LEAGUE FEE ANALYSIS

LEGALIZED SPORTS BETTING TAX STRUCTURES

MARCH 2018

SUMMARY

As of March 2018, 18 states across the country have either passed or are actively considering sports betting-related legislation.[1] Several of these pieces of legislation either include, or contemplate, a fee payable to professional sports leagues (League Fee) calculated as 1.0% of the total amount bet (handle). The initial rationale presented for such a fee was that leagues would require additional funds to bolster efforts related to monitoring the integrity of sports contests, although ensuing justifications for the fee have also included compensation for the leagues' intellectual property.[2]

To contribute to a broader foundation for discussing legalized sports betting, the American Gaming Commission (AGA) commissioned Oxford Economics (Oxford) to analyze the implications of this League Fee tax structure. Our analysis consists of an independent assessment of the potential for various tax structures, including the League Fee option, to support legalized sports betting and satisfy the goals shared by both the sports leagues and gaming industry. Those goals are:

- protecting consumers;
- safeguarding game integrity;
- generating revenue for federal, state and tribal governments; and,
- eradicating the existing illegal sports betting market.

To assess the potential impact of the League Fee, we conducted a scenario analysis. In this analysis, we calculated the effective tax rate on a gaming revenue basis both with and without the League Fee using a range of potential state tax rates (from 6% to 24% of gaming revenue). We then estimated the expected gaming revenue from sports betting and corresponding tax and League Fee revenues.

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[1] American Gaming Association. (2018, February) Active Sports Betting Legislation in the U.S. https://www.americangaming.org/active-sports-betting-legislation-us

[2] Rovell, Darren. (2018, February 17). Adam Silver's full answer when asked today about the NBA wanting to take 1% of every NBA bet if gambling is legalized. Message posted to Twitter, https://twitter.com/darrenrovell/status/965038206566592513

Because the League Fee is calculated on handle (amount bet), which represents a large volume of offsetting stakes, rather than the gaming revenue a potential sports book might earn after paying winning bettors (also referred to as gross gaming revenue or GGR in this report), the League Fee has a large impact on effective tax rates. Indeed, the League Fee increases the effective tax rate by 16.7 percentage points, assuming a constant hold rate.[3] For example, a state tax of 16% of gaming revenue, plus a 0.25% federal handle tax, is equivalent to an effective tax on gaming revenue of 20.2%. When the League Fee is added, the effective tax rate increases substantially to 36.8%. In this analysis, we assumed a hold rate of 6.5% and that sports betting would be available on-site at casinos and through online (mobile) formats.

Key Findings

Our key findings are summarized as follows.

- **The higher effective tax rate in scenarios with the League Fee is anticipated to limit the attractiveness of legal sports betting relative to the illegal market.** Rather than developing a competitive, accessible legal means of sports betting, the League Fee fosters the risk of creating a niche legal offering. This would leave many bettors to favor illegal alternates that are less safe, less fair, do less to address problem gaming and reduce law enforcement costs, and which fail to generate tax revenue or mainstream jobs. Also, persistence of a sizable illegal market would hamper game integrity efforts, as regulators would lack the level of visibility into potential match fixing that a more active legal market could provide.
- **Legal sports betting scenarios that include the League Fee are anticipated to generate less than half the state tax revenue compared to scenarios that don't include the League Fee.** This is because the League Fee substantially raises the effective tax rate, reducing legal gaming revenue. For example, we estimate that with a reasonable tax rate, no League Fee, and a 50-state competitive legal sports betting market, US states would generate $2.4 billion in state gaming tax revenue annually. In contrast, we estimate that with the addition of the League Fee, states would generate as much as $1.4 billion less in gaming tax revenue annually, representing a loss of 50% to 59%.
- **No available information demonstrates that League Fee proceeds in the hundreds of millions of dollars are necessary to bolster the sports leagues' integrity monitoring efforts.** If the League Fee were instituted in a 50-state legal sports betting scenario, it would generate approximately $1 billion in annual integrity fees for the sports governing bodies.
- **Sports betting bills that institute the League Fee would do less to create mainstream, safe, taxable jobs and economic activity than those that do not.** This is because a relatively smaller legal sports betting market would undermine economic opportunities for Americans and reduce state and local tax revenue.

