.1	276.9	266.0	(3.9)			266.0
Maryland				50.8	88.3	314.4	358.3	419.6	17.1			419.6
Pennsylvania	67.6	126.7	347.7	500.0	577.9	590.6	583.0	591.0	1.4	36.3	773.7	523.3

Source: Rockefeller Institute review of state gaming regulatory agencies' financial reports.
Note: Michigan's state fiscal year is from October 1st to September 30th.

Appendix Table 9. Racino Legalization & Opening Dates, Distribution & Format

States are sorted based on racino legalization date

State	Legalization date	First racino opening date	# of operating racinos, FY 2014	# of operating racinos, FY 2015	Racino format
Rhode Island /1	1992	1992	2	2	VLTs / Table games
Delaware	1994	1995	3	3	VLTs / Table games
Iowa	1994	1995	3	3	Slot machines / Table games
West Virginia	1994	1994	4	4	VLTs / Table games
Louisiana	1997	2002	4	4	Slot machines / Table games
New Mexico	1997	1999	5	5	Slot machines
New York	2001	2004	9	9	VLTs
Maine /2	2004	2005	0	0	Slot machines
Oklahoma	2004	2005	2	2	Slot machines
Pennsylvania	2004	2006	6	6	Slot machines / Table games
Florida /3	2006	2006	8	7	Slot machines
Indiana	2007	2008	2	2	Slot machines / Table games
Maryland	2008	2011	1	1	VLTs
Ohio	2009	2012	5	7	VLTs

Source: Rockefeller Institute review of state gaming regulatory agency information.

Notes: 1/ Rhode Island was the first state to introduce racinos. However, the two racinos in Rhode Island have evolved over the years. Currently they don't offer any kind of live racing and operate more like casinos.

2/ Maine converted Hollywoods Slots racino into casino in March of 2012.

3/ Florida closed one of its racino facilities on October 12, 2014 due to remodeling.

Appendix Table 10. Racino Tax Rates & Tax Uses, By State					
States are sorted based on racino legalization date					
State	**Legalization date**	**Tax type**	**Tax rates and fees**	**Tax rate details**	**Tax uses**
Rhode Island	1992	Flat	VLTs 61.03% at Twin River 59.17% at Newport Grand Table games 16.0%		General Fund, Lottery Commission, marketing programs
West Virginia	1994	Flat	42% VLTs 35% table games		Senior citizens, education, tourism and state parks
Delaware	1995	Flat	43.33%		State General Fund to help pay for state services
Iowa	1995	Graduated	22% or 24%	22.0% tax on $0 to $100 mln 24.0% tax on over $100 mln	Infrastructure, schools & universities, the environment, tourism projects, cultural initiatives, general fund
New Mexico	1999	Flat	26% gaming tax 20% tax for racing purses 0.25% tax for problem gambling		General fund, problem gambling treatment
Louisiana	2002	Flat	18.5% state taxes 4% local parish		General fund, city of New Orleans, public retirement systems, state capital improvements, rainy day fund
New York	2004	Graduated	Varies between 55% to 70% depending on the facility	Graduated for each facility at different rates Resorts World Casino NYC is the only exception where the effective tax rate is flat at 70%	Education, Commission administrative costs and racing support payments
Oklahoma	2005	Graduated	10% to 30%	10.0% tax on $0 to $30 mln 15.0% tax on $30 to $40 mln 20.0% tax on $40 to $50 mln 25.0% tax on $50 to $70 mln 30.0% tax on over $70 mln	12% to the General Revenue Fund, 88% to the Education Reform Revolving Fund
Florida	2006	Flat	35%		Educational Enhancement Trust Fund
Pennsylvania	2006	Flat	55%	34% state tax 4% local share assessment 5% Economic Dev. & Tourism 12% Race Horse Dev. Fund	Property tax relief, economic development, tourism, horse racing and host local government
Indiana	2008	Graduated	State wagering tax between 25% to 35% County wagering tax at 3% Addition wagering tax at 1% Initial license fee at $250 mln Annual license fee after the first 5 years of operation at $100 mln	State wagering tax 25.0% tax on $0 to $100 mln 30.0% tax on $100 to $200 mln 35.0% tax on over $200 mln County wagering tax at 3%, with the annual tax liability for each facility limited to $8 mln Additional 1% wagering tax	Property tax relief Hosting local governments
Maryland	2011	Flat	67%		Education trust fund, local impact grants, small, minority and women-owned businesses
Ohio	2012	Flat	33.50%		Local governments, education, casino control commission, law enforcement training, racing commission, problem gambling & addictions
Sources: (1) Rockefeller Institute review of state gaming regulatory agency information and (2) 2013 Casino Tax and Expenditures, NCSL available at: http://www.ncsl.org/research/financial-services-and-commerce/casino-tax-and-expenditures-2013.aspx					

