JFO Sports Wagering Revenue Model and Estimates

House Committee on Ways and Means Patrick Titterton, Fiscal Analyst, JFO February 22, 2023



Quick Terminology

- *Handle*: the amount wagered over a given period. The total amount of dollars placed by bettors.
- Revenue: the amount of money retained by the operator out of money wagered, after all winning bets are paid out.
- *Hold*: the amount of revenue retained by the operator as a share of handle.
 - i.e., the percentage of handle that is retained by the operator after all bets are paid out.



Example

- Suppose 100 people make \$100 bets. 50% pick one team and 50% pick the other team so each team has \$5,000 worth of bets placed on it.
- The wager is between two teams that are considered equally likely to win and the payout for both is set at -110, meaning that a \$100 winning bet equates to roughly \$91 in proceeds for the wagerer.

Handle	\$10,000
Winning Bets	50
Winnings	\$4,545
Winnings Plus Initial Bet Value of Winners	\$9,545
Revenue	\$455
Hold	4.55%



Sports Wagering Revenue is a function of...

- The maturity of the sports gambling market: all else equal, more gambling occurs in more mature markets.
 - Ramp up period from year 1 to year 2 of market.
- The legal and regulatory structure:
 - how many operators are allowed in the state?
 - Are they public or private?
 - Are the operators competitive?
 - Online or in person or both?
- The tax rate or revenue share: does the state opt for a low tax rate or a high tax rate/revenue sharing agreement?

Maturity of the Sports Betting Market

 Per capita handle is almost always higher in years 2 and 3 versus year 1 of sports gambling markets.

> Note: Nevada excluded since sports betting has been legal since 1949 For states with more than 4 months but less than 12 months of data in a given year, data were extrapolated for the missing months Date legalized refers to when legislation was passed Data updated to Nov/Dec 2022

Per Capita Handle by State			
		Covid-19 Adjusted Per Capita Handle	
State	Date Legalized	Year 1	Year 2
	Low Tax Rate, More	Competitive Market	
New Jersey	June 2018	\$318.26	\$543.89
West Virginia	August 2018	\$81.61	\$276.30
Iowa	May 2019	\$226.77	\$402.38
Indiana	May 2019	\$340.84	\$448.06
Michigan	December 2019	\$176.74	\$440.87
Colorado	November 2019	\$494.93	\$846.17
Illinois	June 2019	\$423.92	\$664.95
Virginia	July 2020	\$372.27	\$531.76
Tennessee	April 2019	\$337.61	\$556.12
Arizona	April 2021	\$759.08	N/A
Connecticut	May 2021	\$378.81	N/A
Louisiana	November 2020	\$396.75	N/A
	High Tax Rate, More	Competitive Market	
Pennsylvania	November 2018	\$65.23	\$416.26
Rhode Island	November 2018	\$178.89	\$343.95
New Hampshire	July 2019	\$338.42	\$485.18
	Low Tax Rate, Less	Competitive Market	
Mississippi	August 2018	\$106.31	\$187.09
Arkansas	November 2018	\$11.60	\$22.02
South Dakota	March 2021	\$7.49	N/A
	High Tax Rate, Less	Competitive Market	
Delaware	June 2018	\$162.17	\$126.05
Oregon	August 2019	\$67.28	\$72.86
Montana	May 2019	\$72.04	\$43.22

Legal and Regulatory Structure

- States make various decisions about how they want to structure their markets:
 - Number of operators/competition: how many and how competitive?
 - Many states permit many operators to take bets, or they allow a limited number to take bets but ensure the betting lines are nationally competitive.
 - A handful of states allow limited operators or manage a government-run operator through their lottery systems.
 - Generally, states with many operators are competitive, but some states have few operators but are still competitive.
 - Online vs in-person betting
 - Usually, those states with many operators allow both online and in-person betting.
 - Some states may allow online betting, but only in permitted locations like a casino.



Tax rates and revenue sharing

- Most states apply a tax rate to operator revenue, although the definitions of that base vary.
- In states with limited operators, the "tax rate" is structured as a revenue share.
- States with government-run lottery, sports gaming collect the net sportsbook profit.

State Tax Rates or	Revenue Sharing for Sports Gambling
State	Tax Rate
Arizona	8% on gross revenue, 10% on mobile revenue
Arkansas	13% or 20%
Colorado	10%
Connecticut	13.75%
Delaware	50% of total revenue
Illinois	15%
Indiana	9.50%
Iowa	6.75%
Kansas	10%
Louisiana	10%
Maryland	15%
Michigan	3.78%
Mississippi	8% state, 4% local tax
Montana	Net state sportsbook profit
New Hampshire	51% of gross revenue
New Jersey	8.5% or 13% if online
New York	10%*
Oregon	Net state sportsbook profit
Pennsylvania	34% tax with 2% local option tax
Rhode Island	51% of revenue
South Dakota	9%
Tennessee	20%
Virginia	15%
Washington, D.C.	10%
West Virginia	10%
Wyoming	10%

^{*}New York recently expanded online betting, and law states sportsbook must pay at least 50% of revenues



JFO Revenue Model

- H.127 would establish a market most closely aligned with markets in states considered *More Competitive, High Tax Rate*.
- JFO created scenarios based upon simple parameters of a regulatory market:
 - More Competitive, Low Tax Rate: Vermont would operate a model similar to NJ, WV, IA, IN, MI, CO, IL, VA, TN, AZ, LA, CT.
 - More Competitive, High Tax Rate: Vermont would operate a model similar to PA, RI, NH.
 - Less Competitive, Low Tax Rate: Vermont would operate a model similar to MS, AR, SD.
 - Less Competitive, High Tax Rate: Vermont would operate a model out of the Department of Liquor and Lottery, like OR, MO, DE.



