



Regulated Sports Betting: Defining The U.S. Opportunity

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Table Of Contents

This report offers our view of the potential market for regulated sports betting in the United States, including market sizing, legislative and regulatory outlook, analysis of the black market for sports betting, and discussion of relevant impacts and trends.

Executive Summary & Introduction

I. Projections

II. Legislative Landscape

III. Sports Betting And The Supreme Court

IV. Regulatory Scenarios For U.S. Sports Betting

V. Black Market Analysis

VI. Key Stakeholder Analysis

VII. Impact On Other Verticals

VIII. The View From Europe

IX. Appendix

Executive Summary (1/3)

In 2018, the U.S. Supreme Court is expected to rule on a challenge to the Professional and Amateur Sports Act (PASPA), which could effectively end the Federal ban on sports betting. This monumental decision could unlock a market that generates more revenues annually than Las Vegas, creates hundreds of millions in state tax revenues and tens of thousands of new jobs, and drives a meaningful boost in both TV ratings and ad dollars.

In the event that PASPA is struck down, we believe a significant market for regulated sports betting will emerge in relatively short order in the United States. **The size of that market will depend primarily on four key factors:**

- (i) The pace of regulation,
- (ii) The availability of regulated sports betting,
- (iii) The quality of the regulated sports betting product, and
- (iv) The transfer of demand from the current black market for sports betting to the regulated market.

We estimate that a 50-state market for regulated sports betting in the U.S. would be worth anywhere from \$7.1 to \$15.8 billion in revenue and could, in a bullish scenario, attract up to 44 million customers wagering some \$245 billion annually.

Our **base case** for the U.S. regulated sports betting market **by 2023** calls for 32 states to offer regulated sports betting, with varying approaches to availability and the land-based / mobile question, resulting in **a market worth \$6.03 billion in annual revenue.**

We believe **the pace of regulation** will be relatively rapid, although we recognize that legislative inertia, unreasonable demands from lawmakers regarding tax and license fees, opposition from professional sports leagues, and clashes among industry stakeholders could all easily derail legislative progress.

We foresee three distinct waves of adoption, with the bulk of states (32 states representing 69% of the gambling age population) authorizing sports betting within five years of a full PASPA repeal. We believe there will be a material number of states that choose to not offer regulated sports betting.

Executive Summary (2/3)

The **quality of the regulated sports betting product** will determine the product's appeal to consumers, who have competing alternatives both in the black market and in a growing suite of real-money fantasy contest products. If the quality is low enough, consumers – especially younger consumers accustomed to seamless mobile experiences – may not even require a directly competing product to abandon regulated sports betting.

The availability of regulated sports betting – who can offer it, where, and in what manner – is arguably the most complicated of the questions in play. As for the *who*: A variety of stakeholders spanning a wide range of size and influence will seek to contest the regulated sports betting market. That jockeying for position will take on a unique shape and character in each individual state. The *where* of regulated sports betting will largely be a function of who ultimately controls the product from an operational standpoint.

The *what* is arguably the most pivotal question of all. Our model suggests that a market incorporating both land-based and online sports betting products could be worth over two times a market that is restricted to land-based sports betting alone. But we are of the strong opinion that many – perhaps even most – states will choose to delay or forgo online.

Finally, there's the **transfer of demand from the black market to the regulated market**.

Our estimates for the size of the black market for sports betting are significantly lower than frequently-circulated numbers. **We estimate that some 14 million Americans bet \$50 - \$60 billion annually via illegal channels** (discounting social bets such as office pools and casual bets between friends), resulting in a **market worth between \$2.5 to \$3 billion in annual revenue**.

While smaller than typically described, that's still a significant market, and the success – or failure – of regulated operators to transfer that demand to legal markets will play an important role in shaping the potential for regulated sports betting in America.

Executive Summary (3/3)

Some of our **core beliefs** about the U.S. sports betting market include:

- A robust online product is key to unlocking the full potential of U.S. regulated sports betting. Without online, we believe the market will realize less than half of the revenue it would otherwise generate.
- Further, we believe that gap will only widen over time as the importance of mobile products intensifies for the general consumer population and the sports betting consumer specifically.
- Many – possible most – states will be reluctant to authorize online sports betting, whether due to lack of political will or infighting among industry stakeholders.
- While the size of the black market for sports betting in the U.S. is substantial, we believe it is commonly overstated by 2-3x. We further believe that the habit of describing market size in terms of handle (i.e., total amount bet) as opposed to revenue may be creating distorted expectations among lawmakers, which could slow the process of regulation.
- The black market will continue to enjoy significant competitive advantages post-regulation, advantages that will ensure a substantial amount of black market customers do not migrate to regulated sports betting products.
- The economic benefits of sports betting will be more widely distributed than a typical gambling product. Stakeholders who stand to gain include: Casino operators, sports leagues, sports media, state governments, platform providers, service providers, and customer acquisition platforms.
- Sports betting will be positive at best, and neutral at worst, for most key adjacent verticals in the gambling / gaming space, including: Land-based casinos, DFS, Las Vegas sports betting, horse racing, and regulated online gambling.

The Status Quo For Sports Betting In The United States (1/2)

As of this report, regulated sports betting in the United States is effectively restricted to Nevada and Delaware. Two other states – Oregon and Montana – technically have the right to offer some form of sports betting, but Oregon mothballed its product in 2007 and Montana's product barely registers from a revenue perspective.

Why is sports betting so limited in a country where other forms of gambling are so pervasive? The simple answer is the federal Professional and Amateur Sports Protection Act (PASPA), passed in 1992. PASPA basically froze the ability of states to introduce regulated sports betting (although the [full story and scope of PASPA is more complex than generally acknowledged](#)).

Of course, sports betting is not actually limited – rather, it's regulated sports betting that faces restrictions in America. Unregulated, offshore, illegal, black market – however you want to characterize it, there's a substantial industry that makes hundreds of millions of dollars a year satisfying the demand for sports betting in the American market.

Despite several decades of law enforcement attempts to eliminate such operators, placing a sports bet outside of Delaware or Nevada remains a relatively trivial undertaking for anyone interested in doing so. In fact, one could argue that it's easier to do so now than at any point in the last 10 years, thanks largely to the decentralization of bookmaking facilitated by high-tech online platforms and the rise of cryptocurrencies.

And so things might have continued ad infinitum were it not for New Jersey. In 2009, the state kicked off a legal challenge to PASPA that spanned most of the decade following, one that ultimately resulted in a surprise decision by the Supreme Court of the United States to hear New Jersey's case.

With a resolution to that case expected in early 2018, many are anticipating a sea change for regulated sports betting in the U.S., a change that could potentially unlock one of the largest markets for sports betting in the world.

The Status Quo For Sports Betting In The United States (2/2)

<u>Market</u>	<u>2017 Revenue (est.)</u>	<u>Discussion</u>
Legal	\$270mm	<ul style="list-style-type: none"> • Some form of legal sports betting available in Delaware, Montana, and Nevada. • Federal statute (PASPA) effectively blocks other states from regulating sports betting. PASPA is facing judicial and legislative challenges. • Vast majority of legal sports betting revenue generated by Nevada. • Significant growth in revenue over last five years driven by expansion of mobile wagering and more variety in available fixtures, suggesting customers will choose legal products over illegal ones when legal products are competitive. • Daily fantasy sports does not appear to have had a cannibalistic impact on Nevada sports betting revenue.
Black market	\$2.5-3bn	<ul style="list-style-type: none"> • Wide array of offshore sites of varying size and sophistication available to U.S. players with little-to-no friction. • Low visibility into offshore operators complicates market sizing, but robust competition for U.S. players supports estimates at the higher end of reasonable ranges. • Two decades of attention from law enforcement has primarily achieved temporary disruptions and marginally increased the cost of doing business in the market. • Variety of technological advances (e.g., VPNs, cryptocurrency, pay-per-head software) support and extend the ability of U.S. players to place illegal bets. • Additional information regarding our sizing for the illegal market is available in the “Unregulated Market Analysis” section of this report.



Regulated Sports Betting: Defining The U.S. Opportunity

I. Projections

II. Legislative Landscape

III. Sports Betting And The Supreme Court

IV. Regulatory Scenarios For U.S. Sports Betting

V. Black Market Analysis

VI. Key Stakeholder Analysis

VII. Impact On Other Verticals

VIII. The View From Europe

IX. Appendix

I. U.S. Regulated Sports Betting Projections – Headline Numbers

\$ **7.1** BN

The total annual revenue we expect to be generated if all 50 states regulate online sports betting but **restrict sports betting** to highly-licensed land-based environments such as casinos and racetracks.

\$ **15.8** BN

The total annual revenue we expect to be generated if all 50 states regulate sports betting and **allow unfettered access** to a robust online sports betting product as well as land-based sports betting.

32

The number of states we expect to offer regulated sports betting by 2023 should PASPA be fully repealed (includes Nevada, Delaware, and Montana).

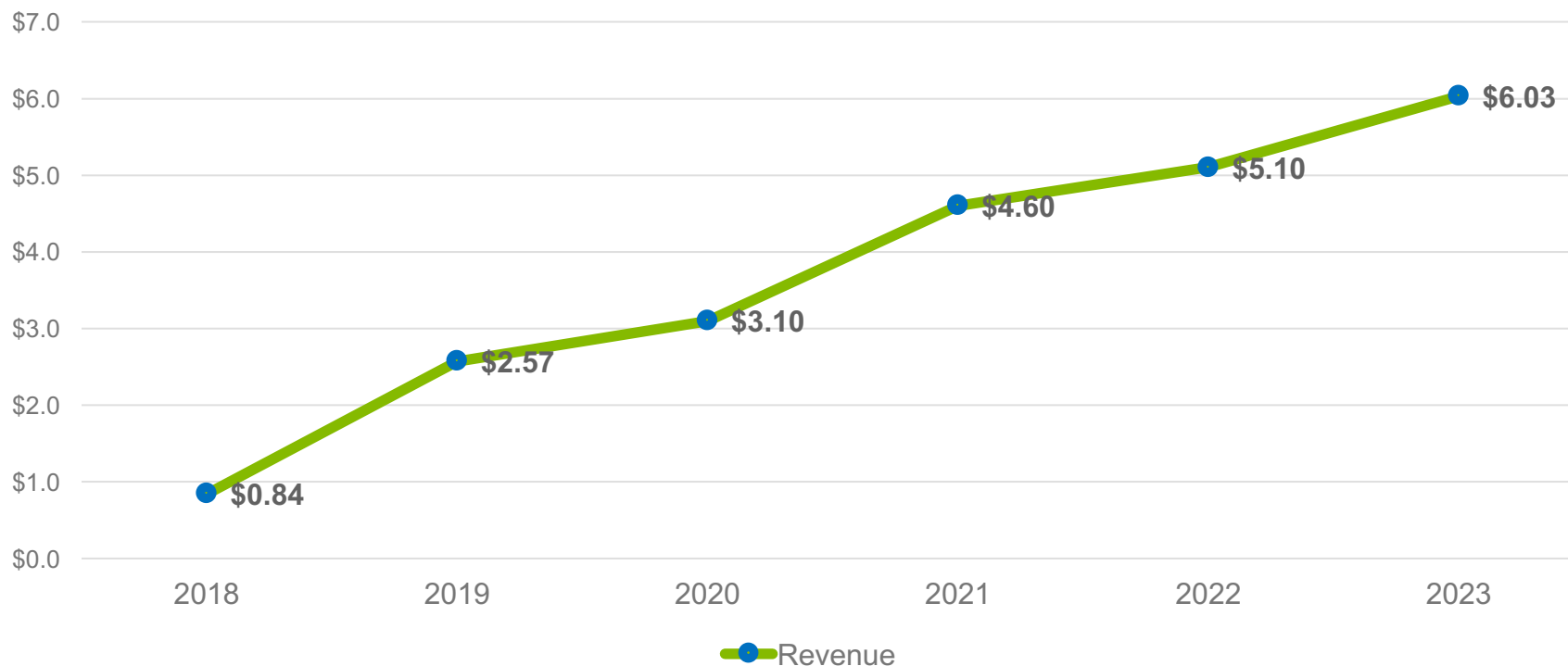
44 MM

The number of Americans we believe would actively participate annually in a 50-state market for regulated sports betting that included both land-based and robust online sports betting products.

I. U.S. Regulated Sports Betting Projections – The Market At 2023

The chart below represents our baseline estimates for the total annual revenue that regulated sports betting would generate in the U.S. during the first five years of operation (assuming a full repeal of PASPA at the start of 2018 for simplicity's sake). Our projection assumes 32 states authorize sports betting by 2023, and that those states vary on key policy terms such as availability of licenses and the ability to offer sports betting online. Full methodology and key caveats are available in the Appendix.