Appendix Table 11. Racino Revenues to State-Local Governments, FYs 2008-15												
State	$ millions, adjusted for inflation								% change	CAGR	% change	$ change
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2014-15	FY 2008-15	FY 2008-15	FY 2008-15
United States	**$2,805**	**$2,955**	**$3,013**	**$3,075**	**$3,238**	**$3,237**	**$3,231**	**$3,326**	**2.9%**	**2.5%**	**18.6%**	**$520.9**
"Older" racino states	***$2,798***	***$2,837***	***$2,882***	***$2,924***	***$3,082***	***$3,040***	***$2,943***	***$2,927***	***-0.5%***	***0.6%***	***4.6%***	***$129.6***
West Virginia	470.2	452.2	391.8	397.6	417.8	348.4	295.7	307.0	3.8	(5.9)	(34.7)	(163.2)
Delaware	236.9	230.5	258.0	263.5	237.5	194.8	166.0	151.0	(9.1)	(6.2)	(36.3)	(85.9)
Pennsylvania	791.5	928.8	947.7	958.6	943.8	862.5	780.7	768.2	(1.6)	(0.4)	(2.9)	(23.3)
Iowa	118.0	108.5	105.7	105.0	107.7	104.6	102.1	98.5	(3.5)	(2.6)	(16.6)	(19.5)
Louisiana	64.8	68.0	63.9	63.2	63.9	62.8	59.4	57.7	(3.0)	(1.7)	(11.1)	(7.2)
New Mexico	74.6	75.7	70.8	69.8	68.5	65.2	67.8	70.6	4.1	(0.8)	(5.4)	(4.0)
Rhode Island	327.0	309.7	312.4	321.9	338.2	327.3	324.4	327.2	0.9	0.0	0.1	0.2
Oklahoma	12.0	15.3	15.1	18.6	19.9	21.3	20.9	20.6	(1.2)	8.1	72.3	8.7
Florida	134.1	113.7	150.3	133.6	150.8	157.0	176.2	182.6	3.6	4.5	36.2	48.5
New York /1	545.7	505.8	535.8	562.6	714.2	896.6	949.6	943.7	(0.6)	8.1	72.9	398.0
Maine /2	22.7	28.9	30.7	29.5	19.4							
"New" racino states	***$7***	***$118***	***$131***	***$151***	***$156***	***$196***	***$288***	***$399***	***38.4%***	***77.1%***	***5374.4%***	***$391.3***
Maryland				12.5	28.9	30.1	25.4	26.0	2.2			26.0
Indiana	7.3	117.9	130.9	138.9	123.6	109.1	112.7	111.1	(1.4)	47.6	1,426.0	103.8
Ohio					3.9	57.1	149.9	261.5	74.4			261.5

Sources: Rockefeller Institute review of state gaming regulatory agencies' financial reports.

1/ New York's state fiscal year is from April 1st to March 31st.

2/ Maine converted Hollywoods Slots racino into casino in March of 2012.

Appendix Table 12. Native American Casino Revenues to State-Local Governments, FYs 2008-15

State	$ millions, adjusted for inflation								% change	CAGR	% change	$ change
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2014-15	FY 2008-15	FY 2008-15	FY 2008-15
Subtotal of 7 states	**$1,066**	**$1,104**	**$1,282**	**$1,122**	**$1,118**	**$1,105**	**$1,072**	**$1,023**	**-4.6%**	**-0.6%**	**-4.0%**	**($42.5)**
Connecticut	457.5	413.3	390.9	384.1	360.7	305.1	283.4	268.0	(5.5)	(7.4)	(41.4)	(189.5)
Oklahoma	79.7	101.6	15.5	15.3	15.5	15.8	14.9	15.4	3.4	(20.9)	(80.7)	(64.3)
Michigan /1	60.0	61.8	67.1	85.1	95.2	95.8	87.1	32.6	(62.6)	(8.4)	(45.7)	(27.5)
Arizona	123.6	106.7	96.9	96.7	102.0	100.5	99.1	99.5	0.4	(3.1)	(19.5)	(24.1)
New Mexico	72.8	69.7	68.2	69.3	70.2	70.8	68.0	66.6	(2.1)	(1.3)	(8.6)	(6.2)
California	272.1	351.3	331.1	321.8	321.3	288.6	286.3	292.7	2.2	1.0	7.6	20.6
Florida			312.8	149.2	153.3	228.1	233.2	248.5	6.5			

Source: Rockefeller Institute review of state gaming regulatory agencies' financial reports.

