



The Potential Economic Impact of iGaming

Supplement for Maryland

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March 22, 2024

The conclusions and opinions expressed are exclusively those of the authors and not of Analysis Group. Support for this study was provided by the Sports Betting Alliance.

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Mickey Ferri, Vice President; Ph.D., economics. Dr. Ferri specializes in applied business economics and has extensive experience in economic analysis, business strategy, and data analysis. His work includes market analyses, revenue projections, analysis of actual versus but-for scenarios, economic damages, and commercial success. Dr. Ferri has served as an economics expert or consultant in more than 60 engagements in U.S. federal and state courts and has submitted over 30 expert reports and declarations. He has consulted to clients in industries such as entertainment, consumer products, real estate, pharmaceuticals, finance, cybersecurity, natural resources, and sports. He has been recognized as a top patent expert in the IAM Patent 1000.



Laura O'Laughlin, Vice President; M.Sc., economics. Ms. O'Laughlin has developed, administered, and analyzed surveys in trademark, intellectual property (IP), antitrust, consumer protection, and false advertising litigation matters. She has served as an expert witness and manages case teams in support of academic and industry experts in a broad range of matters involving merger reviews, antitrust disputes, competition policy, labor relations, valuation, trademark, IP, and patent infringement. In the non-litigation context, Ms. O'Laughlin uses complex research methods and modeling and applies innovative analytical approaches to provide new insights on the competitive and market challenges that clients face in managing and expanding their businesses.

The authors would like to thank Viraj Jorapur, Marimer Guevara, Joe Bourdage, Matthew Richman, Jonathan Gong, Lexi Gu, Vatsala Ramanan, Raul Gulrajani, Kate Schoenbach, Justin LaTorraca, Juan Estrada, Ananya Sen, Thuy Le, Ellie Miller, Sean Flanagan, Hana Dai, Frank Kim, Angelina Cao, Benjamin Harvey, Patrice Geffrard, and Yonatan Melamed for their valuable contributions.



Analysis Group is one of the largest international economics consulting firms, with more than 1,200 professionals across 14 offices in North America, Europe, and Asia. Since 1981, we have provided expertise in economics, finance, health care analytics, and strategy to top law firms, Fortune Global 500 companies, and government agencies worldwide. Our internal experts, together with our network of affiliated experts from academia, industry, and government, offer our clients exceptional breadth and depth of expertise.

THE POTENTIAL ECONOMIC IMPACT OF IGAMING: SUPPLEMENT FOR MARYLAND

March 22, 2024

I. EXECUTIVE SUMMARY

Summary of Revenue Analysis. This supplement summarizes the results from the study conducted by Mickey A. Ferri and Laura O’Laughlin from Analysis Group, entitled “The Potential Economic Impact of Legalizing iGaming on Casino Revenues in Five States,” March 2024 (hereafter AG iGaming Report (2024)). Based on the projected increase in growth of Land-based casino revenues and new iGaming revenues, the projected impact on Land-based and total casino revenues in Maryland is as follows (Figure 1 here and Figure 86 in the AG iGaming Report (2024)¹):

1. Projected increase in Land-based casino revenues. Annual Land-based casino revenues are projected to increase from \$2.0 billion in 2024 to \$2.5 billion in 2029 (a \$490 million increase, or 24%).² Of the projected \$490 million increase in casino revenues, (1) \$266 million is projected based on Maryland’s current growth rate, and (2) an additional \$224 million is projected from the increased anticipated growth in Land-based revenues associated with iGaming.
2. Projected contribution from iGaming. iGaming is projected to generate an additional \$769 million in revenues in its first full year, which is projected to grow to \$1.4 billion by Year 5.
3. Projected increase in total market revenues. In total, Land-based and iGaming revenues combined are projected to grow from \$2.0 billion in 2024 to \$3.9 billion in 2029 (a 92% increase).³ This large increase is attributable to Maryland’s positive existing growth rate in Land-based casino revenues and its demonstrably large existing sports betting revenues.

Summary of Jobs Analysis. Impact of iGaming on gambling jobs.

1. iGaming is expected to create additional jobs among iGaming operators. These jobs include, for example, live dealers, customer service, customer retention, marketing, and operations. Census data support the notion that there are a substantial number of new gambling jobs in iGaming states in the category that includes iGaming jobs, which is labeled as “Other Gambling Industries.” When comparing the number of jobs in this category before iGaming was legalized to the most current data available, New Jersey showed an increase of 1,790 new jobs, Pennsylvania showed an increase of 773 new jobs, West Virginia showed an increase of 98 new jobs, and Michigan showed an increase of 112 new jobs.⁴ To the extent live dealers

¹ AG iGaming Report (2024), at p. 156.

