OXFORD ECONOMICS

MARYLAND SPORTS BETTING TAX ANALYSIS

JANUARY 2021

SUMMARY

Maryland voters recently approved legalizing sports betting and the legislature is preparing enabling legislation. To contribute to a broader foundation for discussion, PPE Casino Resorts Maryland, LLC commissioned Oxford Economics (Oxford) to analyze aspects of potential regulatory and tax decisions. Our key findings are summarized as follows.

- **An active and competitive legalized sports betting market represents a valuable opportunity to generate significant additional casino gaming tax revenue.** We anticipate sports betting will result in additional trips to Maryland casinos and that the casino gaming tax revenue generated by incremental spending during these trips is likely to be greater than total sports betting gaming tax revenue. For example, at a 10% sports betting tax rate, we estimate $39.1 million of sports betting gaming tax revenue, and $83.4 million of incremental casino gaming tax revenue, for a total gaming tax impact of $122.4 annually.
- **An incrementally higher gaming tax on sports betting is anticipated to reduce legal betting activity, incremental casino gaming activity, and total tax revenue.** Even as higher sports betting tax rates, to a point, may generate higher sports betting tax revenue, such tax rates may result in lower total gaming tax revenue for the state. We estimate that with a 10% sports betting tax rate, sports betting and incremental casino gaming will support $122.4 million of annual gaming tax revenue for Maryland, as compared to $113.9 million with a 20% sports betting tax rate. The range of sports betting tax rates in almost all states in which sports betting is offered by commercial operators separate from the state lottery is between 6.75% and 20% of gaming revenue.
- **Issuing additional sports betting licenses to non-casino/racetrack licensees has the potential to substantially reduce the tax impact generated by legalized sports betting, relative to a base scenario in which all licenses are issued to casino/racetrack licensees.** This is because in such a scenario, sports betting revenue would not be expected to expand meaningfully, and there would not be the same focus by all operators on generating additional casino gaming spending. As a result, we estimate the total tax impact (sports betting tax, casino gaming tax, and state and local tax revenue) would be 29.4% lower if three additional licenses are issued to non-casino/racetrack businesses, representing a difference of $49.5 million annually. Almost exclusively, the licensing model used by states with existing commercial casinos or racinos is to award sports betting licenses to existing casino operators.

1. ANALYSIS

1.1 OUR UNDERSTANDING

The ballot referendum approved by voters in November 2020 authorized the legislature to pass a law allowing the State Lottery and Gaming Control Commission to issue sports betting licenses with the intent that resulting tax revenue be primarily used for funding public education.

For this analysis, we have assumed that legislation would allow sports betting at licensed facilities and on mobile devices. We have assumed that the primary goals of legalized sports betting in Maryland include:

- protecting consumers, safeguarding game and business integrity, and providing legalized sports betting that chokes off the existing illegal market;
- generating tax revenue for state and local governments; and,
- providing economic opportunity for Maryland residents and businesses, including minority business enterprises.

In this analysis, we have focused on the key aspects of the potential regulatory structure in Maryland that will have important implications on the level of tax revenue and economic impacts that can be generated by legalized sports betting. In our view, these are:

- **Gaming tax rate:** Level of gaming tax rate
- **Licensing structure:** Number of licenses, number of authorized locations, number of mobile betting brands or "skins" per license, role of third-party betting providers, and role of existing Maryland gaming operators.
- **Licensing fees:** Initial license fee

There are other regulatory topics that are also important to successful legalization of sports betting, for example, the types of wagering allowed, and we have assumed, Maryland's structure will not be unusually limited (e.g., similar to New Jersey).

1.2 OUR APPROACH

We conducted our analysis by preparing two scenarios that assess the impacts associated with various tax rates and licensing structures.