U.S. Regulated Sports Betting Market Size Post-PASPA
(\$ in Billions)



Source: Eilers & Krejcik Gaming, LLC



I. U.S. Regulated Sports Betting Projections – Four Scenarios

The tables on the following slides offer four unique takes on the state-by-state market for regulated sports betting in America. Additional information regarding our underlying methodology, key caveats, and other important notes are available in the Appendix at the end of this report.

Scenario 1: Land-based availability only, relatively tight licensing conditions

In this scenario, sports betting is only available in land-based environments (e.g., the casino). There is no online product. Additionally, licenses are limited by statute or are priced in a way that limits participation by full range of land-based outlets.

Scenario 2: Land-based availability only, relatively loose licensing conditions

In this scenario, sports betting is only available in land-based environments. However, licenses are made available to a broad range of land-based gambling outlets (e.g., OTBs, small casinos, etc.) and are reasonably affordable.

Scenario 3: Land-based + online availability, limited online product

In this scenario, a state authorizes sports betting for both land-based and online play. But the online product is limited by some combination of regulatory restriction (e.g., must sign up in person) and is an inferior product vs. international sportsbooks.

Scenario 4: Land-based + online availability, unrestricted / robust online product

In this scenario, land-based and online play are both authorized. The online product has few, if any, undue regulatory restrictions, and offers a suite of markets and features on par with major international sportsbooks.

I. U.S. Regulated Sports Betting Projections – Land-Based Only (1/3)

LAND-BASED ONLY PROJECTIONS

State	Scenario 1 (land-based only, restricted supply)	Scenario 2 (land-based only, liberal supply)
Alabama	\$91,074,295	\$95,244,142
Alaska	\$16,344,224	\$17,752,891
Arizona	\$140,524,494	\$156,189,354
Arkansas	\$50,707,949	\$50,707,949
California	\$930,050,580	\$991,445,701
Colorado	\$118,913,530	\$129,314,785
Connecticut	\$108,284,846	\$113,180,451
Delaware	\$23,117,977	\$23,117,977
District of Columbia	\$14,517,812	\$14,517,812
Florida	\$496,788,180	\$542,225,398
Georgia	\$195,135,003	\$195,135,003
Hawaii	\$30,350,861	\$30,350,861
Idaho	\$28,397,023	\$30,913,869
Illinois	\$301,664,365	\$315,105,025
Indiana	\$129,507,858	\$135,330,286
Iowa	\$63,727,004	\$68,027,257
Kansas	\$59,281,382	\$61,931,110
Kentucky	\$78,850,167	\$82,426,553
Louisiana	\$84,412,113	\$99,683,350
Maine	\$33,087,605	\$36,134,074
Maryland	\$166,996,482	\$174,396,809

Additional notes and context

- Our model is grounded in land-based sports betting activity in the “locals” (i.e., non-tourist) market in Nevada.
- We believe that many states will introduce land-based sports betting first. Online sports betting may or may not follow, depending on the political and cultural context within a given state.
- The “liberal supply” scenario (Scenario 2) assumes that states will extend licensing to a broad class of operators and will keep the relative cost of licenses and regulation within the range of affordability for smaller operators.

This scenario provides the most meaningful boost for small states with a high number of gambling outlets (e.g., Louisiana, Montana).
- Additional information regarding our methodology and key assumptions is available in the Appendix.

I. U.S. Regulated Sports Betting Projections – Land-Based Only (2/3)

LAND-BASED ONLY PROJECTIONS

State	Scenario 1 (land-based only, restricted supply)	Scenario 2 (land-based only, liberal supply)
Massachusetts	\$185,168,736	\$185,168,736
Michigan	\$221,263,615	\$231,260,000
Minnesota	\$135,353,753	\$147,386,716
Mississippi	\$46,944,694	\$51,262,849
Missouri	\$127,895,630	\$133,670,953
Montana	\$20,251,781	\$26,713,004
Nebraska	\$37,625,924	\$40,136,292
New Hampshire	\$37,339,610	\$39,867,843
New Jersey	\$251,071,261	\$278,571,669
New Mexico	\$38,927,000	\$40,704,807
New York	\$532,004,335	\$579,267,245
North Carolina	\$202,769,850	\$202,769,850
North Dakota	\$13,696,207	\$16,102,952
Ohio	\$249,470,282	\$260,762,549
Oklahoma	\$71,301,169	\$80,984,475
Oregon	\$80,572,378	\$87,749,710
Pennsylvania	\$302,812,921	\$316,569,241
Rhode Island	\$25,603,979	\$25,603,979
South Carolina	\$91,708,935	\$91,708,935
South Dakota	\$16,643,100	\$19,669,852
Tennessee	\$125,106,146	\$125,106,146

Additional notes and context

- The market size estimates in these tables are meant to represent the market value at a maturity baseline (e.g., consumers are broadly aware of the product, the product is fully developed). There is certainly additional room for growth beyond these numbers, growth that will depend on a variety of factors that are outside the bounds of this analysis.
- States that deviated the most positively from a simple population-adjusted model based on Nevada's local market for sports betting include: Connecticut, New Jersey, Maryland, Massachusetts, and New York.
- States that deviated the most negatively from a simple population-adjusted model based on Nevada's local market for sports betting include: Mississippi, Arkansas, West Virginia, Kentucky, and Alabama.



I. U.S. Regulated Sports Betting Projections – Land-Based Only (3/3)

LAND-BASED ONLY PROJECTIONS

State	Scenario 1 (land-based only, restricted supply)	Scenario 2 (land-based only, liberal supply)
Texas	\$521,929,047	\$521,929,047
Vermont	\$16,216,326	\$16,216,326
Virginia	\$211,309,286	\$211,309,286
Washington	\$163,447,968	\$181,436,452
West Virginia	\$34,866,044	\$36,481,311
Wisconsin	\$137,720,937	\$147,045,628
Wyoming	\$12,999,830	\$14,746,222
TOTAL	\$7,133,208,413	\$7,532,786,652
IMPLIED HANDLE AT 6.5% HOLD	\$109,741,667,896	\$115,889,025,421

Additional notes and context

- We have utilized a placeholder number for hold of 6.5% based on the long-term performance of the Nevada sports betting market. It is certainly possible that significant divergence from the Nevada model of taxation and regulation could cause hold to diverge meaningfully in other states.

I. U.S. Regulated Sports Betting Projections – Land-Based + Online (1/3)

LAND-BASED + ONLINE PROJECTIONS

State	Scenario 3 (Restricted online access / product)	Scenario 4 (Full online access, robust product)
Alabama	\$108,988,134	\$205,757,662
Alaska	\$21,611,856	\$36,250,132
Arizona	\$176,004,247	\$295,905,293
Arkansas	\$61,018,242	\$117,061,354
California	\$1,190,098,168	\$2,146,644,126
Colorado	\$153,682,478	\$259,283,819
Connecticut	\$132,487,930	\$212,651,586
Delaware	\$28,292,091	\$49,670,146
District of Columbia	\$20,630,072	\$36,859,204
Florida	\$595,758,848	\$1,033,367,081
Georgia	\$247,118,010	\$450,519,834
Hawaii	\$38,377,204	\$66,829,508
Idaho	\$35,930,337	\$61,222,841
Illinois	\$378,317,081	\$670,864,033
Indiana	\$159,979,547	\$303,049,950
Iowa	\$78,637,693	\$145,770,538
Kansas	\$73,950,633	\$131,740,742
Kentucky	\$95,935,887	\$186,096,934
Louisiana	\$103,209,272	\$202,618,706
Maine	\$39,207,736	\$64,215,137
Maryland	\$211,306,325	\$333,378,587

Additional notes and context

- The numbers in the following tables capture our revenue expectations for states that allow both land-based and online sports betting.
- Scenario 3 is a model grounded in the Nevada locals market for online sports betting. That product is relatively restricted (i.e., requires patrons to sign up in person) and is a generally less-developed product feature-wise than major online platforms in markets like the UK.
- Scenario 4 is a model grounded in the UK market for online sports betting. That market is highly competitive, saturated, and is a low-friction process from the consumer point of view. Additionally, the sports betting products feature a greater density of markets, higher average limits, and a far wider array of innovative features that drive customer interest.

I. U.S. Regulated Sports Betting Projections – Land-Based + Online (2/3)

LAND-BASED + ONLINE PROJECTIONS

State	Scenario 3 (Restricted online access / product)	Scenario 4 (Full online access, robust product)
Massachusetts	\$237,168,363	\$388,054,356
Michigan	\$271,047,398	\$482,030,078
Minnesota	\$170,410,044	\$285,767,525
Mississippi	\$55,725,386	\$107,099,093
Missouri	\$156,803,655	\$285,877,646
Montana	\$24,431,116	\$43,503,263
Nebraska	\$47,319,421	\$86,636,600
New Hampshire	\$45,809,237	\$72,766,483
New Jersey	\$323,563,255	\$502,060,699
New Mexico	\$46,792,331	\$89,486,542
New York	\$670,546,542	\$1,170,178,588
North Carolina	\$245,926,297	\$464,174,229
North Dakota	\$17,575,324	\$34,073,816
Ohio	\$304,595,145	\$572,618,603
Oklahoma	\$87,041,363	\$166,991,340
Oregon	\$101,103,516	\$189,219,446
Pennsylvania	\$367,414,819	\$681,004,440
Rhode Island	\$31,149,071	\$52,957,071
South Carolina	\$109,636,964	\$204,146,100
South Dakota	\$20,164,889	\$38,022,388
Tennessee	\$153,640,232	\$295,386,238

Additional notes and context

- The market size estimates in these tables are meant to represent the market value at a maturity baseline (e.g., consumers are broadly aware of the product, the product is fully developed). There is certainly additional room for growth beyond these numbers, growth that will depend on a variety of factors that are outside the bounds of this particular analysis.
- States that deviated the most positively from a simple population-adjusted model based on Nevada's local market for sports betting include: New York, Connecticut, California, Massachusetts, and New Jersey.
- States that deviated the most negatively from a simple population-adjusted model based on Nevada's local market for sports betting include: Mississippi, Arkansas, Idaho, West Virginia, and Kentucky.



I. U.S. Regulated Sports Betting Projections – Land-Based + Online (3/3)

LAND-BASED + ONLINE PROJECTIONS

State	Scenario 3 (Restricted online access / product)	Scenario 4 (Full online access, robust product)
Texas	\$657,339,519	\$1,286,226,037
Vermont	\$19,684,200	\$31,873,512
Virginia	\$265,561,472	\$440,493,048
Washington	\$209,041,523	\$362,831,573
West Virginia	\$40,841,013	\$78,566,505
Wisconsin	\$168,968,306	\$293,244,926
Wyoming	\$16,166,672	\$28,894,532
TOTAL	\$8,891,277,803	\$15,872,692,524
IMPLIED HANDLE AT 6.5% HOLD	\$136,788,889,272	\$244,195,269,606

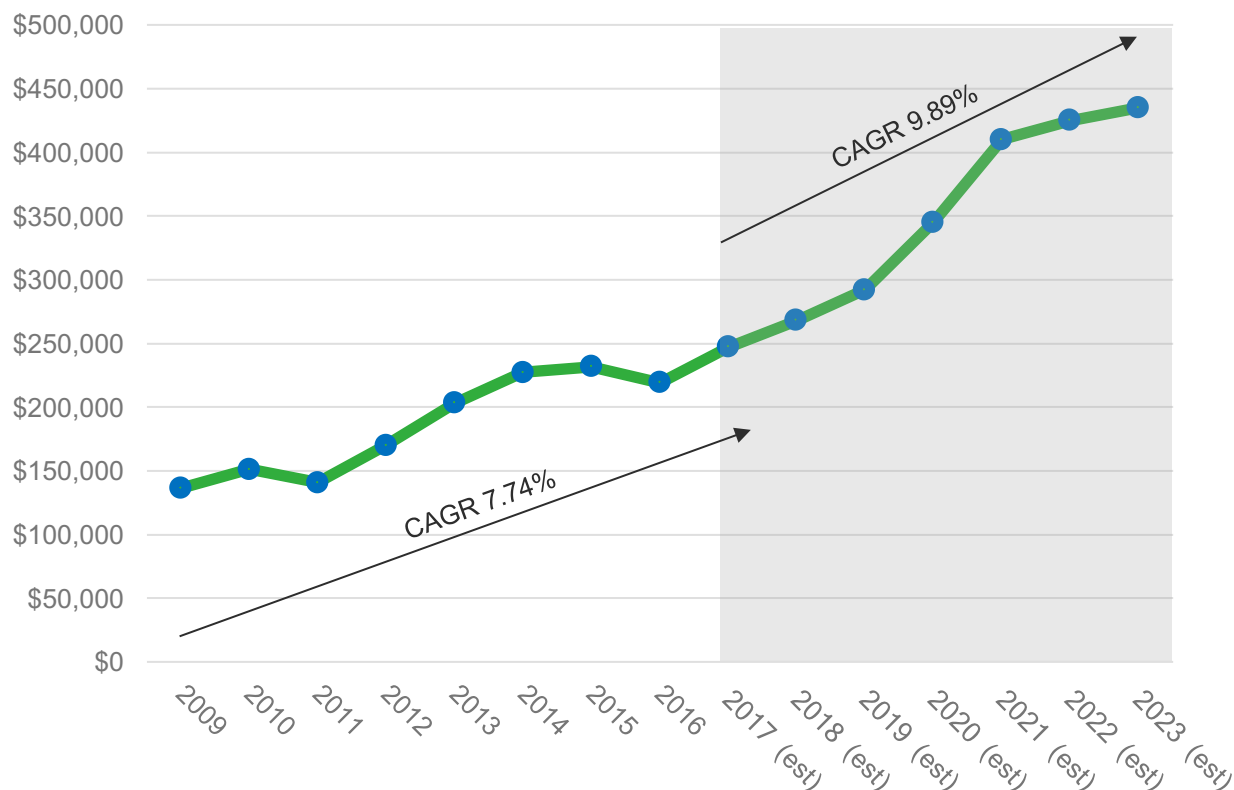
Additional notes and context

- We have utilized a placeholder number for hold of 6.5% based on the long-term performance of the Nevada sports betting market. Significant divergence from the Nevada model of taxation and regulation could cause hold to diverge meaningfully in other states.
- Additionally, it is certainly possible that the hold for the online product could be higher than the hold for the land-based product due to a more casual player base, greater participation in parlay / other high-hold wagers, and so on. That question is beyond the scope of this particular analysis.