² $(\$2,515 \text{ million} - \$2,025 \text{ million}) / \$2,025 \text{ million} = 24\%$.

³ $(\$3,882 \text{ million} - \$2,025 \text{ million}) / \$2,025 \text{ million} = 92\%$.

⁴ Exhibit 1 in the jobs analysis exhibit deck.

operate in Maryland, based on data from one live dealer company and one casino operator, it is reasonable to expect at least 545 new jobs in Maryland from iGaming as a conservative estimate. See Section IV.A.

2. iGaming is unlikely to have a negative impact on jobs supported by the Land-based casino industry in Maryland, based on the observed changes in New Jersey, Delaware, Pennsylvania, West Virginia, Michigan, and Connecticut relative to all other states that have not legalized iGaming. From 2017 to 2022, during the time iGaming was being implemented and growing in the iGaming States, jobs supported by the Land-based casino industry in iGaming states grew by an annual average of 9.4%. Further, when comparing job growth in the iGaming states versus non-iGaming states as a control group, the iGaming states outperformed the non-iGaming states by 0.6% to 5.4% per year. See Section IV.B.
3. Based on observed trends in other states with legalized iGaming, including an overall increase in Land-based casino revenues of 1.9% relative to pre-iGaming trends, iGaming legalization is expected to be associated with an increase in Land-based casino activity, which is expected to lead to additional jobs to service the additional activity. See Section IV.C.

Analysis of the TIG (2023) Study. This supplement also provides an analysis of a study by The Innovation Group, “iGaming in Maryland,” November 2023. See Section V.

II. BASELINE LAND-BASED REVENUE PROJECTIONS

Baseline Land-based revenues are projected by applying the average Land-based Treatment Effect from the main AG study to Maryland’s existing growth rate of Land-based revenues.

Figure 1: Projected Maryland Land-Based Casino Revenue Growth Rate Before and After Treatment of Introducing iGaming⁵

Description	Land-Based Before Treatment [J]	Land-Based After Treatment [K]
Initial Year	2018	2024
Final Year	2023	2029
Number of Years	5	5
Initial Value	\$1,746	\$2,025
Final Value	\$1,976	\$2,515
CAGR	2.5%	4.4%
Change in Land-Based CAGR	n/a	1.9%

Maryland’s existing growth rate of Land-based revenues has been 2.5% from 2018 to 2023. The “Land-based Treatment Effect” from the AG iGaming Report (2024) is 1.9%.⁶ Therefore, Maryland’s projected growth rate after iGaming is 4.4% (2.5% + 1.9%). Land-based revenues are projected to grow from \$2.0 billion in 2023 to \$2.5 billion in 2029. The supporting charts and tables are in the AG iGaming Report (2024), at Sections VIII.D and XI.D.

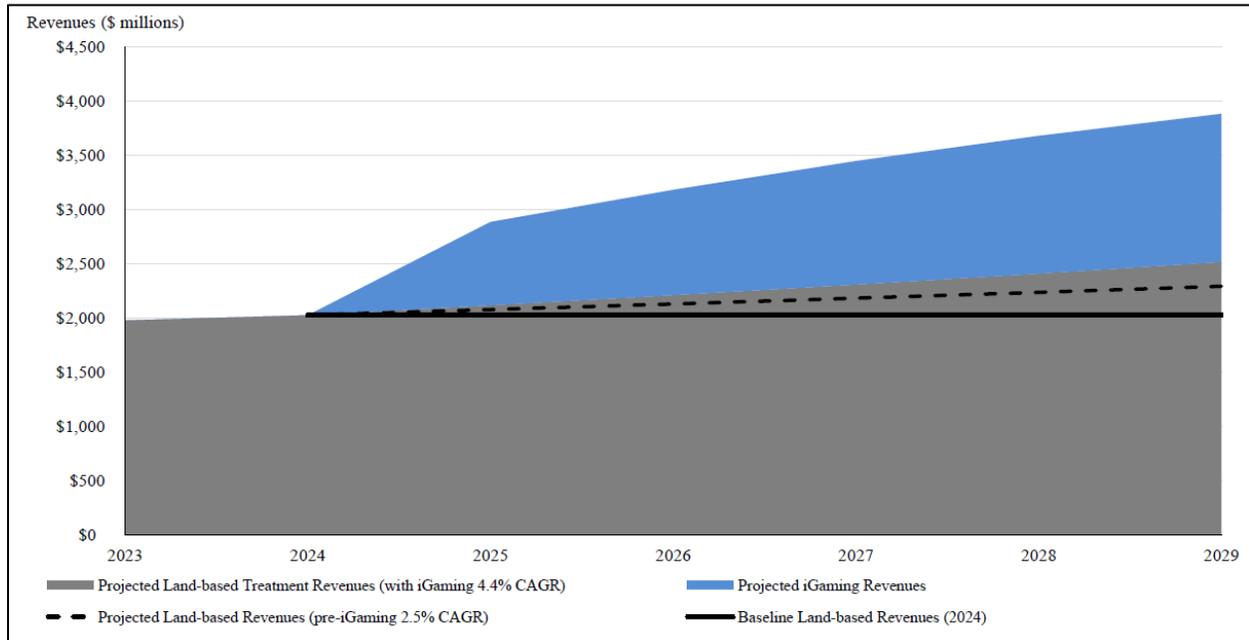
⁵ AG iGaming Report (2024), Exhibit 56.