Note: 1/ Numbers for Michigan are on calendar year basis.

Table 13. Government Tax & Fee Revenues from Major Types of Gambling, FY 2008-15												
State	$ millions, adjusted for inflation								% change	CAGR	% change	$ change
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2014-15	FY 2008-15	FY 2008-15	FY 2008-15
United States	**$27,210**	**$26,144**	**$26,419**	**$26,098**	**$27,462**	**$27,955**	**$27,652**	**$27,711**	**0.2%**	**0.3%**	**1.8%**	**$500.9**
Alabama	3.0	2.7	2.3	2.1	1.9	1.6	1.6	1.5	(3.9)	(9.1)	(48.8)	(1.4)
Arizona	161.2	141.5	154.7	156.7	172.8	183.3	178.1	176.2	(1.0)	1.3	9.4	15.1
Arkansas	5.9	5.8	95.5	83.9	106.1	96.3	85.9	75.6	(11.9)	44.1	1,187.3	69.7
California	1,256.4	1,181.0	1,202.6	1,220.1	1,400.2	1,336.7	1,380.8	1,405.6	1.8	1.6	11.9	149.2
Colorado	259.3	235.4	240.6	233.7	236.7	247.4	238.6	239.3	0.3	(1.1)	(7.7)	(20.0)
Connecticut	323.9	317.9	318.3	316.8	332.0	328.4	329.7	326.6	(1.0)	0.1	0.8	2.6
Delaware	280.9	271.5	298.2	304.4	279.7	240.0	212.5	194.3	(8.6)	(5.1)	(30.8)	(86.6)
Florida	1,582.6	1,538.1	1,519.4	1,416.9	1,545.1	1,632.6	1,707.2	1,694.5	(0.7)	1.0	7.1	111.9
Georgia	964.8	954.1	961.7	903.9	944.2	954.8	957.1	980.5	2.4	0.2	1.6	15.7
Idaho	41.1	40.0	40.8	40.5	44.9	50.9	50.9	48.6	(4.6)	2.4	18.1	7.5
Illinois	1,506.8	1,284.2	1,242.8	1,209.9	1,376.2	1,461.3	1,464.7	1,436.4	(1.9)	(0.7)	(4.7)	(70.3)
Indiana	1,156.7	1,158.2	1,160.8	1,128.3	1,086.7	1,008.9	918.9	862.9	(6.1)	(4.1)	(25.4)	(293.9)
Iowa	406.8	398.5	389.2	389.7	414.1	410.2	382.1	383.4	0.3	(0.8)	(5.8)	(23.4)
Kansas	80.1	74.9	81.2	86.4	131.3	177.0	172.0	173.6	0.9	11.7	116.8	93.5
Kentucky	219.5	228.4	233.0	231.7	230.5	235.4	231.5	239.1	3.3	1.2	8.9	19.5
Louisiana	971.8	946.8	874.9	869.0	872.8	864.8	863.2	907.2	5.1	(1.0)	(6.6)	(64.6)
Maine	81.1	86.7	90.1	84.9	90.5	108.7	105.9	107.6	1.6	4.1	32.8	26.6
Maryland	590.7	541.4	557.3	619.4	701.2	907.0	914.6	973.2	6.4	7.4	64.8	382.5
Massachusetts	1,145.8	991.1	1,034.5	950.1	1,032.3	985.8	942.0	960.2	1.9	(2.5)	(16.2)	(185.6)
Michigan	1,177.9	1,122.6	1,071.0	1,094.4	1,129.0	1,047.8	1,028.0	1,076.9	4.8	(1.3)	(8.6)	(101.0)
Minnesota	130.4	130.1	133.7	130.8	130.3	139.6	129.2	136.1	5.3	0.6	4.4	5.7
Mississippi	383.2	341.5	312.3	293.3	294.9	271.5	251.0	250.2	(0.3)	(5.9)	(34.7)	(133.0)
Missouri	773.2	780.1	799.1	794.5	789.9	766.1	725.5	712.2	(1.8)	(1.2)	(7.9)	(61.0)
Montana	82.9	79.1	68.6	64.4	70.0	72.3	70.0	72.1	3.0	(2.0)	(13.0)	(10.7)
Nebraska	34.7	33.3	35.0	34.4	38.1	41.4	38.6	37.3	(3.6)	1.0	7.2	2.5
Nevada	1,089.8	938.7	902.3	911.8	905.8	918.3	924.0	909.9	(1.5)	(2.5)	(16.5)	(179.9)
New Hampshire	87.3	76.9	73.8	67.8	70.5	77.2	74.1	77.0	3.9	(1.8)	(11.8)	(10.3)
New Jersey	1,504.3	1,411.6	1,378.5	1,323.5	1,287.7	1,374.9	1,238.2	1,201.2	(3.0)	(3.2)	(20.2)	(303.1)
New Mexico	120.7	121.0	118.9	114.3	112.7	111.2	109.9	112.6	2.5	(1.0)	(6.7)	(8.1)
New York	2,934.0	2,813.9	2,970.6	2,837.8	2,987.2	3,187.4	3,235.7	3,181.8	(1.7)	1.2	8.4	247.8
North Carolina	387.3	452.9	470.3	466.0	481.3	492.6	509.5	526.4	3.3	4.5	35.9	139.1
North Dakota	7.2	7.3	6.5	7.0	8.6	8.9	9.1	8.1	(11.1)	1.7	12.4	0.9
Ohio	759.4	778.8	801.9	797.4	839.8	1,070.2	1,206.5	1,273.2	5.5	7.7	67.7	513.8
Oklahoma	92.9	92.7	92.7	94.1	94.9	94.9	90.2	82.4	(8.7)	(1.7)	(11.3)	(10.5)
Oregon	726.6	652.6	592.0	587.2	551.3	566.8	516.2	548.5	6.3	(3.9)	(24.5)	(178.0)
Pennsylvania	1,916.9	2,066.8	2,310.8	2,500.7	2,648.6	2,565.4	2,470.8	2,430.3	(1.6)	3.4	26.8	513.4
Rhode Island	396.2	377.3	374.4	380.8	399.5	393.8	384.5	385.1	0.2	(0.4)	(2.8)	(11.0)
South Carolina	295.0	286.1	296.5	289.9	314.4	314.2	330.7	343.5	3.9	2.2	16.4	48.5
South Dakota	155.2	148.8	149.1	133.7	127.2	129.1	124.4	128.5	3.3	(2.7)	(17.2)	(26.6)
Tennessee	318.2	306.5	314.3	313.5	338.8	349.7	341.6	347.8	1.8	1.3	9.3	29.6
Texas	1,164.0	1,173.7	1,167.9	1,102.0	1,218.0	1,257.2	1,243.7	1,249.9	0.5	1.0	7.4	85.9
Vermont	25.3	23.1	23.5	22.9	23.4	23.6	22.8	22.8	(0.4)	(1.5)	(9.9)	(2.5)
Virginia	506.2	480.4	468.1	474.6	510.2	500.8	545.4	533.8	(2.1)	0.8	5.4	27.5
Washington	148.5	134.8	157.3	162.3	146.4	145.0	151.1	142.7	(5.5)	(0.6)	(3.9)	(5.7)
West Virginia	789.0	768.4	691.9	694.7	786.2	642.7	571.6	563.9	(1.3)	(4.7)	(28.5)	(225.1)
Wisconsin	165.0	146.7	139.8	155.4	158.1	161.4	171.5	167.5	(2.4)	0.2	1.5	2.4
Wyoming	0.2	0.2	0.2	0.1	0.1	0.1	0.4	2.5	545.7	44.0	NM	2.3