[3] Hold rate refers to the ratio of gross gaming revenue to handle (amount bet). For example, the hold percentage at Nevada sports books averaged 5.1% in 2017, implying that gaming revenue was equivalent to 5.1% of the handle, or amount bet.

1. ANALYSIS

1.1 SELECTED ASSUMPTIONS

If at some point current federal prohibitions on sports betting are no longer applicable, we expect individual states will legalize sports betting and that a variety of state-specific regulatory and taxation models will emerge. For this analysis, we focused on the following hypothetical scenarios:

- state gaming tax rates ranging from 6% to 24% of gaming revenue (also referred to as gross gaming revenue, or GGR).
- continuation of the existing federal tax of 0.25% of handle (amount bet); and,
- League Fee calculated as 1.0% of handle in scenarios.

We assumed a constant hold percentage of 6.5% and assumed that each state would allow sports betting on-site at casinos (in the 40 states that currently offer casino gaming) and through online (mobile) formats. We prepared our estimates for a future stabilized year of operations, in 2017 dollars. It is possible that certain states may not legalize sports betting, resulting in conditions that differ from our assumptions. This analysis is based in part on earlier research prepared for AGA as part of a nationwide study.[4]

1.2 OUR APPROACH

In evaluating the potential impact of the League Fee, we sought to understand whether it would support legalized sports betting and help achieve four goals:

- protecting consumers;
- safeguarding game integrity;
- generating revenue for federal, state and tribal governments; and,
- eradicating the existing illegal sports betting market.

We organized our analysis in three parts, beginning with consideration of key concepts relevant to sports betting, followed by examples of sports betting tax structures in Europe, and concluding with an analysis of tax structure scenarios.

1.3 KEY CONCEPTS IN ESTABLISHING A TAX STRUCTURE FOR LEGALIZED SPORTS BETTING

Several concepts are important to understand when establishing a tax structure for legalized sports betting.

- **To be successful, legal sports betting must provide an attractive, competitive alternative to illegal sports betting.** For legal sports betting to successfully attract bettors away from illegal betting, it must provide odds that are competitive with illegal markets and be accessible and appealing to bettors. A legal, but inferior offering is not likely to succeed.

[4] Oxford Economics. (2017, May) Economic Impact of Legalized Sports Betting. American Gaming Association.

- **If the effective tax rate is too high, it will hinder the competitiveness of legal sports betting.** Gaming taxes represent a significant operating cost for legal operators. If the tax is too high, fewer legal operators will be attracted to the market, and those that do chose to compete in it will reduce spending in areas such as marketing, technology, content, and distribution. As a result, illegal sports betting will maintain a significant local market share.
- **A legal sports betting market with multiple, competitive sports betting operators is anticipated to better serve customers and help maximize gaming tax revenues.** If properly developed, a legal sports betting market will attract multiple operators, resulting in competitive pressures that will help support attractive gaming opportunities for bettors (e.g. competitive odds and a variety of betting options, online (mobile) formats with content such as video, statistics and commentary; appealing promotions; and responsive customer service).
- **A tax on gaming revenue 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.
    - The “revenue” that is generated in a sports betting operation is the amount bet by patrons minus the amount paid out as prizes (gaming revenue). This represents the amount of revenue that the betting operation can then use to pay taxes and operating costs. A sports betting operation that generates a high level of gaming revenue during a given period, has the capacity to pay the corresponding gaming tax. Meanwhile another sports betting operation with a similar handle during this same period may have generated very little gaming revenue, for example due to variability in bet outcomes. If both businesses are taxed based on handle, the second business will likely face a cash shortfall. This lack of alignment between the tax due and the actual revenue of the business would make it more difficult for legal sports betting operations to stay in business and compete with illegal operations.
    - A tax on gaming revenue allows operators flexibility to offer gaming options that better suit consumer preferences. For example, a handle tax constrains the ability of a sports book to offer attractive odds on single game bets, and instead encourages a focus on offerings with less attractive odds, such as those that depend on the outcomes of multiple games (also known as parlay betting).
    - Because gaming revenue is equivalent to the amount spent by customers, a tax on gaming revenue is similar to how sales taxes are applied to the value of a purchase.