⁶ AG iGaming Report (2024), at p. 9.

III. IGAMING PROJECTIONS

Maryland’s iGaming revenues are projected based on a model utilizing data on sports betting revenues. A complete description of the model and the corresponding supporting tables can be found in the AG iGaming Report (2024).⁷ Based on the ratios observed in other states between sports betting revenues and iGaming revenues, Maryland’s iGaming revenues are projected to be \$769 million in Year 1 (2025), and they are projected to grow to \$1.4 billion in Year 5 (2029).

Figure 2: Maryland – Chart of Revenue Projections (Including iGaming)⁸



IV. ANALYSIS OF CASINO RELATED JOBS IN MARYLAND

A. iGaming is expected to create additional jobs among iGaming operators.

Market research and analysis indicates that the introduction of iGaming is expected to create additional jobs in iGaming operations.⁹ A casino operator indicated that iGaming operations have resulted in 183 jobs in New Jersey and 182 jobs in Pennsylvania.”¹⁰ Maryland’s adult population

⁷ AG iGaming Report (2024), at pp. 138-142.

⁸ AG iGaming Report (2024), Exhibit 56A.

⁹ “Market and Policy Analysis: Prospective Internet Casino Gaming in Indiana,” *Spectrum Gaming Group* (2023) (“Spectrum Indiana 2023 Study”), at p. 41.

¹⁰ Spectrum Indiana 2023 Study, at p. 41.

is approximately 55% of the average adult population of New Jersey and Pennsylvania.¹¹ Thus, as a proportion of its population, Maryland's iGaming operations could generate approximately 100 jobs or more for just one iGaming operator.¹²

Market research also indicates that when operators launch live dealer gaming as part of their iGaming platforms, states realize substantial employment impacts, typically through third-party providers.¹³ As one example, as of November 2023, "Sweden-based Evolution AB currently employs about 2,620 people – including 2,260 dealers – at five purpose-built live-dealer studios it has developed and operates in Connecticut, Michigan, New Jersey and Pennsylvania."¹⁴

Moreover, aside from dealers, such gaming studios also create jobs in card shuffling, card inspection, equipment management, training, floor supervision, service support, surveillance, physical security, human resources, recruitment, technical operations (video and sound engineering), construction and maintenance (carpentry), facilities operations, office management, team management, management, studio compliance, and scheduling, among other positions.¹⁵

Census data from the Bureau of Labor Statistics ("BLS") support the notion that there are a substantial number of new gambling jobs in iGaming states in the category that includes iGaming operations, but not Land-based casinos. While the iGaming jobs data are included within a broader category called "Other Gambling Industries,"¹⁶ these numbers have grown in the iGaming states since iGaming was legalized. In New Jersey, there were 139 jobs in "Other Gambling Industries" in the year prior to when iGaming was active. As of March 2023, there were about 1,929 jobs in this category, an increase in 1,790 jobs.¹⁷ In Pennsylvania, there were 564 jobs in "Other Gambling Industries" in the year prior to when iGaming was active. As of March 2023, there were 1,338 jobs in this category, an increase of 773 jobs.¹⁸ Similarly, West Virginia showed an increase of 98 new jobs and Michigan showed an increase of 112 new jobs after iGaming legalization.¹⁹

Maryland's adult population is approximately 17.0% of the combined adult populations of New Jersey, Michigan, Pennsylvania, and Connecticut, where large live dealer iGaming operations

¹¹ From the U.S. Census Bureau data for 2023, the average adult population for New Jersey and Pennsylvania was 8,806,615. The adult population in Maryland was 4,818,337, implying the $4,818,337 / 8,806,615 = 55\%$.

¹² $55\% \times 182 = 100.1$.

¹³ Spectrum Indiana 2023 Study, at p. 41.

¹⁴ Spectrum Indiana 2023 Study, at p. 42.

¹⁵ Spectrum Indiana 2023 Study, at p. 42.