I. U.S. Regulated Sports Betting Projections – Nevada

Because Nevada is such a wholly unique market, and because it forms the basis of our 50-state model, we have broken out our projections for Nevada from the rest of the U.S. market. We expect recent growth in Nevada's sports betting market to continue in the near-term, with a number of independent factors supporting meaningful growth through 2023. We tend to believe that regulation of sports betting in other states will not suppress growth in Nevada.

Total Nevada Sports Betting Revenue (\$ in 000s)



Factors supporting growth

- Introduction of professional football and hockey teams.
- Additional marquee sporting events driven by bookings at T-Mobile and Raiders stadium.
- Decrease in professional sports league opposition to holding events in Vegas.
- Macro growth of Vegas as a tourist destination.
- Improvements in user onboarding for mobile apps.
- Improvements in payment capabilities for mobile apps.
- Incremental UI / UX improvements to mobile apps.
- Greater investment in sportsbooks as “social” spaces.
- Live betting development.
- Expansion of wagering beyond traditional sports events.



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I. Projections

II. Legislative Landscape

III. Sports Betting And The Supreme Court

IV. Regulatory Scenarios For U.S. Sports Betting

V. Black Market Analysis

VI. Key Stakeholder Analysis

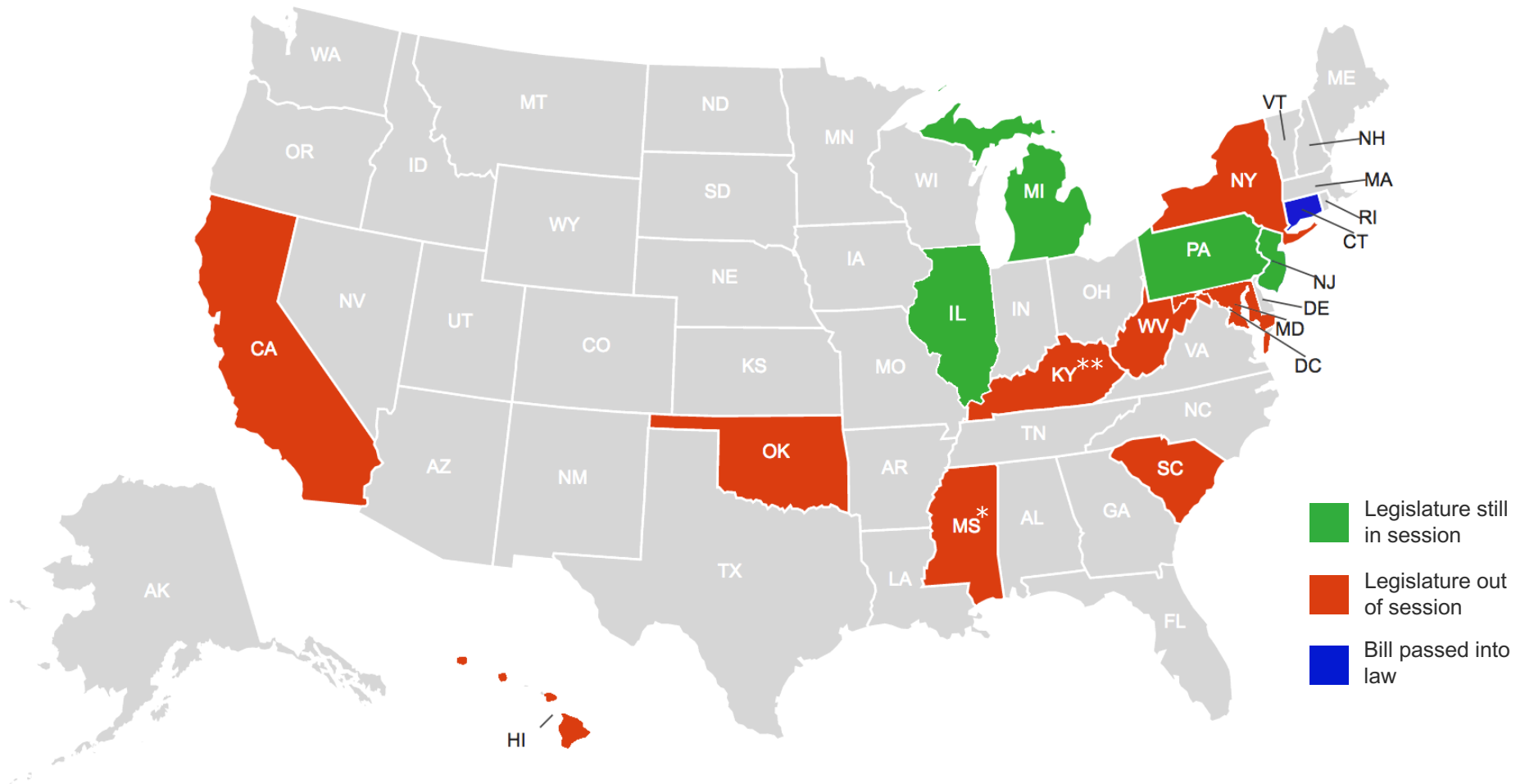
VII. Impact On Other Verticals

VIII. The View From Europe

IX. Appendix

II. Legislative Landscape – 2017 Bill Tracker (1/2)

The map below shows which states have introduced bills related to sports betting in 2017. With many state legislatures out of session for the year, we may see only a handful of new bills before 2017 ends.



* An argument has been made that MS authorized sports betting with its DFS bill. See table on next slide for more details

**Bill pre-filed in 2017 for 2018 session

Source: Eilers & Krejcik Gaming LLC



II. Legislative Landscape – 2017 Bill Tracker (1/2)

STATE	BILL	LEG STILL IN SESSION?	NOTES
California	ACA 18	No	Some tribes have voiced opposition to the bill. Issue likely to re-emerge next year.
Connecticut	H 6948	Signed into law	Authorizes regulation once federal prohibition is lifted.
Hawaii	H 927	No	Bill calls for a study of gambling expansion, including sports betting.
Illinois	SJR0026	Yes	Resolution calls for federal government to repeal PASPA.
Kentucky	BR 155	No	Pre-filed for 2018 session. Sets 20% tax on handle.
Maryland	H 989	No	Bill calls for a public referendum to authorize sports betting, should federal law allow.
Michigan	H 4060 H 4261	Yes	First bill calls for a referendum that would authorize sports betting. Second would authorize parlay wagering.
Mississippi	H 967	No	An argument has been made that a bill dealing with fantasy sports authorized the state to allow sports betting in the absence of a federal prohibition. It's unclear if that argument will hold in the face of political pressure.
New Jersey	S 3375	Yes	The current bill seeks to de-criminalize sports betting. New Jersey has already passed enabling legislation that acts as the foundation of the state's PASPA challenges.
New York	S 1282 A 5438	No	Calls for a constitutional amendment to authorize sports betting regulation. Some have made the argument that NY already authorized sports betting when it expanded casino gambling in 2013.
Oklahoma	S 857	No	Sought to authorize "sports pools" as part of a broader gaming package.
Pennsylvania	H 519	Yes	Sports betting in play as part of a broader conversation regarding gambling expansion.
South Carolina	H 3102	No	Would amend state constitution to allow for sports betting and casinos.
West Virginia	H 3102	No	In addition to the bill, the state lottery recently expressed an interest in preparing for regulated sports betting post-PASPA.
U.S. Federal	H 783	Yes	Sports Gaming Opportunity Act of 2017.

II. Legislative Landscape – Outlook (1/5)

Should PASPA be repealed or overturned, we believe that states will regulate sports betting in distinct waves:

1. **Immediate adopters** (live within 2 years)
2. **Slow adopters** (live within 5 years)
3. **Late adopters** (live within 7 years)

We also note that there will likely be a number of states where adoption will take even longer, and a number of states where adoption may never occur.

There are myriad factors that will influence the willingness of states to regulate and the speed with which states regulate. Our analysis considers a state's general history with gambling expansion along with three primary questions:

1. **Has the state already filed enabling legislation for sports betting?** While far from a perfect proxy, the presence of enabling legislation for sports betting in the status quo suggests a measure of legislative appetite for regulation and may provide a state with some standing legislative momentum should PASPA fall aside.
2. **How complex is the stakeholder picture?** As we've seen with iGaming, states with complicated stakeholder landscapes (e.g., California) have a harder time moving forward with gambling expansion than states with a more homogenous stakeholder landscape (e.g., New Jersey).
3. **What legal or legislative hurdles stand in the way of gambling expansion?** Some states have constitutional prohibitions on gambling expansion or require additional steps (e.g. referendums) for expansion.

Note: Our analysis only considers the possibility of land-based sports betting. We believe that authorization of online sports betting will be a far more contentious issue that will stretch out over a longer horizon.



II. Legislative Landscape – Outlook (2/5)

Key stakeholders

Commercial casinos. Largely, although not unanimously, in support of regulated sports betting. Support definitely fractures along issue of land-based vs. online sports betting. Would likely seek protectionist approach that forces licensing to flow through casinos and limits the ability of out-of-state brands to compete in the market. Would likely accommodate racing and tribal casinos, but not surrender driver's seat to either.