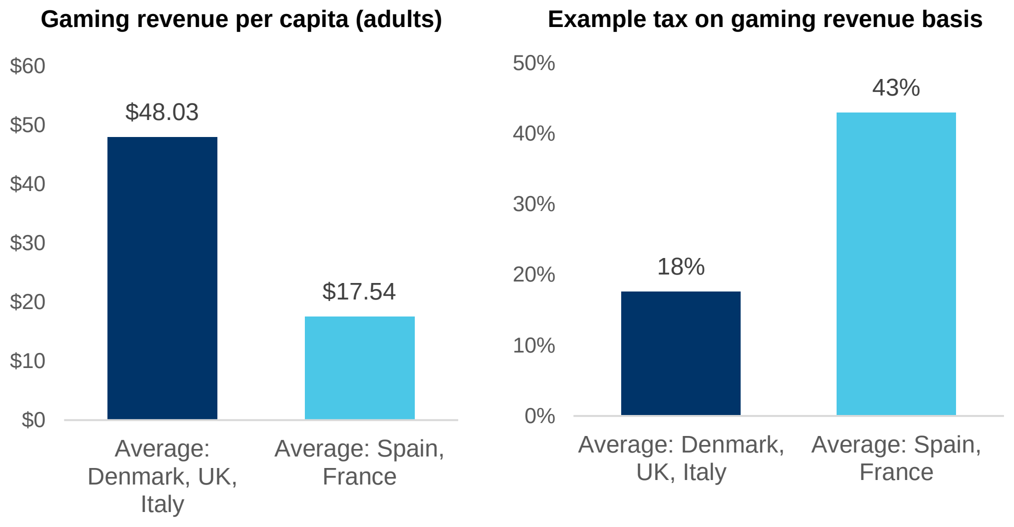
1.4 EUROPEAN EXAMPLES

To contribute to our understanding of the relationship between the tax and regulatory structure and the success of legal sports betting, we reviewed the experiences of several countries in Europe with relatively mature sports betting regimes. These markets provide a distinct contrast between countries such as Denmark, United Kingdom, and Italy in which the gaming tax is structured as a reasonable tax on gaming revenue, and those, such as Spain and France, in which the tax rate is higher.

As shown in the accompanying figure, the effective tax rate on sports betting in Denmark, United Kingdom, and Italy on a gaming revenue basis is 18%, and sports betting revenue averages $48 per adult. In contrast, effective tax rates in Spain and France average 43% on a gaming revenue basis, and legal sports betting revenue averages $18 per adult (additional information provided in the appendix). This relationship is consistent with the fundamental cost structure and consumer preferences in the sports betting business. At reasonable tax rates, sports betting operators in the legal market provide an attractive alternative to the illegal market and generate sustainable revenues. At higher tax rates, the legal offering is less attractive, and the model represents a weak alternative to the illegal market.

For example, to cover the high tax rate, legal online sports betting in France averages a 17% hold. As a simplified example, rather than the opportunity to bet $110 to win $100 (implying a 4.5% hold rate), this is more consistent with the lopsided opportunity to bet $150 to win $100 (implying a 17% hold rate). In this example, a bettor would find the model with the high hold rate undesirable, contributing to the low gaming revenue per capita. In this situation, many bettors would find it more attractive to place their wager with an illegal operator. An illegal operator using an offshore online format would have no direct tax on gaming revenue, which would allow it to offer very competitive odds.

Fig. 1: Example sports betting gaming revenue and tax rates in Europe



Note: Estimates reflect historical data collected as part of Oxford Economics' study on the Economic Impacts of Legalized Sports Betting, May 2017, American Gaming Association.
Source: Regulatory authorities; Gambling Compliance; Practical Law

1.5 TAX STRUCTURE SCENARIO ANALYSIS

1.5.1 Scenario analysis

We analyzed the implications of the League Fee by conducting a scenario analysis across a range of 10 potential state gaming tax rates from 6% to 24%. For all scenarios, we assumed a federal handle tax of 0.25%. For each state tax rate, we calculated the effective tax rate without the League Fee and with the League Fee. This resulted in a range of 20 effective tax rates on a gaming revenue basis from 10.2% to 44.8%. For each of these effective tax rates, we then estimated gaming revenue per adult.