¹⁶ Other Gambling Industries corresponds to NAICS code 713290, which includes industries engaged in operating gambling facilities (except casinos or casino hotels) or providing gambling services. Examples include betting information services, card rooms, gambling control boards, online gambling sites, online sports betting sites, slot machine concession operators, video gaming device concession operators, and more.

See <https://www.census.gov/naics/?input=713290&year=2022&details=713290>.

¹⁷ Exhibit 1 in the jobs analysis exhibit deck.

¹⁸ Exhibit 1 in the jobs analysis exhibit deck.

¹⁹ Exhibit 1 in the jobs analysis exhibit deck.

exist.²⁰ Applying a 17.0% factor to the 2,620 people employed by Evolution AB in those states results in an estimate of 445 jobs that could be employed by a similar company in Maryland.²¹ In other words, based on the observed employment data from the four iGaming states and Maryland's population ratio relative them, it is reasonable that iGaming could generate approximately 445 jobs for a company like Evolution AB alone.

Many live dealer companies and operators are increasingly focusing on expanding into iGaming markets to grow their live dealer services. For example, the live casino supplier OnAir Entertainment has a strategy to launch studio in five regulated live casino states with more to come pending legislation,²² indicating the company's strategy on building studios in iGaming markets once it becomes legalized. Additionally, Light & Wonder, a large-scale American gambling corporation, has also expanded into the live-dealing market, having acquired Authentic Gaming in 2021 to begin studio operations in Michigan.²³ According to their website, the company "has strong ambitions to further extend Authentic Gaming's product offering across the U.S. Market."²⁴

To the extent live dealers open new facilities and operations located in the state of Maryland, this could lead to substantial iGaming jobs within the state. With an estimated 445 new jobs based on data from Evolution AB and 100 jobs from one iGaming operator alone, it is reasonable to expect at least 545 new jobs in the state of Maryland due to iGaming as a very conservative estimate.²⁵

There is evidence from sports betting in Maryland indicating that iGaming companies are likely to develop additional jobs in the state. Some of the largest iGaming companies already have operations in Maryland via sportsbook retail locations. For example:²⁶

1. FanDuel (an estimated 30% market share within the U.S. online sports betting and iGaming market as of Q3 in 2023), has two retail sportsbooks in Maryland, the Live! Casino & Hotel Maryland in Hanover and the Sports & Social in North Bethesda, in addition to mobile sports betting.
2. BetMGM (estimated 16% market share), has the MGM National Harbor retail casino in Oxon Hill, which offers both live and mobile sports betting.
3. Caesars (estimated 5% market share) has the Horseshoe Baltimore Casino, which offers both live and mobile sports betting.

²⁰ $4,818,337 / (7,280,551 + 7,925,350 + 10,332,678 + 2,894,190) = 17\%$.

²¹ $2,620 * .170 = 445.4$.

²² <https://igamingnext.com/news/onair-entertainment-us-rollout/> (accessed January 25, 2024).

²³ <https://igamingbusiness.com/casino/light-wonder-authentic-gaming/> (accessed January 25, 2024).

²⁴ <https://explore.lnw.com/newsroom/scientific-games-enters-live-casino-market-with-authentic-gaming-acquisition/> (accessed January 25, 2024).

²⁵ $445 + 100 = 545$.

²⁶ All Maryland examples come from <https://www.gamingtoday.com/maryland/> (accessed March 21, 2024).

All Market share estimates in this section are according to estimates from Eilers & Krejcik Gaming (EKG) from: <https://next.io/news/draftkings-overtakes-fanduel-us-market-leader/> (accessed January 25, 2024).

4. BetRivers (estimated 5% market share) has joined forces with a local partner Bingo World to offer sports betting at retail facilities Bingo World in Brooklyn Park, in addition to mobile sports betting.
5. Fanatics is a relatively new company in the online gambling market, having only launched iGaming in West Virginia in November 2023 and Pennsylvania in January 2024. The company has already started operations in the sports betting market in Maryland with their Fanatics Sportsbook at FedExField in Landover.

Additional sportsbooks providers also offer retail options for sports betting, including the Hollywood Casino Perryville partnering with Barstool Sportsbook, the Ocean Downs Casino partnering with TwinSpires Sportsbook, the Riverboat on the Potomac partnering with PointsBet Sportsbook, the Greenmount Station partnering with betPARX, the Long Shot's partnering with Betfred, and the Greene Turtle in Canton and Towson partnering with betPARX. Moreover, other important players in the iGaming industry such as DraftKings (an estimated 30% market share within the U.S. online sports betting and iGaming market as of Q3 in 2023), and relevant local players such as Crab Sports MD also have presence in the state but only via their mobile options.