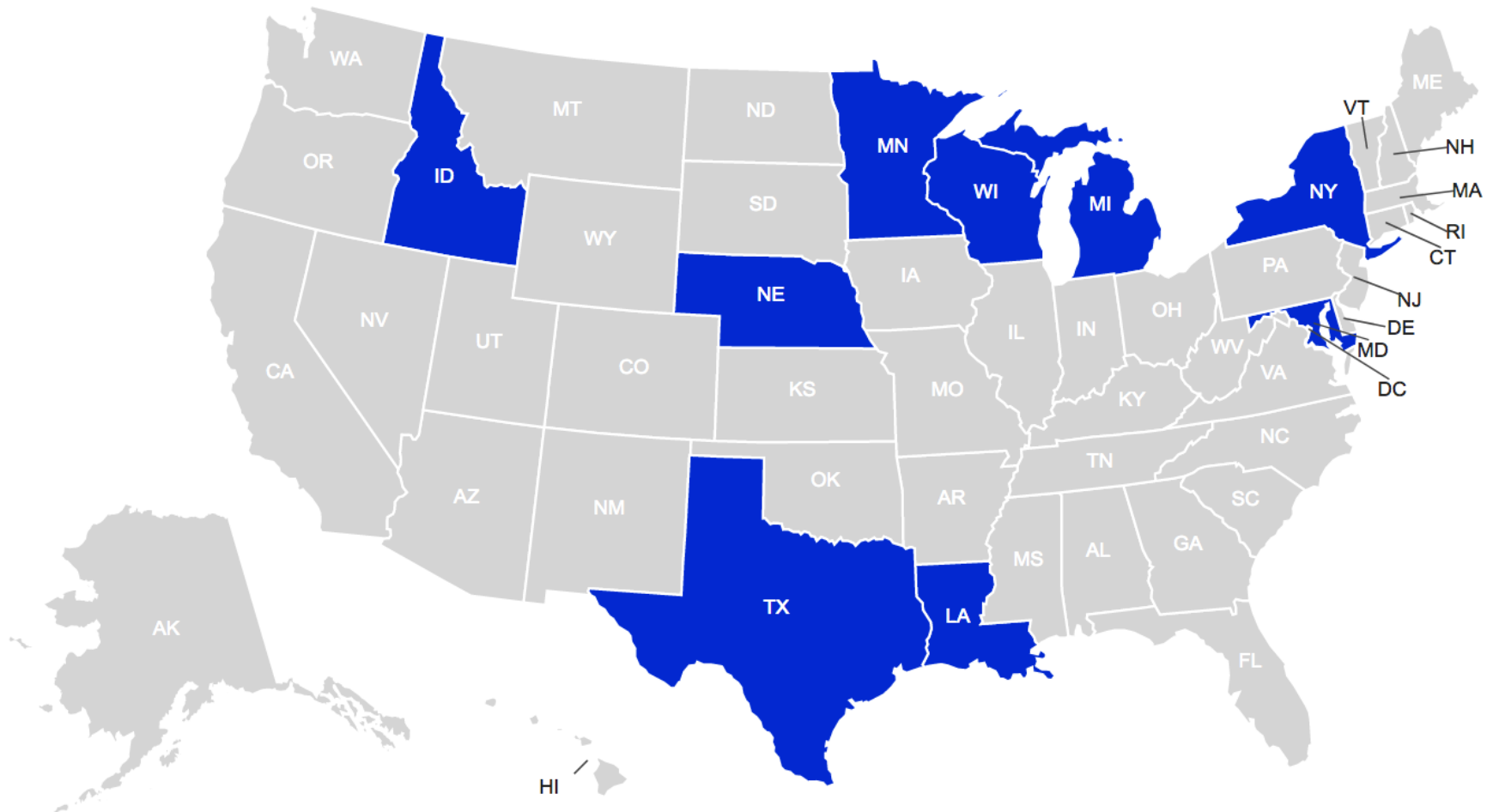
Tribal casinos. Little consensus on the issue of regulated sports betting. Some would see as an opportunity, others as a threat. Opposition would likely increase if regulation included online sports betting vs. land-based only. Tribal exclusivity agreements in some states could act as a barrier to sports betting regulation, depending on structure and scope of regulation.

Racing industry. No consensus position, but more likely to support than oppose. Would demand a significant seat at the table in terms of licensing, which could complicate the situation in states with significant tribal or commercial casino presence. ADWs would be especially interested in the opportunity (and could bring significant user databases to the table), but that interest could clash with protectionist tendencies of commercial and tribal casinos.

State lotteries. Would likely maneuver for some significant role in or revenue stemming from regulated sports betting. Will oppose additional competition for customer dollars from casinos / tribes / tracks. Lotteries could point to Delaware as a model for a lottery-centric approach to sports betting. Critically, lotteries are largely exempt from existing state constitutional bans on gambling expansions, meaning that the lottery could be the path of least resistance to some type of sports betting product in many states.

II. Legislative Landscape – Outlook (3/5)

Key states with constitutional hurdles to gambling expansion: ID, LA, MD, MI, MN, NE, NY, TX, WI

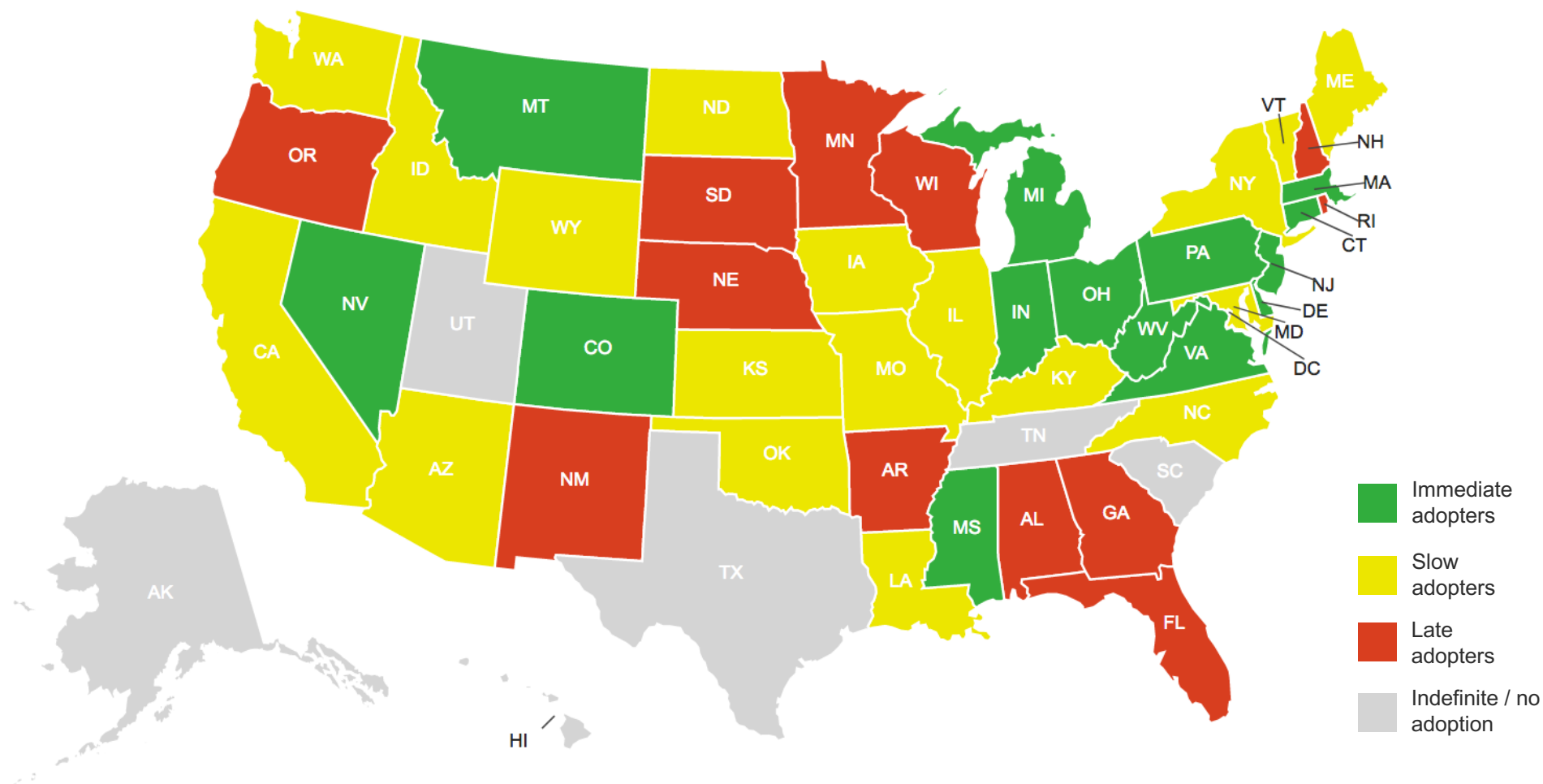


*Michigan's commercial and tribal casinos are exempt from constitutional ban

Source: Eilers & Krejcik Gaming, LLC

II. Legislative Landscape – Outlook (4/5)

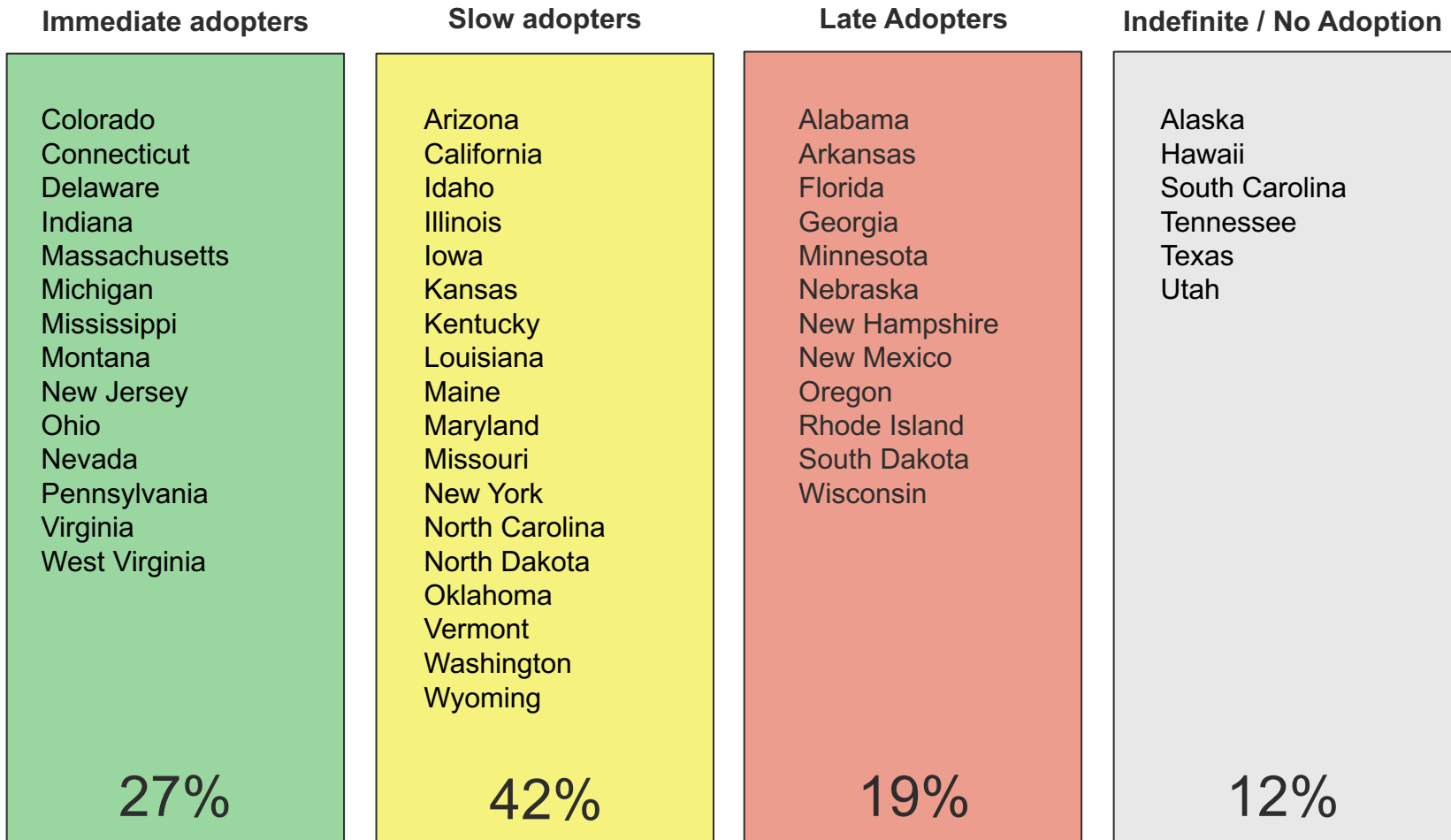
Which states are likely to legalize, and when?





II. Legislative Landscape – Outlook (5/5)

Which states are likely to legalize, and when?



II. Legislative Landscape – The Question Of Land-Based Availability

One of the most complex questions lawmakers will have to answer is where land-based sports betting will be made available to consumers. The question will vary fundamentally from state to state, with significant implications for the size, scope, and nature of the market. The non-exhaustive illustration of possible retail outlets below underlines the point.



Commercial and tribal casinos are the most likely retail outlet for land-based sports betting, and may argue for exclusivity / gatekeeper status in states where they hold significant political power. Unlikely to be shut out of the conversation in any state.



Route outlets (VGT / taverns / truck stops) will likely provide fertile ground for debate, especially in states like IL where the industry has a significant political voice. Lawmakers will face thorny choices here in states with multiple stakeholders.



Racetracks / racinos will also mount a strong claim to key license or similar status when it comes to sports betting, based on extensive experience with similar products and, in many states, an argument grounded in economic need.



Lottery retailers could be an unexpected front in the sports betting distribution debate, especially in states that lack a strong commercial gambling industry. How lottery POS operators would handle sports betting is an open question.