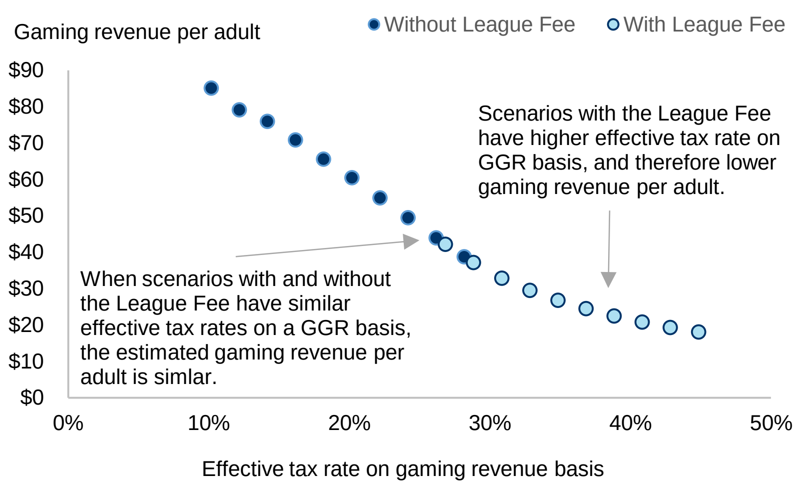
In scenarios with progressively higher effective tax rates, we project far lower levels of gaming revenues. This is because we expect operators would reduce the availability of legal betting opportunities to only the highest volume and lowest cost formats; cut back on expenses such as marketing, technology, and content; and avoid smaller markets. All three of these actions would result in lower gaming revenue. Also, fewer operators would be expected to enter highly taxed markets. We expect customers would respond by reducing their level of play in legal markets, in many cases continuing to bet in illegal markets.

We have held the hold percentage constant at 6.5% across all scenarios to isolate the impact of the League Fee. While it is possible that in higher tax scenarios, operators may tend to favor offerings with higher hold rates (i.e. less favorable odds for bettors), it is also possible that competitive pressures from illegal markets would limit such flexibility.

Our analysis of expected gaming revenue is indifferent to whether the effective tax rate is being increased because of the inclusion of the League Fee, or because of a higher state gaming tax rate. With the assumption of a constant hold percentage of 6.5%, the League Fee of 1.0% of handle is equivalent to a 16.7% tax on a gaming revenue basis. Therefore, a scenario with a 22% state gaming tax rate and no League Fee (26.2% effective tax rate on a gaming revenue basis, after including federal handle tax) generates approximately the same gaming revenue as a scenario with a 6% state gaming tax and the League Fee (26.8% effective tax rate on a gaming revenue basis). This is shown in Figure 1.

Fig. 1: Scenario estimates: US

Gaming revenue per adult at various levels of effective tax rates



Note: Stabilized year estimates in 2017 dollars.
Source: Oxford Economics

The following summarizes the two groups of scenarios. Additional information is provided in the appendix.

- **Scenarios without the League Fee:** The effective tax rate ranges from 10.2% to 28.2% on a gaming revenue basis. As shown in Figure 2, the 6% GGR tax scenario is expected to generate the highest level of gaming revenue ($21 billion on a stabilized year basis), with the highest state gaming tax revenue achieved in the 18% or 20% GGR scenarios ($2.5 billion).
- **Scenarios with the League Fee:** The effective tax rate ranges from 26.8% to 44.8% on a gaming revenue basis. Gaming revenue and therefore state gaming taxes are expected to be 50% to 59% lower than in the corresponding scenarios without the League Fee. This corresponds to loss of state gaming tax revenue relative to the scenarios without the League Fee of between $600 million and nearly $1.5 billion, depending on the scenario.