- B. iGaming is unlikely to have a negative impact on jobs supported by the Land-based casino industry in Maryland, based on the observed changes in New Jersey, Delaware, Pennsylvania, West Virginia, Michigan, and Connecticut relative to all other states that have not legalized iGaming. From 2017 to 2022, during the time iGaming was being implemented and growing in the iGaming states, jobs supported by the Land-based casino industry in iGaming states grew by an annual average of 9.4%. Further, when comparing job growth in the iGaming states versus non-iGaming states as a control group, the iGaming states outperformed the non-iGaming states by 0.6% to 5.4% per year.**

Overview. An approach motivated by the Difference-in-Differences (DiD) technique is used to evaluate whether the introduction of iGaming has been associated with a positive, negative, or neutral impact on Land-based casino jobs in New Jersey, Delaware, Pennsylvania, West Virginia, Michigan, and Connecticut (the six iGaming states), compared to all other states that have not legalized iGaming. This study uses data provided by the American Gaming Association (AGA) and Oxford Economics related to their report: “Economic Impact of the U.S. Gaming Industry” (“AGA Economic Report”).²⁷ The AGA Economic Report quantifies the number of direct, indirect, and induced jobs supported by the U.S. gaming industry. Direct jobs include on-site jobs at casinos, corporate offices, gaming manufacturers, as well as businesses supporting casino patrons or involved in casino construction and renovation.²⁸ Indirect and induced jobs are jobs generated by the casinos’ supply chain or jobs created through the casino employees’ direct spending.²⁹ By including not only direct jobs but also indirect and induced employment opportunities, this study accounts for *all* jobs that are generated and maintained by presence of Land-based casinos.

²⁷ “Economic Impact of the U.S. Gaming Industry,” *American Gaming Association* (2023); “Economic Impact of the US Gaming Industry,” *American Gaming Association* (2018).

²⁸ “Economic Impact of the U.S. Gaming Industry,” *American Gaming Association* (2023), at p. 3.

²⁹ “Economic Impact of the U.S. Gaming Industry,” *American Gaming Association* (2023), at p. 19.

Importantly, the AGA and Oxford Economics has developed two versions of their economic report – one with data from 2017 and the other with data from 2022. Using the timing of the two reports, this study employs an approach motivated by the DiD technique to evaluate whether the introduction of iGaming has been associated with a positive, negative, or neutral impact on jobs supported by the Land-based casino industry in the iGaming states. The intuition behind this methodology is that if the legalization of iGaming in a state has an impact on jobs, the employment growth rates would be different in states that have legalized iGaming compared to those that have not. To the extent the growth rates in iGaming states are higher than those in non-iGaming states, this indicates that the presence of iGaming in a state can accelerate job growth, for example via an overall increase in the total casino market. Observing the opposite, *i.e.*, slower growth in iGaming states compared to non-iGaming states could provide evidence that iGaming legalization negatively impacts jobs supported by Land-based casinos.

To implement the approach motivated by DiD, this study divides states into a treatment and a control group. In this specific setting, treatment is the legalization of iGaming, and the treatment states are the states which have legalized iGaming. The control group consists of all states that have not legalized iGaming. The methodology then calculates the compound annual growth rate (CAGR) of employment for both the treatment and control groups between the years 2017 and 2022.³⁰ Figures 3 and 4 show the number of jobs supported by the Land-based casino industry for the iGaming and the control states along with the CAGR calculated from the changes in the number of jobs in 2017 and 2022 in each state.

Notably, all the iGaming states experienced positive growth in jobs supported by the Land-based casino industry between 2017 and 2022, with an average growth of 8.4% across all iGaming states, and 9.4% across the states that legalized iGaming after 2017 (Pennsylvania, West Virginia, Michigan, and Connecticut).

Figure 3: Number of Jobs Supported by the U.S. Gaming Industry For the iGaming States in 2017 and 2022³¹

State	Jobs Supported in 2017	Jobs Supported in 2022	Total % Increase	CAGR from 2017 to 2022
[A]	[B]	[C]	[D]	[E]
[1] New Jersey	39,007	51,834	32.9%	5.9%
[2] Delaware	5,299	6,924	30.7%	5.5%
[3] Pennsylvania	33,171	64,933	95.8%	14.4%
[4] West Virginia	8,347	10,663	27.7%	5.0%
[5] Michigan	37,911	60,669	60.0%	9.9%
[6] Connecticut	24,245	26,336	8.6%	1.7%
[7] Sum of iGaming States	147,980	221,360	49.6%	8.4%
[8] Sum of iGaming States that Legalized After 2017	103,674	162,601	56.8%	9.4%

³⁰ States with a missing datapoint in 2017 were excluded from the control group.

³¹ Supplemental Exhibits with Jobs Data, Exhibit 3.