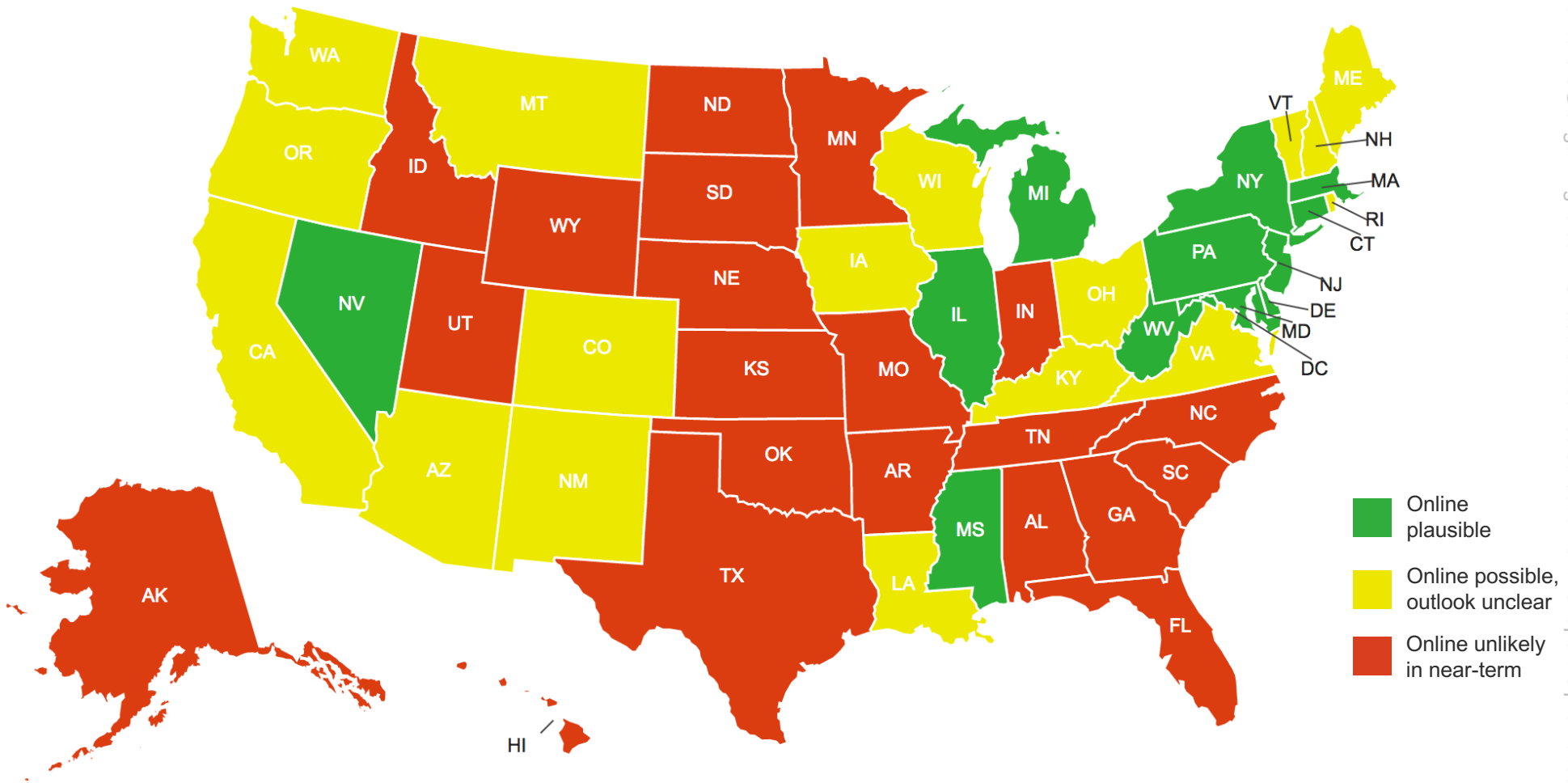
OTBs will no doubt push to be part of the retail conversation. But this may be the line where policy makers will need to start making tough calls regarding retail availability – and where powerful gambling stakeholders could push back.



New type of outlet. We could certainly see the creation of outlets similar to route outlets or OTBs – small storefronts designed to accommodate sports betting – brought into existence by legislation in some states.

II. Legislative Landscape – Outlook For Online Sports Betting

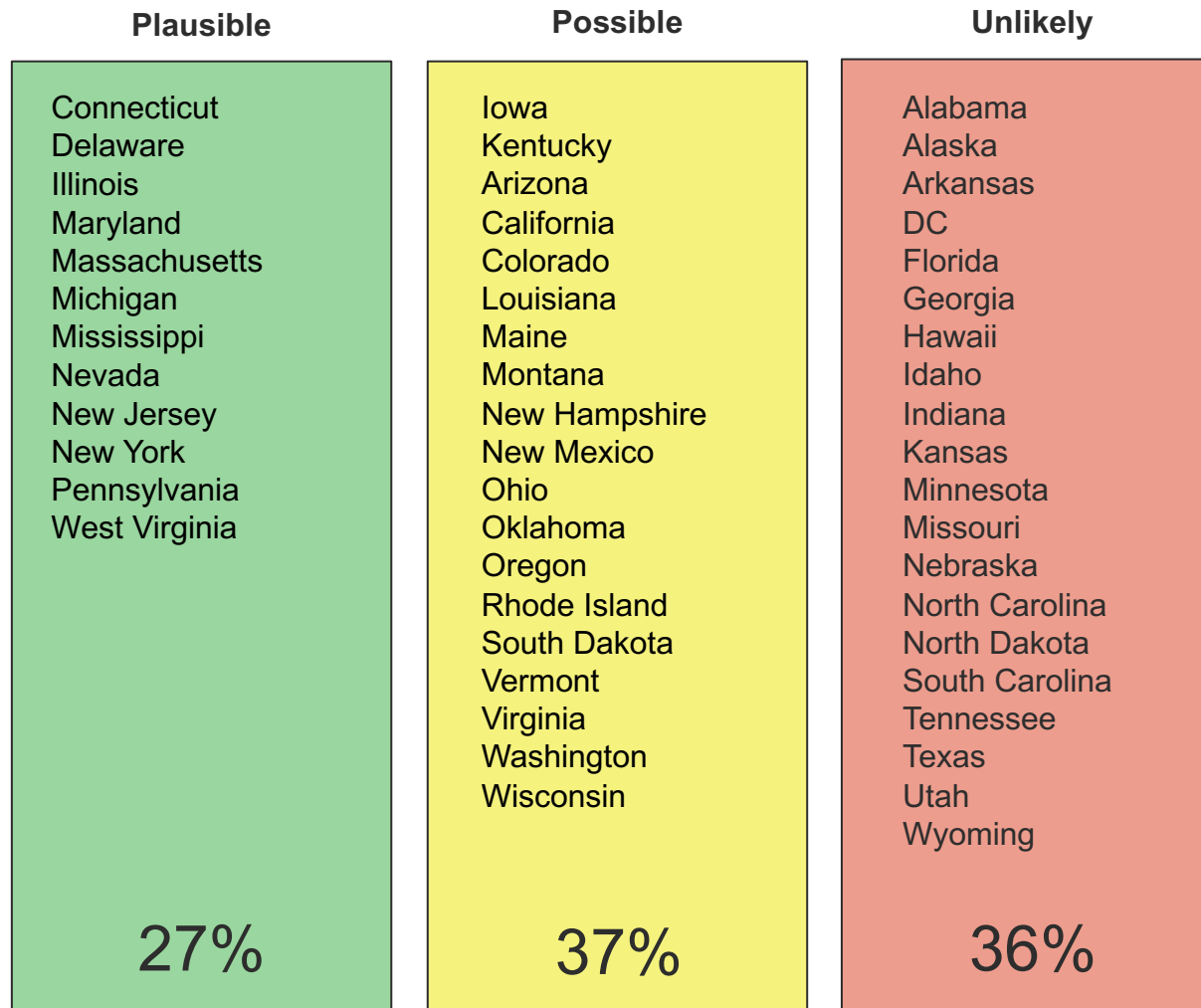
Which states are likely to authorize both land-based and online sports betting?





II. Legislative Landscape – Outlook For Online Sports Betting

Which states are likely to authorize both land-based and online sports betting?





Regulated Sports Betting: Sizing The U.S. Opportunity

I. Projections

II. Legislative Landscape

III. Sports Betting And The Supreme Court

IV. Regulatory Scenarios For U.S. Sports Betting

V. Black Market Analysis

VI. Key Stakeholder Analysis

VII. Impact On Other Verticals

VIII. The View From Europe

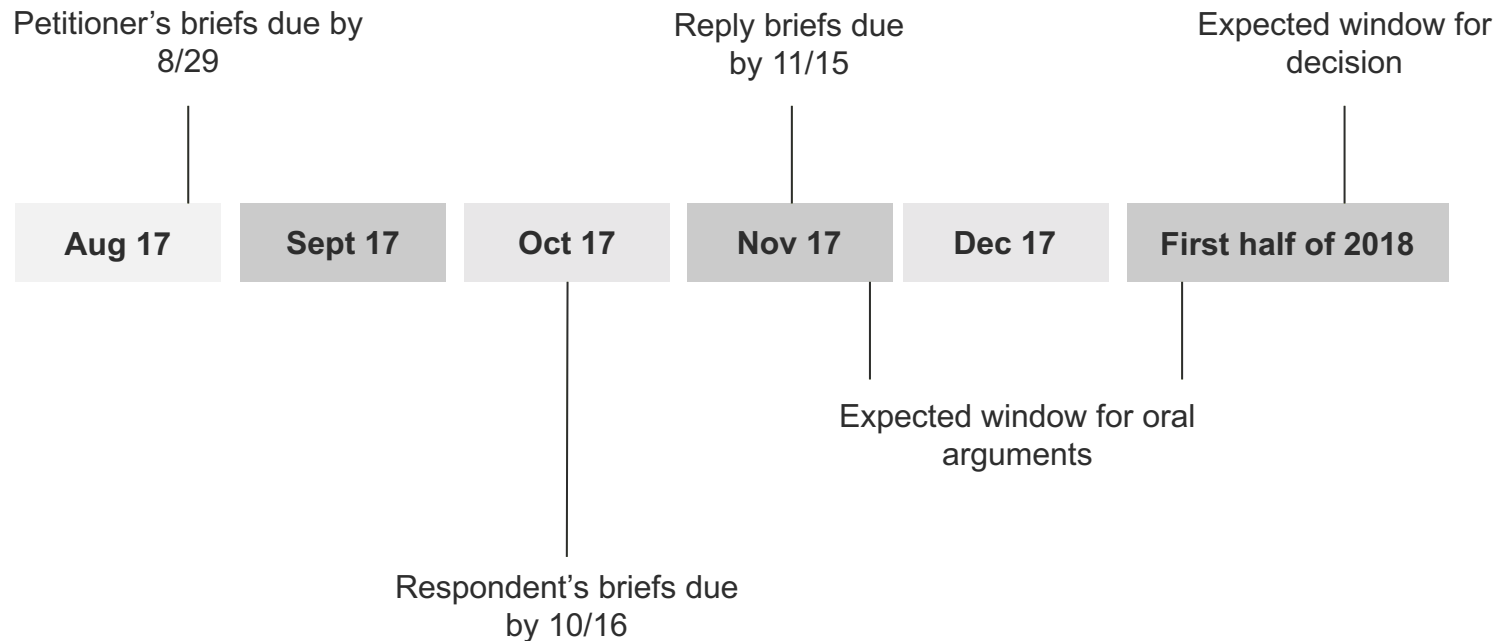
IX. Appendix

III. Sports Betting And The Supreme Court – Abbreviated Background

- **2009:** New Jersey State Sen. Raymond Lesniak says he plans to sue the federal government over PASPA.
- **November 2011:** New Jersey voters pass a referendum supporting legal sports betting at casinos and racetracks.
- **January 2012:** New Jersey lawmakers approve a bill allowing casinos and racetracks to accept certain types of sports bets.
- **May 2012:** NJ Gov. Chris Christie announces plans for regulations to enact the legislation.
- **July 2012:** The NCAA, MLB, NFL, NBA, and NHL file suit against New Jersey in an attempt to block enactment of regulated sports betting under the claim that New Jersey's move violates PASPA.
- **February 2013:** U.S. District Court Judge Michael Shipp sides with the leagues.
- **September 2013:** The U.S. Court of Appeals for the Third Circuit sides with the leagues and affirms PASPA's constitutionality in a 2-1 decision.
- **September 2014:** New Jersey files a motion with Judge Shipp asking the court to hold that the state is not required to criminalize sports betting, effectively arguing that states are free to remove restrictions on sports betting without being in violation of PASPA.
- **October 2014:** New Jersey passes legislation that, in effect, decriminalizes sports betting at licensed racetracks and casinos. The leagues again file suit, and Judge Shipp rules against New Jersey.
- **March 2015:** New Jersey files an appeal.
- **August 2015:** The U.S. Third Circuit Court of Appeals upholds the lower court ruling in a 2-1 decision.
- **October 2015:** The full U.S. Third Circuit Court grants New Jersey's request for a hearing.
- **August 2016:** The full U.S. Third Circuit Court of Appeals rules 9-3 in favor of the sports leagues. New Jersey takes its appeal to the U.S. Supreme Court.
- **June 2017:** The U.S. Supreme Court agrees to hear New Jersey's appeal.