- **Base Scenario:** This scenario assumes seven sports betting licenses are awarded to each of the six existing Maryland casinos and the Maryland Jockey Club. Each of these operators are assumed to offer on-site sports betting as well as mobile betting. We assume that each license holder is permitted to contract with a maximum of one sports betting operator to offer a single brand, or "skin" in Maryland. In this scenario, we analyze the impact of several different gaming tax rates.
- **Alternative Scenario:** This scenario assumes 10 sports betting licenses are awarded, with seven licenses awarded to existing Maryland casinos and/or the Maryland Jockey Club, and three

additional licenses are awarded to other businesses that are allowed to operate a single physical sportsbook as well as offer mobile betting. As with the Base Scenario, we assume each license holder may partner with at most one sports betting operator to offer a single brand, or "skin" in Maryland.

In both scenarios:

- We refer to a stabilized year of operations. This represents a future year (three to five years in the future) in which operators have had time to ramp-up and adjust operations, and consumers have had time to become familiar with sports betting. During initial years of operation, we expect sports betting activity would be lower than in the stabilized year of operations. We have conducted the analysis in constant 2020 dollars. It is possible that general price inflation over time would tend to support higher future revenue levels.
- We refer to sports betting gaming tax as a tax on gaming revenue. Such a tax is a better way to tax sports betting than a tax on handle (amount bet). This is because a tax on gaming revenue is more closely aligned with the way revenue is generated in the gaming business, and the associated operating costs.

In the next part of this report, we discuss the results of these scenarios. This analysis is informed by our research on legalized sports betting in other US states, and in the last part of this report, we summarize observations from this research.

1.3 BASE SCENARIO

The Base Scenario assumes sports betting licenses are awarded to the operators of the six existing Maryland casinos and the Maryland Jockey Club and was analyzed to assess potential gaming tax revenue and economic impacts across multiple gaming tax rates. The analysis reflects two important factors:

- **An active and competitive legalized sports betting market represents a valuable opportunity to generate significant additional casino gaming tax revenue.** We anticipate that sports betting will result in additional trips to Maryland casinos. This is expected as sports events, combined with physical sportsbook facilities and mobile offerings and supported by marketing and promotional activity by casino operators, will create additional occasion to, and interest in, visiting a casino. This is similar to how casinos use on-site events and facilities, such as live entertainment, specialty restaurants, or hotel accommodations, to expand the casino experience, encourage additional trips, and generate additional casino gaming revenue. Sports provides an ongoing calendar of events that are appealing to new and existing customers.
- **An incrementally higher gaming tax on sports betting is anticipated to reduce legal betting activity, incremental casino gaming activity, and total tax revenue.** Even as higher sports betting tax rates, to a point, may generate higher sports betting tax revenue, such tax rates may result in lower total gaming tax revenue for the

state. Higher sports betting gaming tax rates are expected to reduce activity and interest in legal sports betting by reducing operating margins, resulting in less attractive odds for bettors, as well as reduced spending by operators on marketing, promotions, technology and other infrastructure, service levels, and content. Thus, with higher tax rates, consumers are expected to spend less on sports betting and incremental trips to casinos, resulting in lower combined sports betting and casino gaming tax revenue.

As a result of these two factors, the net impact of higher gaming taxes on sports betting is anticipated to be a reduction in gaming tax revenues to the state and reduced economic impacts, relative to lower tax rate scenarios.

This effect is illustrated in the following summary graph. With a sports betting gaming tax rate of 10% of gaming tax revenue, we estimate sports betting gaming tax revenue of $39.1 million annually, and incremental casino gaming tax revenue of $85.7 million. This incremental casino gaming tax revenue represents revenue generated at Maryland casinos as a result of additional trips to the casinos by sports betting patrons. The total gaming tax generated in the 10% tax rate scenario is $124.7 million. In contrast, at a 20% sports betting gaming tax rate, we expect a lower level of total gaming tax revenue ($115.5 million). Sports betting gaming tax revenue increases to $55.1 million due to the higher tax rate, but reduced spending during additional casino visits reduces the incremental casino gaming tax revenue to $60.4 million, more than offsetting the gain in sports betting gaming tax.