Figure 4: Number of Jobs Supported by the U.S. Gaming Industry For All Other States in 2017 and 2022³²

State	Jobs Supported in 2017	Jobs Supported in 2022	Total % Increase	CAGR from 2017 to 2022
[A]	[B]	[C]	[D]	[E]
[9] Alabama	12,270	11,640	(5.1%)	(1.0%)
[10] Alaska	27	582	2055.8%	84.8%
[11] Arizona	38,069	51,753	35.9%	6.3%
[12] Arkansas	<i>na</i>	9,044	<i>na</i>	<i>na</i>
[13] California	124,274	184,701	48.6%	8.2%
[14] Colorado	10,842	19,129	76.4%	12.0%
[15] Florida	54,142	72,892	34.6%	6.1%
[16] Georgia	<i>na</i>	6,646	<i>na</i>	<i>na</i>
[17] Hawaii	<i>na</i>	772	<i>na</i>	<i>na</i>
[18] Idaho	3,305	5,292	60.1%	9.9%
[19] Illinois	15,396	28,562	85.5%	13.2%
[20] Indiana	22,133	38,051	71.9%	11.4%
[21] Iowa	17,420	24,418	40.2%	7.0%
[22] Kansas	7,457	13,924	86.7%	13.3%
[23] Kentucky	<i>na</i>	2,670	<i>na</i>	<i>na</i>
[24] Louisiana	40,919	44,110	7.8%	1.5%
[25] Maine	1,468	3,232	120.1%	17.1%
[26] Maryland	15,364	27,380	78.2%	12.2%
[27] Massachusetts	1,646	17,413	957.9%	60.3%
[28] Minnesota	29,160	31,440	7.8%	1.5%
[29] Mississippi	37,277	41,950	12.5%	2.4%
[30] Missouri	19,987	24,986	25.0%	4.6%
[31] Montana	484	1,474	204.5%	24.9%
[32] Nebraska	105	1,980	1785.7%	79.9%
[33] Nevada	410,456	330,074	(19.6%)	(4.3%)
[34] New Hampshire	<i>na</i>	1,487	<i>na</i>	<i>na</i>
[35] New Mexico	17,393	22,268	28.0%	5.1%
[36] New York	25,784	69,743	170.5%	22.0%
[37] North Carolina	15,034	15,175	0.9%	0.2%
[38] North Dakota	4,275	3,415	(20.1%)	(4.4%)
[39] Ohio	19,953	33,834	69.6%	11.1%
[40] Oklahoma	75,885	89,402	17.8%	3.3%
[41] Oregon	10,770	15,609	44.9%	7.7%
[42] Rhode Island	5,215	9,533	82.8%	12.8%
[43] South Carolina	<i>na</i>	2,902	<i>na</i>	<i>na</i>
[44] South Dakota	4,238	4,969	17.2%	3.2%
[45] Tennessee	<i>na</i>	6,909	<i>na</i>	<i>na</i>
[46] Texas	3,111	20,316	553.0%	45.5%
[47] Utah	<i>na</i>	2,199	<i>na</i>	<i>na</i>
[48] Vermont	<i>na</i>	436	<i>na</i>	<i>na</i>
[49] Virginia	<i>na</i>	8,098	<i>na</i>	<i>na</i>
[50] Washington	35,044	56,580	61.5%	10.1%
[51] Wisconsin	26,882	26,720	(0.6%)	(0.1%)
[52] Wyoming	974	2,588	165.7%	21.6%
[53] Sum of All Other States with Full Data	1,106,759	1,345,133	21.5%	4.0%
[54] Sum of All Other States, Excluding Nevada	696,303	1,015,069	45.8%	7.8%

Figure 5 shows the results of the analysis motivated by DiD. The difference in CAGR between the treatment and control groups is called the “Treatment Effect.” Observing a positive “Treatment Effect” is an indication that the legalization of iGaming is associated with an increase in the total number of jobs supported by Land-based casinos, including direct, indirect, and induced jobs. Within the iGaming States, the number of jobs supported by the Land-based casino industry increased by 49.6% from 2017 to 2022—nearly two times larger than the growth rate for the control group that includes Nevada. However, Nevada’s reduction in jobs supported by Land-based casinos was abnormally low when compared with other states in the control group. As a robustness check, Figure 5 presents a second calculation which excludes Nevada from the control group. The results excluding Nevada still generate a positive but smaller “Treatment Effect” where the iGaming states outperform the control states in terms of Land-based casino employment growth by 0.6%

³² Supplemental Exhibits with Jobs Data, Exhibit 3.