III. Sports Betting And The Supreme Court – Decision Timeline

The timeline below remains in flux. Handicapping the outcome of a SCOTUS decision is notoriously difficult business, but the consensus opinion is that the Court is unlikely to have taken the appeal simply to maintain the status quo, suggesting that a partial or full repeal of PASPA is the most probable outcome.





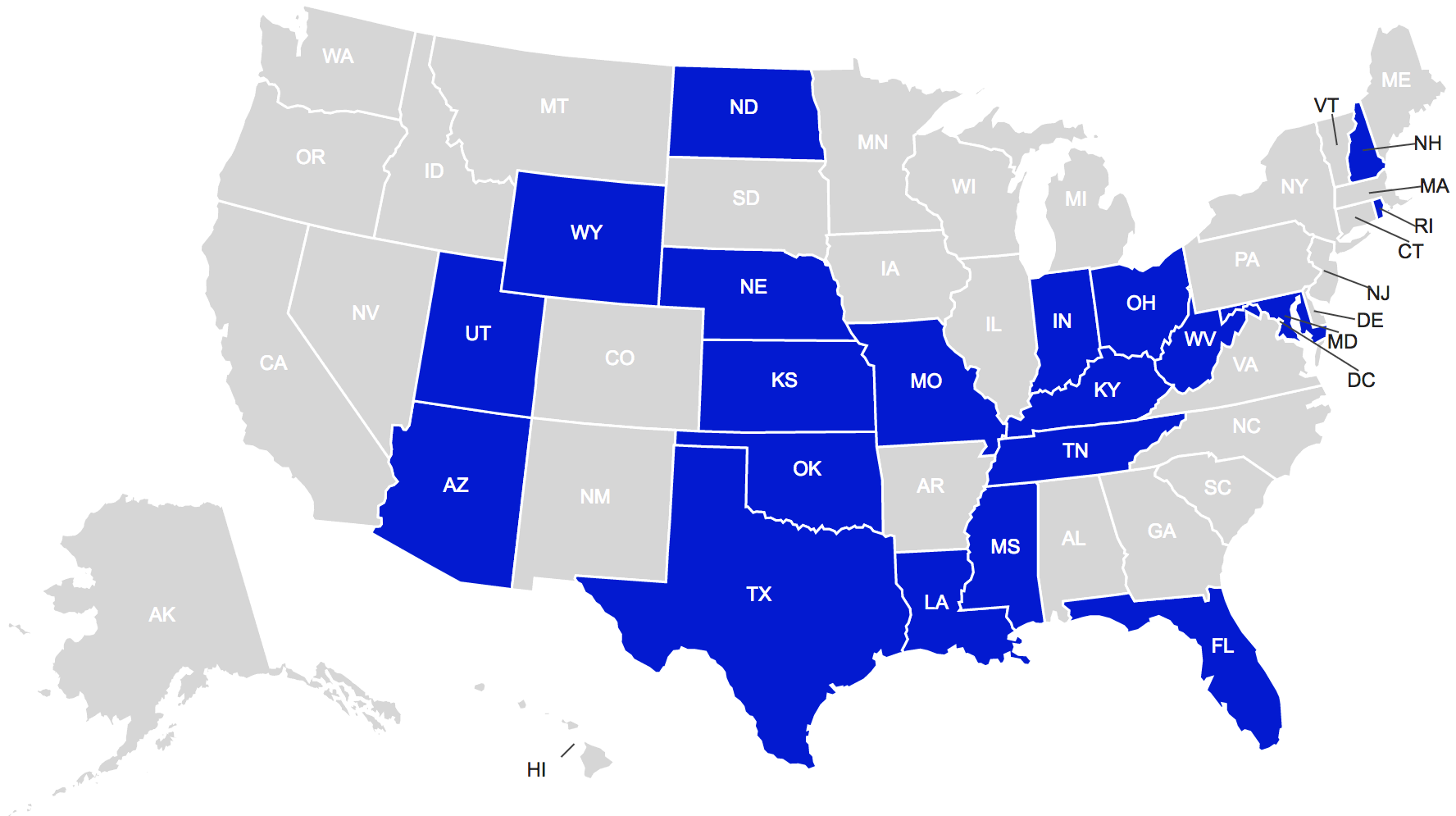
III. Sports Betting And The Supreme Court – Relevant Briefs

The table below lists the relevant briefs filed as of September 24, 2017 related to NJ's appeal before the Supreme Court.

Petitioner / link to brief	Type of brief
Gov. Chris Christie	Representing the state of New Jersey
NJ Thoroughbred Horsemen's Association	A defendant and appellant alongside the state
Pacific Legal Foundation et al	Amicus
Sports law expert Ryan Rodenberg	Amicus
Sports law expert John Holden	Amicus
American Gaming Association	Amicus
European Sports Security Association et al	Amicus
Rep. Frank Pallone	Amicus
West Virginia et al	Amicus
National Governors Association et al	Amicus
New Sports Economy Institute	Amicus

III. Sports Betting And The Supreme Court – Amicus Brief Support

The map below shows the 20 states that signed on to a recent amicus brief submitted to the Supreme Court supporting New Jersey's challenge to the constitutionality of PASPA.



Source: LegalSportsReport.com



III. Sports Betting And The Supreme Court: Possible Outcomes

The scenarios below, ordered roughly in terms of likelihood based on commentary from legal experts, do not represent a comprehensive list. We would stress that there is effectively no consensus among observers as to what the Supreme Court is likely to do, and that forecasting any outcome involves a high degree of speculation.

Narrow repeal of PASPA

The Court could render a decision that touches only on New Jersey's "partial repeal" of sports betting prohibitions. Such an approach would not necessarily open the door for other states – at least not all of the way.

Decision that sidesteps opening door to sports betting

The Court could render a decision focused on standing or a similar issue that does not immediately open the door for states to introduce regulated sports betting.

Decision that throws the sports betting issue back to Congress

The Court could render a decision that effectively puts the onus on Congress by identifying issues with PASPA but contending that resolution of said issues is within the purview of Congress rather than the Court.

Full repeal of PASPA

The Court could strike down PASPA in its entirety, which would clear the way for all individual states to pursue their own approach to regulated sports betting. This is the outcome assumed by our projections for the U.S. regulated sports betting market by 2023.

Uphold PASPA in its entirety

The Court could choose to maintain the status quo, either by affirmatively upholding the constitutionality of PASPA or by ruling in a manner that speaks very narrowly to New Jersey's case without touching on the sports betting authorization question.

Uphold PASPA, but strike grandfather clause

The Court could rule that PASPA is constitutional save the "grandfather clause" and that the grandfather clause is separable. In this scenario, states currently authorized to offer regulated sports betting (e.g., Nevada) would now risk violation of PASPA.



Regulated Sports Betting: Defining The U.S. Opportunity

I. Projections

II. Legislative Landscape

III. Sports Betting And The Supreme Court

IV. Regulatory Scenarios For U.S. Sports Betting

V. Black Market Analysis

VI. Key Stakeholder Analysis

VII. Impact On Other Verticals

VIII. The View From Europe

IX. Appendix



IV. Regulatory Scenarios - Overview

Scenario 1 - State-run with material federal role

In this scenario, states are the primary regulatory authority for regulated sports betting, with the federal government playing an ancillary role (e.g., establishing minimum standards, acting as a central clearinghouse for suspicious activity, and overall activity monitoring). We regard this as the most likely scenario for regulated sports betting in the United States, especially if PASPA is repealed by legislative action.

Scenario 2 - State-run with major federal role

In this scenario, the federal government acts as the primary regulator for sports betting activity (e.g., promulgating all regulations, handling licensing), with states serving in a supporting role and / or handling state-specific matters (e.g., tax collection). We regard this scenario as highly unlikely as we cannot see states surrendering such authority (and the revenue that would come with it). However, we do expect leagues to lobby aggressively for this approach if PASPA is overturned.

Scenario 3 - State-run with limited federal role

In this scenario, states handle the vast majority of the regulatory process, with the federal government acting in an ancillary role (e.g., collecting excise tax, monitoring for AML). We regard this as a plausible scenario, especially if PASPA is overturned by judicial action, but believe that the more states that decide to offer sports betting, the more likely a material federal role becomes.

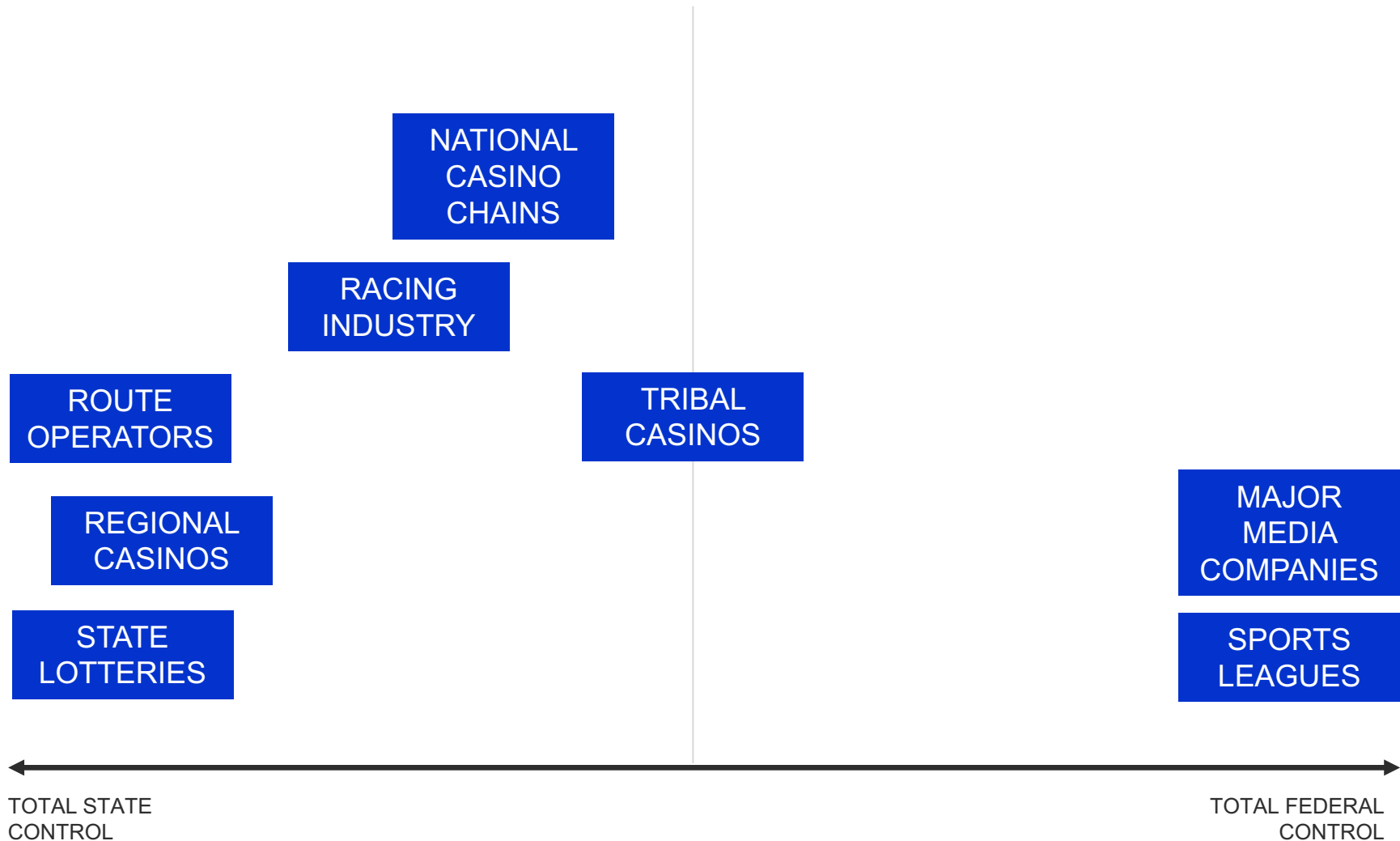


IV. Regulatory Scenarios – Taxes And Fees

	Federal taxes / fees	State taxes / fees	Sports league fees
Scenario 1 - State-run with material federal role	<ul style="list-style-type: none"> Existing excise tax (.25% of handle) Significant additional regulatory fees based on handle or GGR Potential for federal license requirement 	<ul style="list-style-type: none"> Existing tax rate for other gambling activity would likely be baseline for negotiations Significant licensing fees (7-8 figure) Additional regulatory costs 	<ul style="list-style-type: none"> Fees for data access (possibly tiered based on level of access) Fees for streaming rights (possibly competitive bidding) Fees for integrity monitoring
Scenario 2 - State-run with major federal role	<ul style="list-style-type: none"> Existing excise tax (.25% of handle) Significant additional regulatory fees based on handle or GGR Likely federal license requirement with annual fees 	<ul style="list-style-type: none"> Existing tax rate for other gambling activity would likely be baseline for negotiations Additional regulatory costs 	<ul style="list-style-type: none"> Fees for data access (possibly tiered based on level of access) Fees for streaming rights (possibly competitive bidding)
Scenario 3 - State-run with limited federal role	<ul style="list-style-type: none"> Existing excise tax (.25% of handle) Additional regulatory fees based on handle or GGR 	<ul style="list-style-type: none"> Existing tax rate for other gambling activity would likely be baseline for negotiations Significant licensing fees (7-8 figure) Additional regulatory costs 	<ul style="list-style-type: none"> Fees for data access (possibly tiered based on level of access) Fees for streaming rights (possibly competitive bidding) Fees for integrity monitoring



IV. Regulatory Scenarios – Best Outcomes For Various Stakeholders





Regulated Sports Betting: Defining The U.S. Opportunity

I. Projections

II. Legislative Landscape

III. Sports Betting And The Supreme Court

IV. Regulatory Scenarios For U.S. Sports Betting

V. Black Market Analysis

VI. Key Stakeholder Analysis

VII. Impact On Other Verticals

VIII. The View From Europe

IX. Appendix

V. Black Market Analysis - Headline Numbers

\$ **50 - 60** BN

Our estimate of the total handle that flows through the illegal market for sports betting in the U.S., not including social bets, March Madness office pools, and other “casual” illegal betting. See the Appendix at the end of this report for more details.