Fig. 1: Base Scenario, gaming tax revenue comparison by tax rate

Stabilized year, amounts in millions
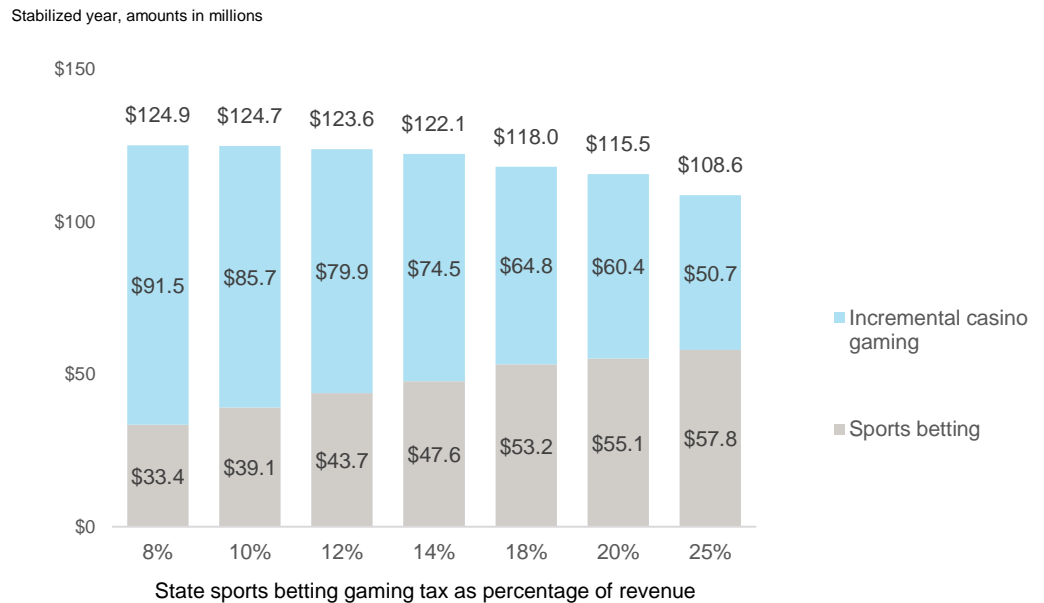
Source: Oxford Economics

These tax rate scenarios are outlined in greater detail in the following Base Scenario table. As shown, at a 10% sports betting gaming tax rate, we expect $390.8 million of sports betting gaming revenue annually, which is equivalent to

$77 per Maryland adult (based on estimated 2025 adult population). We estimate incremental on-site spending at Maryland casinos that is approximately equivalent to the amount of sports betting revenue ($390.8 million). Of this, we estimate $208.4 million will be casino gaming revenue, supporting $85.7 million of incremental casino gaming tax revenue. Together with sports betting gaming tax revenue, this represents $124.7 million of annual Maryland gaming tax revenue as a result of legalized sports betting.

The incremental spending on-site at casinos is also expected to support additional economic impacts in Maryland. Specifically, additional jobs at the casinos (direct jobs), as well as jobs at suppliers (indirect jobs), and jobs supported by the incomes of casino employees (induced jobs). Together, we estimate 3,030 total Maryland jobs will be supported by incremental casino spending on-site at Maryland casinos, which is in addition to jobs supported by sports betting operations. We estimate this economic activity will support $43.8 million of state and local tax revenue, excluding gaming tax revenue. For example, additional casino jobs will support additional income tax revenue, and additional revenue at the casinos and suppliers will support additional property tax revenue.