Figure 5: Summary of Jobs Supported by the U.S. Gaming Industry by State Grouping in 2017 and 2022³³

State Grouping	Jobs Supported in 2017	Jobs Supported in 2022	Total % Increase	CAGR from 2017 to 2022
[A]	[B]	[C]	[D]	[E]
[1] iGaming States	147,980	221,360	49.6%	8.4%
[2] iGaming States that Legalized After 2017	103,674	162,601	56.8%	9.4%
[3] All Other States with Full Data	1,106,759	1,345,133	21.5%	4.0%
[4] All Other States, excluding Nevada	696,303	1,015,059	45.8%	7.8%
Difference in CAGR Between Treatment And Control Groups		Treatment Effect		
[5] iGaming States vs. All Other States with Full Data			+4.4%	
[6] iGaming States vs. All Other States, excluding Nevada			+0.6%	
[7] iGaming States that Legalized After 2017 vs. All Other States with Full Data			+5.4%	
[8] iGaming States that Legalized After 2017 vs. All Other States, excluding Nevada			+1.6%	

As another robustness check, a second Treatment Effect is calculated removing New Jersey and Delaware, to account for the fact that New Jersey and Delaware legalized iGaming in 2013 (before 2017, the first year of available data).³⁴ This Treatment effect isolates only the states that legalized iGaming between 2017 and 2022. The Treatment effect results for these states also indicates that iGaming states have experienced faster growth in jobs supported by the Land-based casino industry relative to the control states, with a 5.4% higher annual job growth rate compared to All Other States and a 1.6% higher job growth compared to All Other States, excluding Nevada. See Figure 5.

Overall, these results present strong evidence indicating that the legalization of iGaming does not have a negative impact on job growth, but rather it is associated with an improvement in the growth rates of jobs supported by the Land-based casino industry.

C. Based on observed trends in other states that have legalized iGaming, including an overall increase in Land-based casino gross gaming revenues of 1.9% relative to pre-iGaming trends, iGaming legalization is expected to be associated with an increase in Land-based casino activity, which is expected to lead to additional jobs to service the additional activity.

iGaming has been associated with an increase in Land-based casino gross gaming revenues in the six states where iGaming is active, with an average Land-based Treatment Effect of +1.9%.³⁵ In other words, on average, the states that have implemented iGaming have seen Land-based revenues grow by 1.9% faster per year than they were trending before they implemented iGaming. Additional gross gaming revenues are reasonably associated with additional activity at the casinos in terms of more frequent visits from casino attendees, as well as new visitors who are drawn to

³³ Supplemental Exhibits with Jobs Data, Exhibit 4.

³⁴ While New Jersey legalized iGaming in 2013, the iGaming revenues were small in New Jersey until they started to grow substantially faster beginning around 2018. Therefore, even though New Jersey legalized iGaming in 2013, its impact (if any) would have been more present beginning around 2018. While Delaware legalized iGaming in 2013, iGaming revenues in Delaware have not grown like in other states, and they only make up about 3% of total casino revenues as of 2023. Both of these states are discussed in more detail in Analysis Group’s full report.

³⁵ AG iGaming Report (2024), at p. 9.

Land-based casinos. The additional activity would reasonably lead to additional employees at the Land-based casinos to service the new gaming activity. Further, the additional activity would reasonably lead to additional employees to service other activities related to the casinos, including hotels, food & beverage, other entertainment, and transportation.

Market research and analysis indicate that the introduction of iGaming would lead to additional jobs at Land-based casinos, or at least the number of existing jobs would not be negatively impacted.³⁶ For example, one casino operator has indicated that “iGaming has increased visits to [their] casino, which “positively impacts” staffing levels.”³⁷ One explanation for this phenomenon is that iGaming operators “use marketing incentives to drive iGaming players to [the] casino,” which results in both increased casino and marketing-related employment.³⁸ Indeed, a casino operator that operates in multiple states indicated that iGaming not led to a reduction in casino employment in the states in which it operates.³⁹

In addition, iGaming is expected to be associated with cross-marketing efforts between Land-based casinos and iGaming. These cross-marketing efforts can also create additional jobs at Maryland land-based casinos.