Sources: Rockefeller Institute review of state lottery and gaming regulatory agencies' financial reports for lottery, casino, racino, and video gaming revenues; U.S. Census Bureau (pari-mutuels).

Notes: Total gambling revenues includes tax and fee revenues for lotteries, commercial casinos, racinos, pari-mutuels, and video gaming machines. Revenues from Native American casinos are excluded. NM = not meaningful.

Endnotes

1 In this report, we use the terms "casinos" and "commercial casinos" interchangeably. Unless otherwise specified, all mentions of casinos refer to commercial casinos.

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10 Etzel, "The House of Cards Is Falling."

11 Ibid, 218.

12 In most states the legal gambling age is either eighteen or twenty-one years. Hence, we adjust the gambling revenue to state population that represents age eighteen or above.

13 We obtained lottery revenue data from individual state lottery agencies. For casinos, racinos, video gaming, and Native American casinos we collected revenue data from individual state gaming regulatory agencies or other state agencies. Pari-mutuel wagering data were obtained from the U.S. Census Bureau.

14 Several states with racino operations host VLTs. In this report, we present revenues from VLTs as part of racinos for the following six states: Delaware, Maryland, New York, Ohio, Rhode Island, and West Virginia. In addition, lottery revenues for Oregon include revenues from video gaming machines.

15 In this report all the inflation adjustments are based on the Bureau of Economic Analysis's price index for Gross Domestic Product (NIPA Table 1.1.4). We used quarterly averages of the GDP indexes that is corresponding to most states' fiscal year periods, running between July and June. Collections are adjusted to 2015 dollars

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19 The compound annual growth rate (CAGR) is the mean annual growth rate over a specified period of time.

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