Fig. 2: Base Scenario estimates

	State tax on sports betting (percentage of gaming revenue)						
	8.0%	**10.0%**	**12.0%**	**14.0%**	**18.0%**	**20.0%**	**25.0%**
Sports betting							
Gaming revenue (in millions)	$417.6	$390.8	$364.5	$339.9	$295.5	$275.6	$231.4
Gaming tax revenue (state, in millions)	33.4	39.1	43.7	47.6	53.2	55.1	57.8
Per capita gaming revenue	$82	$77	$72	$67	$58	$54	$46
Incremental casino spend on-site							
Share of sports betting occurring through casino operator licenses	100%	100%	100%	100%	100%	100%	100%
Ratio of incremental on-site spending to sports betting	100%	100%	100%	100%	100%	100%	100%
Incremental casino spending on-site, in millions							
Total spending	$417.6	$390.8	$364.5	$339.9	$295.5	$275.6	$231.4
Casino gaming spending	222.7	208.4	194.4	181.3	157.6	147.0	123.4
Incremental casino gaming tax revenue	91.5	85.7	79.9	74.5	64.8	60.4	50.7
Combined (sports plus incremental on-site)							
Gaming revenue	$640.4	$599.2	$558.9	$521.2	$453.1	$422.5	$354.8
Gaming tax revenue	**$124.9**	**$124.7**	**$123.6**	**$122.1**	**$118.0**	**$115.5**	**$108.6**
Economic impact of incremental casino spending							
Total employment	3,238	3,030	2,826	2,636	2,292	2,137	1,794
State and local tax revenue (excluding gaming)	$46.8	$43.8	$40.8	$38.1	$33.1	$30.9	$25.9

Source: Oxford Economics

As part of this analysis, we prepared a visitation analysis on incremental casino spending. This helped support our estimate that the opportunity to generate incremental on-site casino spending is approximately equal to potential sports betting revenue in Maryland. In the visitation analysis, we estimated 10% of Maryland adults would visit a Maryland casino at least once during the year on an incremental trip due to the availability of legalized sports betting, and that these bettors would on average, make four such trips a year. Assuming each such visitor spends about $150 during their casino visit, and adding in visitors from Virginia, supports $379.2 million of incremental on-site casino spending. Of this, $202.2 million is expected to be casino gaming revenue. This is

equivalent to 11% of the historical gaming revenue at Maryland casinos. In other words, this analysis is consistent with estimating legalized sports betting will result in about a 11% increase in casino gaming revenue at Maryland casinos.

Fig. 3: Incremental casino spending visitation analysis

Stabilized year

	Maryland	DC and Virginia (selected counties)	Total
Adult population (in millions)	5.1	2.4	7.5
Share of population participating in sports betting, and making at least one visit to bet on-site at a Maryland casino	10%	7%	
Average incremental trips per bettor	4.0	3.0	
Incremental casino visits (in millions)	2.0	0.5	2.5
Spend per visit	$150	$150	
Casino gaming	80	80	
Sports betting	50	50	
Food and beverage, retail, other	20	20	
Incremental casino spending on-site (in millions)	$304.2	$75.0	$379.2
Incremental casino gaming revenue (in millions)	**$162.2**	**$40.0**	**$202.2**
Per capita	$32	$17	$27
Total casino gaming revenue (historical, FY 2019) (in millions)			**$1,760.4**
Incremental casino gaming revenue as ratio to historical (2019)			11%

Notes: Selected Virginia counties include Alexandria city, Arlington, Fairfax city, Fairfax, Falls Church city, Manassas city, and Prince William. Population estimates are 2025, age 21 and above.
Source: Oxford Economics
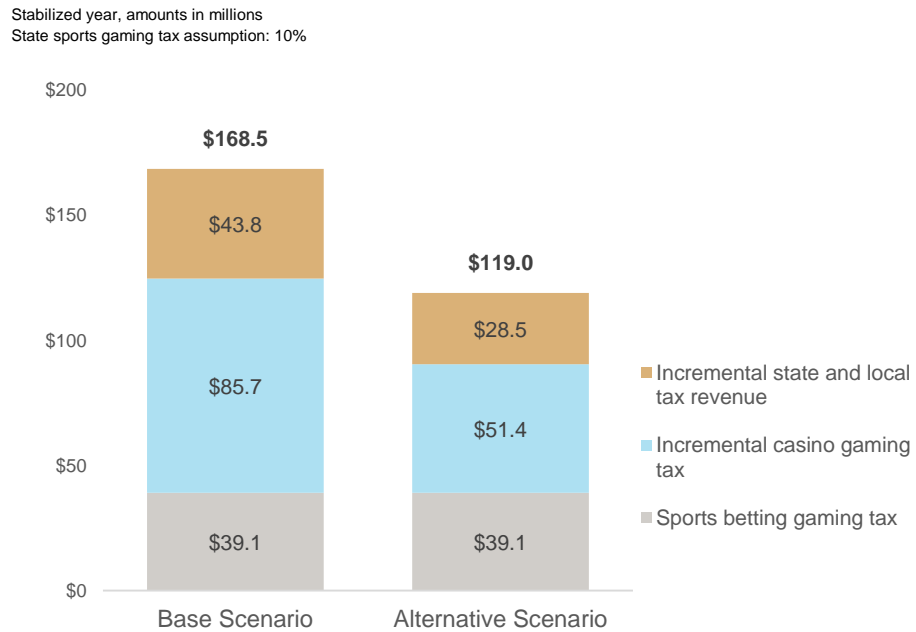
1.4 ALTERNATIVE SCENARIO