V. ANALYSIS OF TIG REPORT (2023)

The Innovation Group published a report in November 2023 with estimates for the potential effects of iGaming in Maryland, entitled “iGaming in Maryland.”⁴⁰ The study compared brick-and-mortar casino performances in 2019 and 2022 for states that had legalized iGaming (Connecticut, Delaware, Michigan, New Jersey, Pennsylvania, and West Virginia), to a select sample of states that had not (Colorado, Florida, Illinois, Indiana, Iowa, Kansas, Maine, Missouri, New York, Ohio, and Rhode Island).⁴¹ It considered the change in Land-based revenues in both groups, taking into account each group’s gross domestic product (GDP) and population, to identify “baseline” brick-and-mortar casino growth rates in each state.⁴² The GDP growth rate and population growth rate were both subtracted from the gross gaming revenue (GGR) growth in each state to estimate the net GGR growth.⁴³ Overall, the TIG Report (2023)’s result for net GGR growth was -8.2% in the iGaming States, 2% in the non-iGaming States, and -10.2% overall.⁴⁴

³⁶ “Market and Policy Analysis: Prospective Internet Casino Gaming in Indiana,” *Spectrum Gaming Group* (2023) (“Spectrum Indiana 2023 Study”), at p. 41.

³⁷ Spectrum Indiana 2023 Study, at p. 41.

³⁸ Spectrum Indiana 2023 Study, at p. 41.

³⁹ Spectrum Indiana 2023 Study, at p. 41.

⁴⁰ The Innovation Group, “iGaming in Maryland,” November 2023, available at https://dlslibrary.state.md.us/publications/JCR/2023/2023_49-50.pdf (“TIG Report (2023)”).

⁴¹ TIG Report (2023), at p. 23-34.

⁴² TIG Report (2023), at p. 22.

⁴³ TIG Report (2023), at p. 23.

⁴⁴ TIG Report (2023), at pp. 5 and 24.

The study also investigated the potential size of a legal iGaming market in Maryland, the impact of iGaming on the state lottery, the size of the illegal gambling market in the state, the methods to transition the illegal market into a legal market, consumer protection, and multijurisdictional agreements.⁴⁵ The study estimated a stabilized annual forecast of more than \$900 million in gross revenue from iGaming legalization in Maryland.⁴⁶

The TIG Report (2023) combined its various estimates of the impact of iGaming on Land-based revenues to report, “We observed 2% same-store casino revenue growth in non-iGaming States, versus an 8.2% decline in iGaming States, suggesting a cannibalization rate of approximately 10% of casino gaming revenue. ... Since Maryland’s casino revenue is just over \$2 billion annually, this would amount to a loss of just more than \$200 million in casino revenue, against a gain of \$900 million in iGaming revenue.”⁴⁷

While the TIG Report (2023) provides a useful estimate for the overall size of the iGaming market in Maryland, the study’s analysis of the impact of iGaming on Land-based revenues is flawed and has limited reliability for several reasons, including the following:

1. The study’s primary methodology of subtracting GDP growth and population growth from GGR growth is flawed and not consistent with economic logic. TIG did not establish the rationale for subtracting growth rates of GDP and population from gaming revenues, and we are not aware of an economic model that would suggest the growth rates of GDP and population are additive to compute a baseline.
2. The reported “cannibalization” figure of \$200 million is highly flawed, and it is a misapplication of the methodology from TIG’s own report. TIG applied the -10.2% figure (which is calculated by adding up the growth rates of Land-based revenues, population, and GDP and then taking a difference in averages from other control states) to Maryland’s Land-based revenues of \$2 billion. By contrast, if the TIG model were to be believed, Maryland’s population and GDP growth rates would have to be added back in to the -10.2% figure to calculate the impact of iGaming on Land-based revenues.
3. The study used a fixed period (2019-2022),⁴⁸ which does not account for the fact that iGaming was legalized at different times in the different states and, in some cases (West Virginia, Michigan, and Connecticut), during the middle of this period.
4. The study did not properly account for the baseline trends in the iGaming states. For example, the study reported large negative changes of -14.2% and -16.3% in Connecticut.⁴⁹ However, Connecticut’s revenues were already declining prior to the introduction of iGaming, which changes the result when properly accounted for in the analysis.⁵⁰

⁴⁵ TIG Report (2023), at p. 4.

⁴⁶ TIG Report (2023), at p. 5.

⁴⁷ TIG Report (2023), at pp. 5-6.

⁴⁸ TIG Report (2023), at p. 24.

⁴⁹ TIG Report (2023), at p. 24.

⁵⁰ See Section V.A in the AG iGaming Report (2024).

5. The study did not properly account for the baseline trends in control states. For example, it reported large positive changes in Colorado, Florida, Iowa, and Ohio.⁵¹ However, revenues in these states were already increasing prior to the introduction of iGaming, which changes the result when properly accounted for in the analysis.⁵²
6. The study did not address why states chose to legalize iGaming, a challenge known in economics as “selection,” which can lead to biased results. To the extent states that legalized iGaming have done so because of declining trends in Land-based revenues, TIG’s analysis and results would be attributing slower growth in Land-based revenues to iGaming when it should be attributed to other factors.

⁵¹ TIG Report (2023), at p. 23.

⁵² See Section V.B in the AG iGaming Report (2024).