16.7%

The League Fee increases the effective tax rate on a GGR basis by 16.7 percentage points.

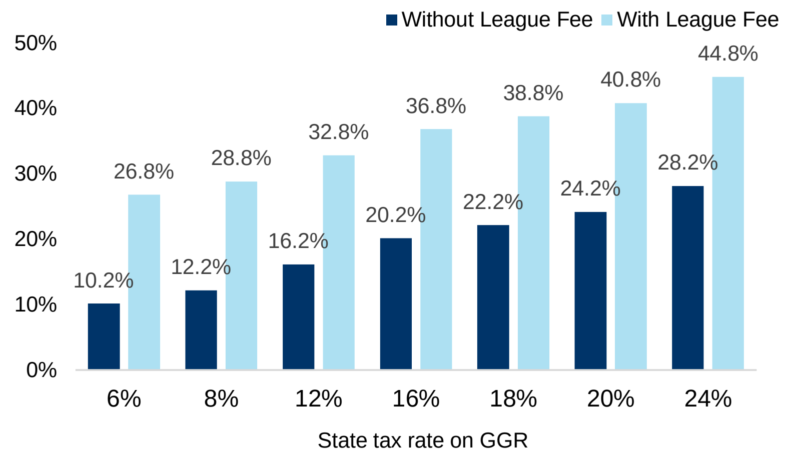
The League Fee reduces the gaming revenue generated at each potential state tax rate on GGR.

($1.5 billion)

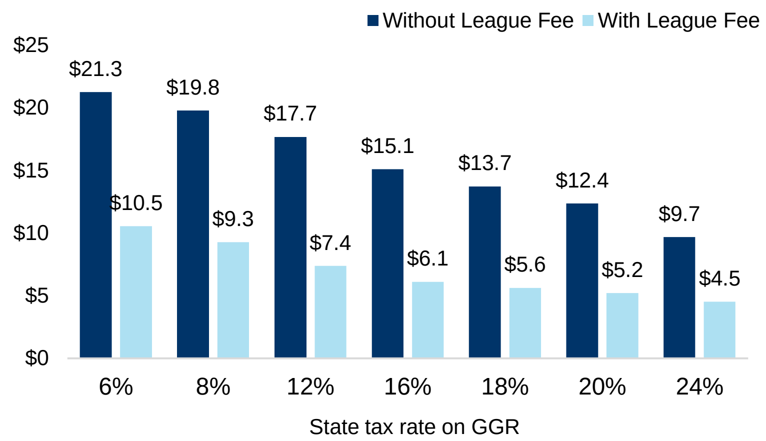
As a result, state gaming tax revenue has the potential to be as much as $1.5 billion lower in scenarios with the League Fee.

Fig. 2: Scenario estimates: US

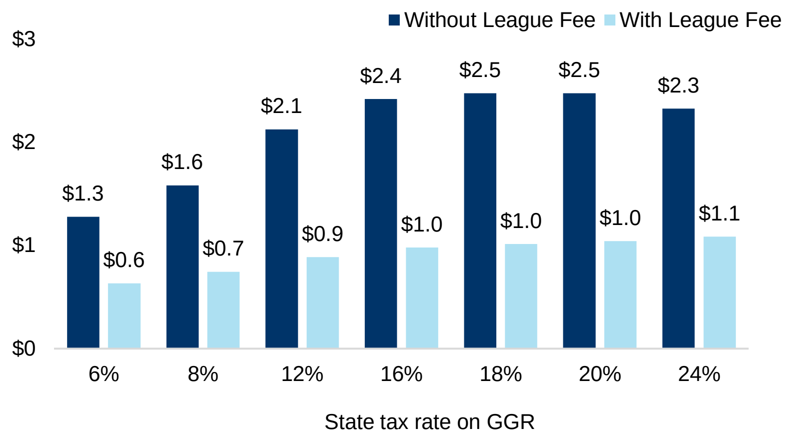
Effective tax rate on gaming revenue basis



Gaming revenue (in billions)



State gaming tax revenue (in billions)