35 %

Our estimate of the total share of that handle accounted for by pay-per-head shops (SaaS companies that provide independent bookies with a robust online platform).

\$ **2.5 - 3** BN

Our estimate of the total revenue generated annually by the black market for sports betting in the United States (does not include “social / casual” bets).

12 - 15 MM

The number of Americans we believe are active illegal sports bettors in any given year (does not include “social / casual” bets).

V. Black Market Analysis - Profile Of The U.S. Customer (1/5)

In September 2017, we conducted a consumer survey* with the goal of developing a clearer picture not only of the prevalence of illegal sports betting in the United States, but also of the betting habits of those that participate in the illegal market.

Based on the results of that survey, we believe that the typical consumer participating in the illegal market for sports betting in the U.S.:

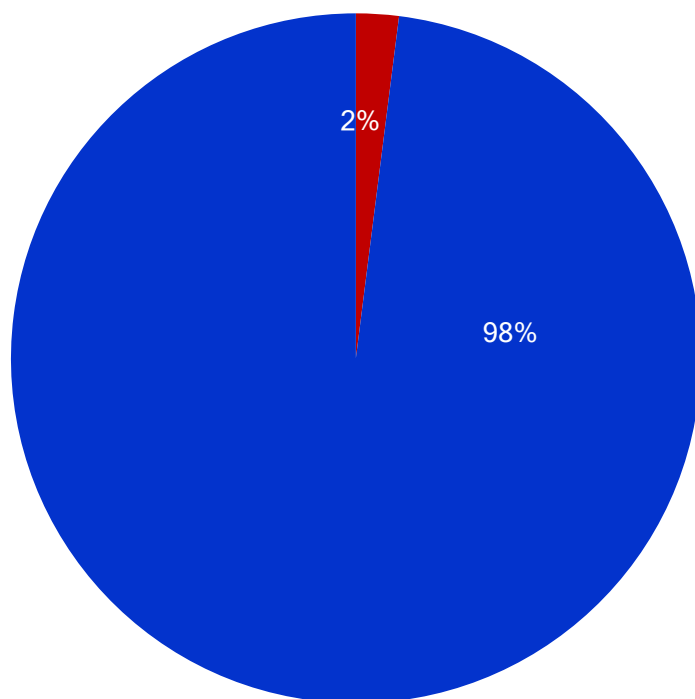
- Is overwhelmingly **(90%+) male**.
- Is most likely to fall between the **ages of 21-49**, with the **heaviest concentration in the 30-39 range**.
- **Places bets frequently**, with an annual average best described in terms of dozens of bets.
- Generally **prefers lower-stakes wagers as a broad population**, but maintains a significant appetite for higher-stakes wagers.
- **Vastly prefers to place bets online** as opposed to placing bets in-person.
- Is **highly likely to bet on sports when they visit Las Vegas**.
- **Would consider moving a significant amount of their betting action to regulated sites**.

*See the Appendix for additional information regarding the survey methodology

V. Black Market Analysis - Profile Of The U.S. Customer (2/5)

What is your gender?

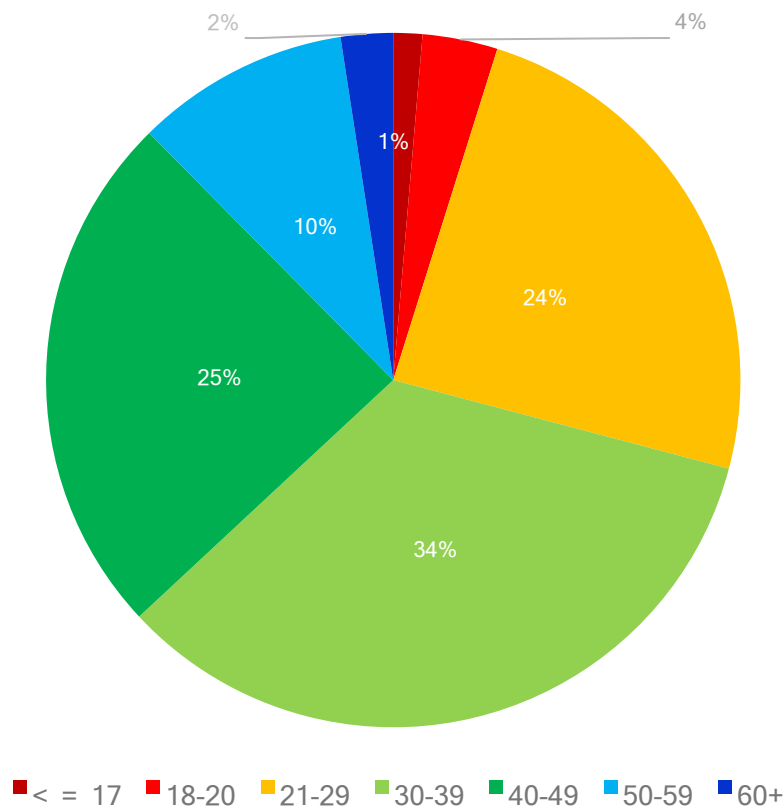
(N = 372)



■ Female ■ Male

What is your age?

(N = 371)



■ < = 17 ■ 18-20 ■ 21-29 ■ 30-39 ■ 40-49 ■ 50-59 ■ 60+

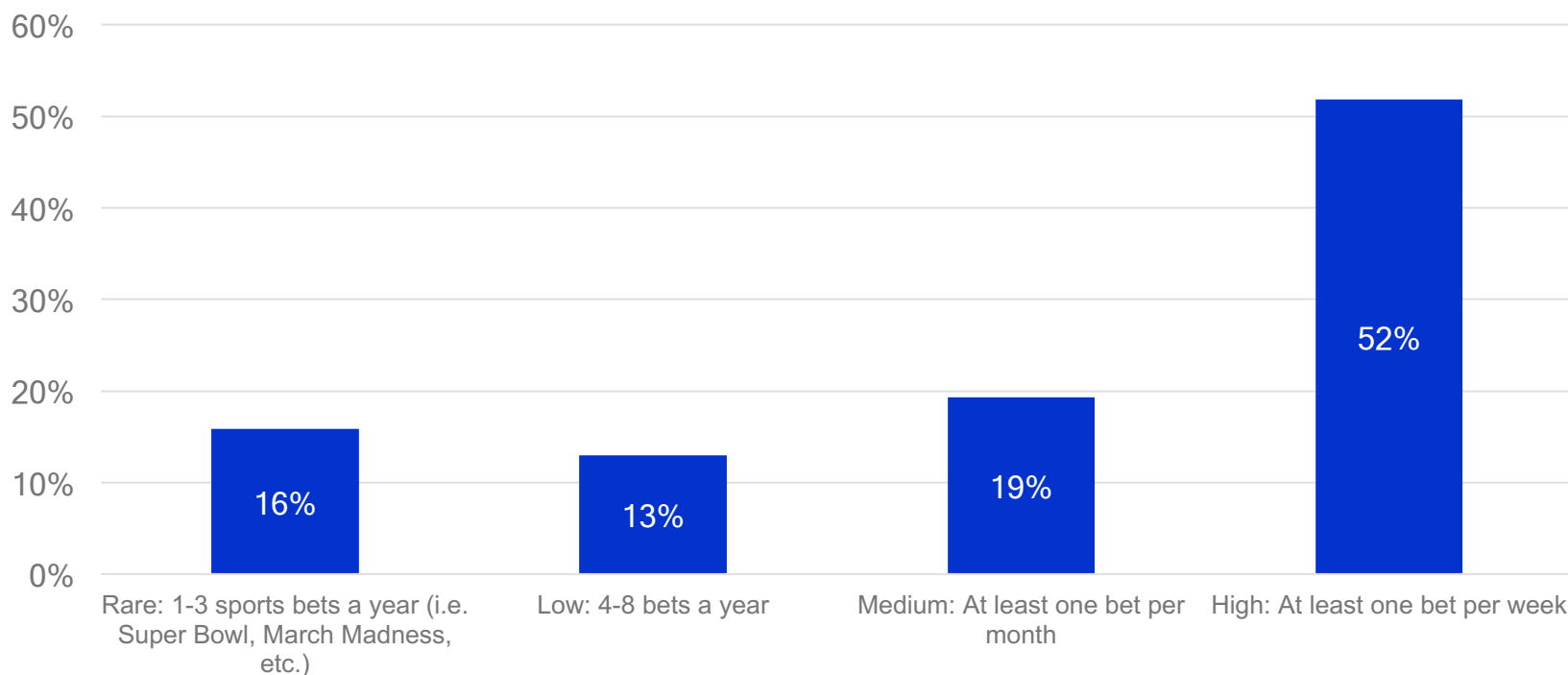


V. Black Market Analysis - Profile Of The U.S. Customer (3/5)

For a majority of consumers participating in the black market for sports betting in the U.S., betting is a regular activity. The results of our survey imply a weighted average bet frequency **exceeding 40 bets per year**.

How often do you make illegal sports bets?

(N = 347)

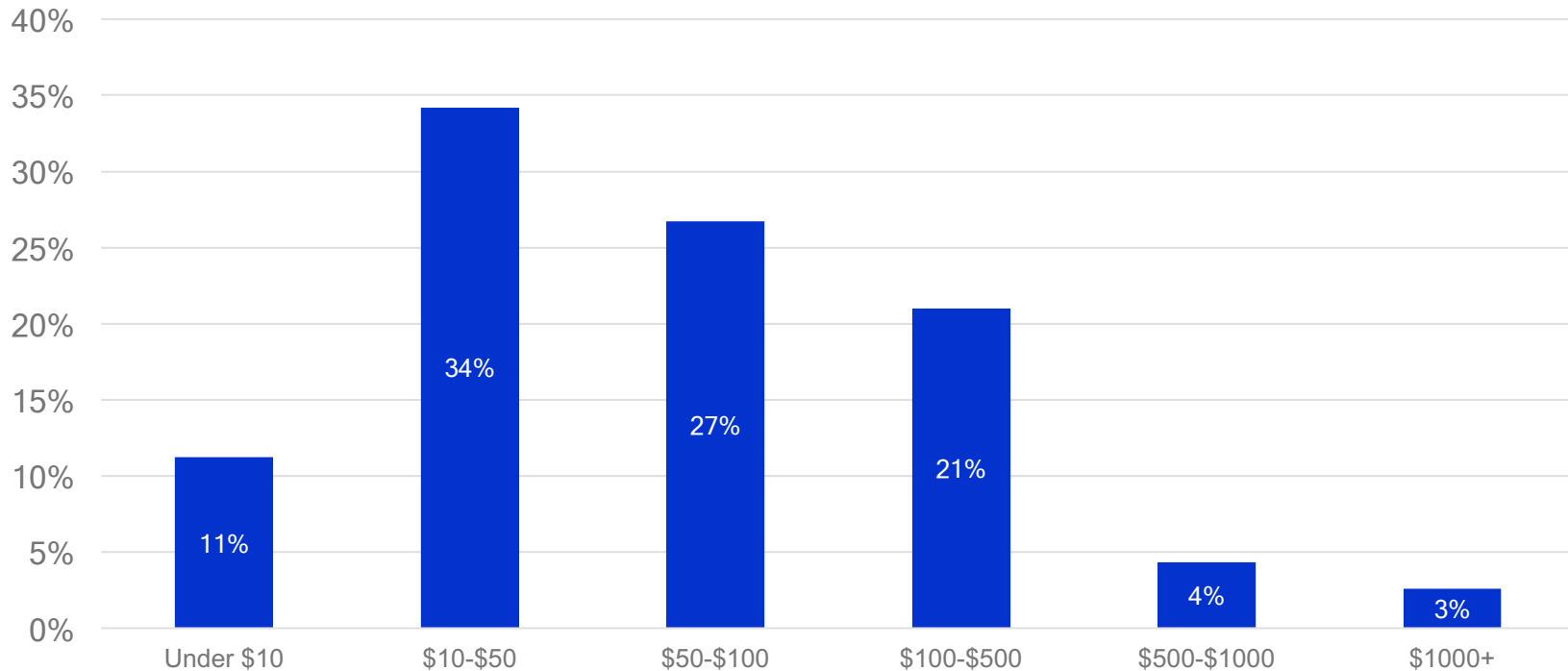


V. Black Market Analysis - Profile Of The U.S. Customer (4/5)

While bet sizes for the majority of consumers are relatively modest, the population at large displays a healthy appetite for larger-stakes wagers. Interestingly, we found no relationship between bet frequency and bet size. The results of our survey imply a weighted average bet size of **roughly \$140 per typical wager**.