We analyzed an Alternative Scenario in which seven sports betting licenses are issued to existing Maryland casinos and/or the Maryland Jockey Club (Casino/Racetrack-held Licenses), and an additional three licenses are issued to other businesses (Non-Casino/Racetrack-held Licenses). As in the Base Scenario, we assumed each sports betting licensee would be allowed to offer a single brand, or "skin", for online gaming, and could do so by partnering with a third-party platform. Each Non-Casino/Racetrack-held Licensee would be permitted to offer a single physical sportsbook and mobile betting.

In this scenario, we assumed that sports betting activity would be approximately split between the Casino/Racetrack-held Licenses (60%) and Non-Casino/Racetrack-held Licenses (40%). For example, this could occur as one or more major brand platforms partners with a Maryland business with a Non-Casino/Racetrack-held License. Such major brand platforms would be expected to offer an appealing mobile betting app and a significant physical sportsbook location and would spend heavily on marketing and promotions.

Sports betting revenue would not be expected to increase meaningfully in the Alternative Scenario relative to the Base Scenario, as we expect the market

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would have reached an active and competitive level in the Base Scenario with seven licenses. The key difference in the Alternative Scenario relative to the Base Scenario would be that there would not be a focus by the Non-Casino/Racetrack-held License operators on opportunities to generate additional casino gaming spending. To illustrate the potential difference of this Alternative Scenario relative to the Base Scenario, we reduced the estimated on-site casino spending to 60% of the Base Scenario, and instead assumed a moderate level of incremental spending would occur at non-casino venues. **As a result, in the Alternative Scenario, we estimate the total tax impact (sports betting tax, casino gaming tax, and state and local tax revenue) would be 29.4% lower if three additional licenses are issued to non-casino/racetrack businesses, representing a difference of $49.5 million annually.**

Fig. 4: Tax revenue comparison between Base and Alternative Scenarios

Stabilized year, amounts in millions
State sports gaming tax assumption: 10%

Source: Oxford Economics

Estimates for the Alternative Scenario, and a comparison of the Base and Alternative Scenarios, are provided in the Appendix.

1.5 LICENSE FEES

The results we have calculated for the Base and Alternative Scenarios exclude sports betting license fees, such as initial license fees and renewal fees. We have assumed that any such fees would be broadly consistent with such fees in other states. For example, in our research, several of the states have an initial license fee of $100,000.

A moderately higher initial license fee is not expected to have a significant impact on the gaming taxes expected to be generated by legalized sports betting over time. However, if the initial license fee is set at too high a level, it may reduce the number of sports betting licensees, and potentially reduce the ongoing annual revenue generated by sports betting. With the potential to

generate in excess of $100 million of combined sports betting and casino gaming tax annually, the path to maximizing the tax revenue opportunity would be to focus on ensuring a prompt and complete uptake of the available licenses.