Note: Stabilized year estimates in 2017 dollars.
Source: Oxford Economics

1.5.2 Implications of League Fee tax structure

Based on the scenario analysis, we expect the League Fee would reduce gaming activity occurring in legal markets relative to the scenarios without the League Fee. We anticipate that with the higher effective tax rates, sports betting operators would face compressed margins, and would reduce the availability and attractiveness of competitive offerings. The following are examples of potential responses by operators in higher tax scenarios:

- operate fewer locations;
- reduce operating hours;
- reduce customer service;
- reduce promotions and marketing;
- reduce investment in technology;
- reduce quality of content made available to bettors (e.g. statistics, video, commentary);
- decrease the variety of sports, games, and bets offered;
- avoid serving smaller markets or in certain states altogether.

Because of some combination of the above, the legal market would be less successful in attracting bettors away from illegal alternatives, and the illegal market would be larger than it would be with a lower tax rate.

In conclusion, we considered the implications relative to the goals of an appropriate tax structure that we set out at the start of our research: Protecting consumers, safeguarding game integrity, generating revenues for federal, state and tribal governments, and eradicating the existing illegal sports betting market.

- **The higher effective tax rate in scenarios with the League Fee is anticipated to limit the attractiveness of legal sports betting relative to the illegal market.** Rather than developing a competitive, accessible legal means of sports betting, the League Fee fosters the risk of creating a niche legal offering. This would leave many bettors to favor illegal alternates that are less safe, less fair, do less to address problem gaming and reduce law enforcement costs, and which fail to generate tax revenue or mainstream jobs. Also, persistence of a sizable illegal market would hamper game integrity efforts, as regulators would lack the level of visibility into potential match fixing that a more active legal market could provide.
- **Legal sports betting scenarios that include the League Fee are anticipated to generate less than half the state tax revenue compared to scenarios that don't include the League Fee.** This is because the League Fee substantially raises the effective tax rate, reducing legal gaming revenue. For example, we estimate that with a reasonable tax rate, no League Fee, and a 50-state competitive legal sports betting market, US states would generate $2.4 billion in state gaming tax revenue annually. In contrast, we estimate that with the addition of the League Fee, states would generate as much as $1.4 billion less in gaming tax revenue annually, representing a loss of 50% to 59%.
- **No available information demonstrates that League Fee proceeds in the hundreds of millions of dollars are necessary to bolster the sports leagues' integrity monitoring efforts.** If the League Fee were instituted in

a 50-state legal sports betting scenario, it would generate approximately $1 billion in annual integrity fees for the sports governing bodies.

- **Sports betting bills that institute the League Fee would do less to create mainstream, safe, taxable jobs and economic activity than those that do not.** This is because a relatively smaller legal sports betting market would undermine economic opportunities for Americans and reduce state and local tax revenue.

2. APPENDIX

Fig. 3: Example sports betting gaming revenue and tax rates in Europe

Country	Gaming revenue per capita (adults)	Example tax on GGR basis	Notes on example tax
Denmark	**$77.39**	**20%**	Tax applies to in-person and online (mobile) gaming
UK	**$44.73**	**15%**	Tax applies to in-person and online (mobile) gaming
Italy	**$21.96**	**18%**	18% of gross gaming revenue (in-person) 22% of gross gaming revenue (online (mobile)
Spain	**$13.78**	**26%**	Tax is calculated as 25% of gross gaming revenue, plus 0.075% of prior year handle (turnover) for regulatory costs (GGR tax estimate assumes 7% hold)
France	**$21.30**	**60%**	Tax is calculated as 7.1% of handle (turnover), plus 1.8% of handle up to 32.3 million Euros, plus negotiated payments to sports organizers. Estimate of 60% tax on GGR basis includes VAT (based on reporting by French regulator).
Averages			
Denmark, UK, Italy	**$48.03**	**18%**	
Spain, France	**$17.54**	**43%**	

Note: Estimates reflect historical data collected as part of Oxford Economics' study on the Economic Impacts of Legalized Sports Betting, May 2017, American Gaming Association.
Source: Regulatory authorities; Gambling Compliance; Practical Law; Oxford Economics