Year 1 Estimated Revenues

Preliminary Potential State Revenues under Differing Frameworks Year 1 of Operations

	More Competitive Market		Less Competitive Market	
	Low Tax Rate	High Tax Rate	Low Tax Rate	High Tax Rate
Total Handle	\$230,800,000	\$124,900,000	\$26,900,000	\$64,600,000
Per Capita Handle	\$359	\$194	\$42	\$100
Hypothetical Hold	7.7%	7.7%	11.2%	7.2%
Hypothetical Tax Rate	11%	50%	15%	50%
Potential Revenue	\$1,960,000	\$4,810,000	\$450,000	\$2,340,000

- Note: Holds and Tax rates are assumptions. Changing them lead to different revenue estimates.
- Estimates updated to January 2023

Year 2 Estimated Revenues

Preliminary Potential State Revenues under Differing Frameworks Year 2 of Operations				
	More Competitive Market		Less Competitive Market	
	Low Tax Rate	High Tax Rate	Low Tax Rate	High Tax Rate
Total Handle	\$336,600,000	\$267,000,000	\$67,200,000	\$51,900,000
Per Capita Handle	\$523	\$415	\$104	\$81
Hypothetical Hold	6.7%	8.0%	12.8%	9.8%
Hypothetical Tax Rate	11%	50%	15%	50%
Potential Revenue	\$2,480,000	\$10,640,000	\$1,290,000	\$2,550,000

- Note: Holds and Tax rates are assumptions. Changing them lead to different revenue estimates
- Estimates updated to January 2023



Quick Note on Fees

- Fees for operators vary significantly across states.
- While not strictly the case, fees in theory cover the regulatory costs to the state and localities.
- In January 2023, Department of Liquor and Lottery estimated ongoing expenses of \$545,000.
 - DLL does is not anticipating any onetime startup costs.
 - H.127 requires total fees received to be equal to \$545,000 split equally among approved operators.

Licensing Fees for Sports Betting Across States		
State	Fee	
Arizona	\$100,000 application fee, \$750,000 initial license, and \$150,000 annual license fee	
Arkansas	No license fees	
Colorado	The Master License Fee is \$2,000 and a retail operator and mobile operator fee is \$1,200 each. These are also the renewal fees every two years.	
Connecticut	\$250,000 initial license application fee and \$100,000 annual renewal fee.	
D.C.	Up to \$500,000 initial license fee.	
	\$250,000 every five years renewal fee.	
Delaware	No additional fee for sports wagering.	
Illinois	Land-based: \$10 million initial license fee.	
	Online: \$20 million initial license fee.	
	\$1 million every four years renewal fee.	
Indiana	\$100,000 initial fee; \$50,000 annual renewal.	
Iowa	\$45,000 initial fee; \$10,000 annual renewal.	
Louisiana	\$250,000 application fee and \$500,000 five- year license fee.	

Quick Note on Fees - continued

Licensing Fees for Sports Betting Across States		
State	Fee	
Maryland	Up to \$1 million application fee with five-year renewal fee equal to 1% of operators average annual proceeds from sports wagering.	
Michigan	\$150,000 licensing fee; \$50,000 application fee; \$50,000 yearly renewal fee.	
Mississippi	No additional fee for sports wagering.	
Montana	\$1,000 annual fee for platform operators; \$100 fee per kiosk.	
New Hampshire	No licensing fees	
New Jersey	\$100,000 annual fee.	
New York	No licensing fees	
Oregon	No licensing fees	
Pennsylvania	\$10 million initial license fee. \$250,000 renewal fee every five years.	
Rhode Island	No licensing fees	
South Dakota	\$5,000 application fee and \$2,000 annual licensing fee.	
Tennessee	\$750,000 annual fee.	
Virginia	\$250,000 3 yr. license; \$200,000 renewal; \$50,000 application fee.	
Washington, D.C.	Up to \$500,000 license fee with five-year renewal.	
West Virginia	\$100,000 fee; renewed every five years.	
Wyoming	\$100,000 five-year license fee with \$50,000 renewal.	



Closing Comments

- Vermont is unlikely to operate a Low Tax Rate, Less Competitive system like Mississippi or Arkansas.
 - Vermont does not have casinos, or a tradition of casinos.
- Too many operators in Vermont may be challenging for firms.
 - Vermont's small market might not make it worth it for many operators.
 - For this reason, if Legislature sets a tax rate or revenue share that is high, JFO expects there to be relatively few operators in Vermont.
- Number of operators isn't necessarily most important from a revenue perspective.
 - More important is that the operators in Vermont are offering competitive lines and promotions, as if they were operating in a highly competitive market (see RI & NH).
- Revenues for Vermont will depend on negotiated revenue share and number of operators should the State choose to adopt that model.
 - H.127 would establish a revenue share model limited to 2 to 6 operators, which would put it in the More Competitive Market, High Tax Rate quadrant.