1.6 RESEARCH ON OTHER STATES

As part of our analysis, we researched legalized sports betting in several US states. The focus was to gather benchmark information on:

- sports betting gaming revenue per capita;
- sports betting tax rates;
- market context, such as type of sports betting permitted and notable restrictions; and,
- license fees, number of potential license holders, and number of skins.

Based on that research we observed:

- **Almost exclusively, the licensing model used by states with existing commercial casinos or racinos is to award sports betting licenses to existing casino operators.** The only exception we noted in our research is Rhode Island.
- **The range of sports betting tax rates in almost all states in which sports betting is offered by commercial operators separate from the state lottery is between 6.75% and 20% of gaming revenue.** The only exception we noted is Pennsylvania.
- Sports betting activity in each of the states is still in the process of ramping up. Revenue levels are expected to continue to expand as offerings, platforms, marketing and promotions are refined, and as consumer awareness and familiarity improves.
- Some states have specific market characteristics that impacts gaming revenue per capita. For example, several of the states don't offer mobile betting (Delaware, and Mississippi). Some states benefit from substantial out-of-state visitation from states that don't yet offer sports betting (New Jersey, Rhode Island).
- Average per capita revenue in states with low tax rates is higher than in states with high tax rates.
- Despite only two years of operation, or in some cases less, annualized per capita gaming revenue in some states, such as New Jersey ($70) and Iowa ($61), and Indiana ($34), is already substantial (revenues adjusted to exclude period with greatest Covid-19 impacts).[1]
- Many states allow multiple skins per license, resulting in a large number of potential skins. However, we do not see indications that a large number of potential skins, beyond having a sufficient level, expands the revenue potential of a market to a substantial degree.

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[1] In some cases, Covid-19-realted casino closures and cancellation of sports events resulted reduced sports betting activity. We calculated annualized revenue excluding the March to July 2020 period as benchmarks.

Fig. 5: Gaming revenue per capita, comparison of states with low and high tax rates

Sports betting, annualized (excluding March '20 to July '20), selected states
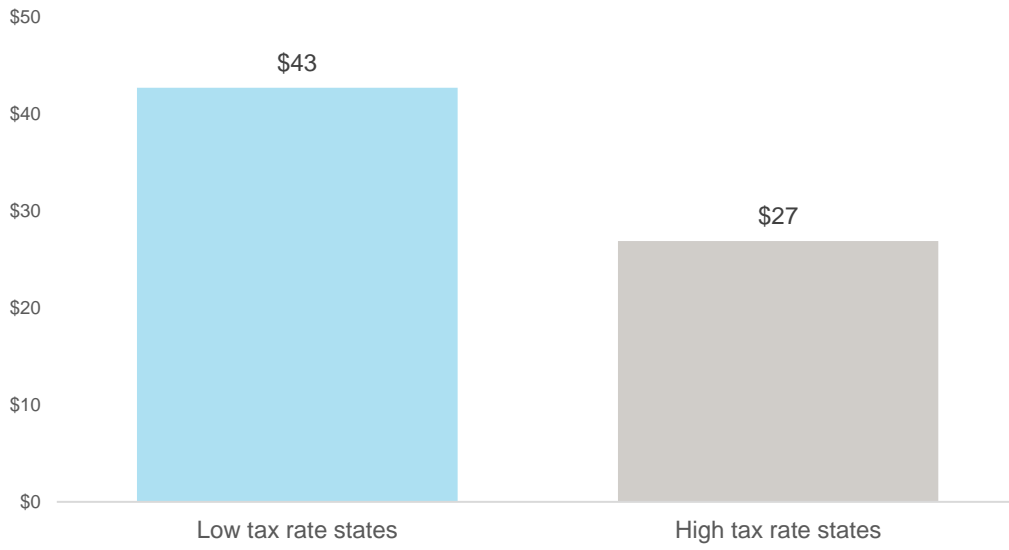
Source: Regulatory agencies; analyst reports; Oxford Economics