Fig. 4: Scenario estimates: Detail

	6% GGR Tax	8% GGR Tax	10% GGR Tax	12% GGR Tax	14% GGR Tax	16% GGR Tax	18% GGR Tax	20% GGR Tax	22% GGR Tax	24% GGR Tax
Scenarios without League Fee										
Assumptions										
Hold rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Tax rate on handle (federal)	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
Tax rate on handle (League)	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Tax rate on GGR (state)	6.00%	8.00%	10.00%	12.00%	14.00%	16.00%	18.00%	20.00%	22.00%	24.00%
Gaming tax rate on gaming revenue basis	**10.2%**	**12.2%**	**14.2%**	**16.2%**	**18.2%**	**20.2%**	**22.2%**	**24.2%**	**26.2%**	**28.2%**
Estimates										
Handle (in millions)	$354,452	$329,597	$316,204	$294,941	$273,224	$251,735	$228,990	$206,114	$183,173	$161,472
Gaming revenue (in millions)	**21,267**	**19,776**	**18,972**	**17,696**	**16,393**	**15,104**	**13,739**	**12,367**	**10,990**	**9,688**
Combined gaming tax revenue (in millions)	2,162	2,406	2,688	2,861	2,978	3,046	3,046	2,989	2,876	2,729
Tax on handle (federal)	886	824	791	737	683	629	572	515	458	404
Tax on handle (League Fee)	0	0	0	0	0	0	0	0	0	0
Tax on GGR (state)	**1,276**	**1,582**	**1,897**	**2,124**	**2,295**	**2,417**	**2,473**	**2,473**	**2,418**	**2,325**
Gaming revenue per adult	$85	$79	$76	$71	$66	$61	$55	$50	$44	$39
Scenarios with 1% League Fee										
Assumptions										
Hold rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Tax rate on handle (federal)	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
Tax rate on handle (League Fee)	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**
Tax rate on GGR (state)	6.00%	8.00%	10.00%	12.00%	14.00%	16.00%	18.00%	20.00%	22.00%	24.00%
Gaming tax rate on gaming revenue basis	**26.8%**	**28.8%**	**30.8%**	**32.8%**	**34.8%**	**36.8%**	**38.8%**	**40.8%**	**42.8%**	**44.8%**
Estimates										
Handle (in millions)	$175,786	$154,833	$136,931	$122,931	$111,652	$101,999	$93,787	$86,735	$80,628	$75,303
Gaming revenue (in millions)	**10,547**	**9,290**	**8,216**	**7,376**	**6,699**	**6,120**	**5,627**	**5,204**	**4,838**	**4,518**
Combined gaming tax revenue (in millions)	2,830	2,679	2,533	2,422	2,334	2,254	2,185	2,125	2,072	2,026
Tax on handle (federal)	439	387	342	307	279	255	234	217	202	188
Tax on handle (League Fee)	1,758	1,548	1,369	1,229	1,117	1,020	938	867	806	753
Tax on GGR (state)	**633**	**743**	**822**	**885**	**938**	**979**	**1,013**	**1,041**	**1,064**	**1,084**
Gaming revenue per adult	$42	$37	$33	$30	$27	$25	$23	$21	$19	$18
Impact of League Fee										
Difference in state gaming tax revenue (in millions)	**-50%**	**-53%**	**-57%**	**-58%**	**-59%**	**-59%**	**-59%**	**-58%**	**-56%**	**-53%**
Difference in state gaming tax revenue	**(643)**	**(839)**	**(1,076)**	**(1,238)**	**(1,357)**	**(1,437)**	**(1,460)**	**(1,433)**	**(1,354)**	**(1,241)**

Note: Stabilized year estimates in 2017 dollars. GGR refers to gross gaming revenue. Handle refers to amount bet. Source: Oxford Economics

March 2018

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.

For further information:

Adam Sacks asacks@oxfordeconomics.com
Aran Ryan aran.ryan@oxfordeconomics.com

Oxford Economics
303 W. Lancaster Ave, Suite 2E, Wayne, PA 19087
Tel: +1 610-995-9600