2. APPENDIX

Fig. 6: Alternative scenario estimates

	State tax on sports betting (percentage of gaming revenue)						
	8.0%	10.0%	12.0%	14.0%	18.0%	20.0%	25.0%
Sports betting							
Gaming revenue (in millions)	$417.6	$390.8	$364.5	$339.9	$295.5	$275.6	$231.4
Gaming tax revenue (in millions)	33.4	39.1	43.7	47.6	53.2	55.1	57.8
Per capita gaming revenue	$82	$77	$72	$67	$58	$54	$46
Incremental casino spend on-site							
Share of sports betting occurring through casino operator licenses	60%	60%	60%	60%	60%	60%	60%
Ratio of incremental on-site spending to sports betting	100%	100%	100%	100%	100%	100%	100%
Incremental casino spending on-site, in millions							
Total spending	$250.6	$234.5	$218.7	$203.9	$177.3	$165.3	$138.8
Casino gaming spending	133.6	125.1	116.6	108.8	94.6	88.2	74.0
Incremental casino gaming tax revenue	54.9	51.4	47.9	44.7	38.9	36.2	30.4
Combined (sports plus incremental on-site)							
Gaming revenue	$551.3	$515.8	$481.1	$448.7	$390.1	$363.8	$305.4
Gaming tax revenue	**$88.3**	**$90.5**	**$91.7**	**$92.3**	**$92.1**	**$91.4**	**$88.3**
Economic impact of incremental casino and non-casino spending							
Total employment	2,332	2,182	2,036	1,898	1,650	1,539	1,292
State and local tax revenue (excluding gaming)	$30.5	$28.5	$26.6	$24.8	$21.6	$20.1	$16.9

Source: Oxford Economics

Fig. 7: Summary comparison of scenarios

Stabilized year, amounts in millions (except jobs)

	State tax on sports betting (percentage of gaming revenue)						
	8.0%	10.0%	12.0%	14.0%	18.0%	20.0%	25.0%
Sports betting gaming revenue							
Base scenario	$417.6	$390.8	$364.5	$339.9	$295.5	$275.6	$231.4
Alternative scenario	417.6	390.8	364.5	339.9	295.5	275.6	231.4
Difference (Alternative minus base)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Incremental casino gaming revenue							
Base scenario	$222.7	$208.4	$194.4	$181.3	$157.6	$147.0	$123.4
Alternative scenario	133.6	125.1	116.6	108.8	94.6	88.2	74.0
Difference (Alternative minus base)	-$89.1	-$83.4	-$77.8	-$72.5	-$63.0	-$58.8	-$49.4
Gaming tax revenue (sports betting and incremental casino gaming on-site)							
Base scenario	$124.9	$124.7	$123.6	$122.1	$118.0	$115.5	$108.6
Alternative scenario	88.3	90.5	91.7	92.3	92.1	91.4	88.3
Difference (Alternative minus base)	**-$36.6**	**-$34.3**	**-$32.0**	**-$29.8**	**-$25.9**	**-$24.2**	**-$20.3**
Difference relative to base	-29%	-27%	-26%	-24%	-22%	-21%	-19%
Total employment							
Base scenario	3,238	3,030	2,826	2,636	2,292	2,137	1,794
Alternative scenario	2,332	2,182	2,036	1,898	1,650	1,539	1,292
Difference (Alternative minus base)	-906	-848	-791	-737	-641	-598	-502
State and local tax revenue (excluding gaming)							
Base scenario	$46.8	$43.8	$40.8	$38.1	$33.1	$30.9	$25.9
Alternative scenario	30.5	28.5	26.6	24.8	21.6	20.1	16.9
Difference (Alternative minus base)	-$16.3	-$15.3	-$14.2	-$13.3	-$11.5	-$10.8	-$9.0

Source: Oxford Economics

January 2021

All data shown in tables and charts is Oxford Economics' own data, except where otherwise stated and cited in footnotes.

The modelling and results presented here are based on information provided by third parties, upon which Oxford Economics has relied in producing its report and forecasts in good faith. Any subsequent revision or update of those data will affect the assessments and projections shown.

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