What is your average amount per bet?

(N = 348)

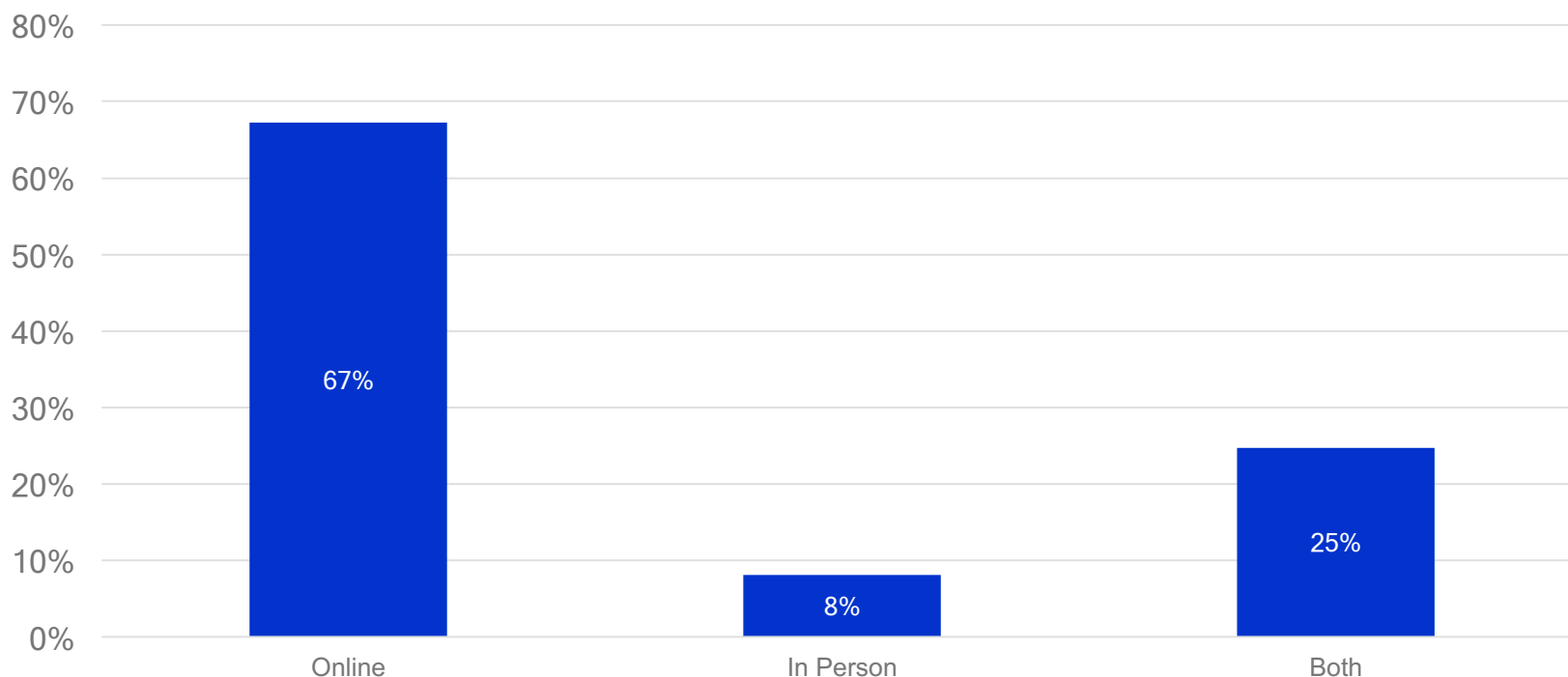


V. Black Market Analysis - Profile Of The U.S. Customer (5/5)

While online dominates the market, a significant amount of bets are still placed in person or using both online and in-person channels. This likely represents the impact of the rise of “pay-per-head” services that provide local bookies with sophisticated betting platforms, 24-7 customer service, and other tools that have moved the sector into the digital age.

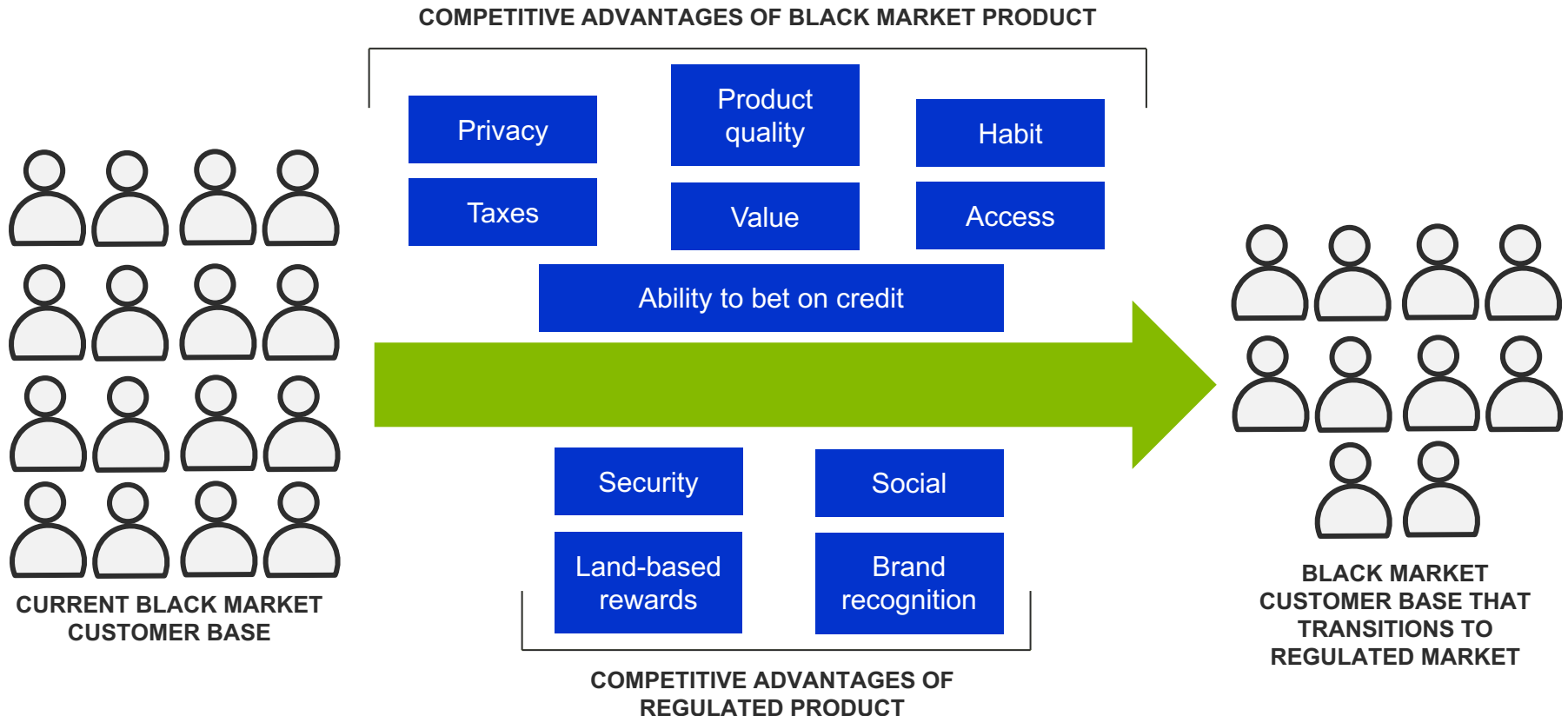
Do you place these bets online, in person, or both?

(N = 348)



V. Black Market Analysis – Will Demand Flow To Regulated Markets? (1/5)

We believe that the black market sports betting product will enjoy a number of competitive advantages over the regulated product. Some of these advantages will dissipate over time (e.g., product quality) while others will persist (e.g., privacy, credit betting). But in any case, we contend that a significant part of the current black market customer base will stick with that market post-regulation. The illustration below is meant to provide a rough approximation, not a precise estimate.



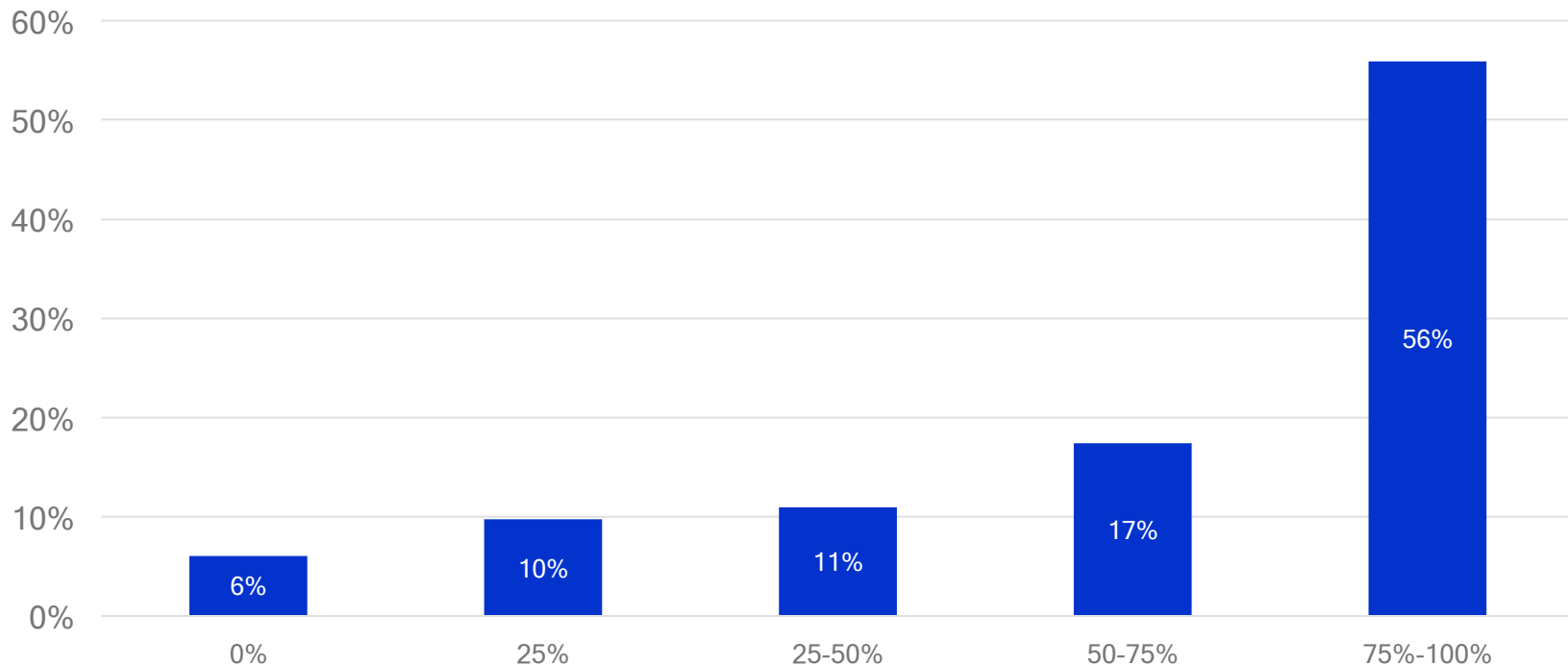


V. Black Market Analysis – Will Demand Flow To Regulated Markets? (2/5)

The good news for regulated operators? Assuming a reasonably competitive product, the majority of consumers would move most or all of their action to legal or regulated channels.

If sports betting were legalized, what percentage of your bets would you expect to make through legal/regulated channels?

(N = 247)



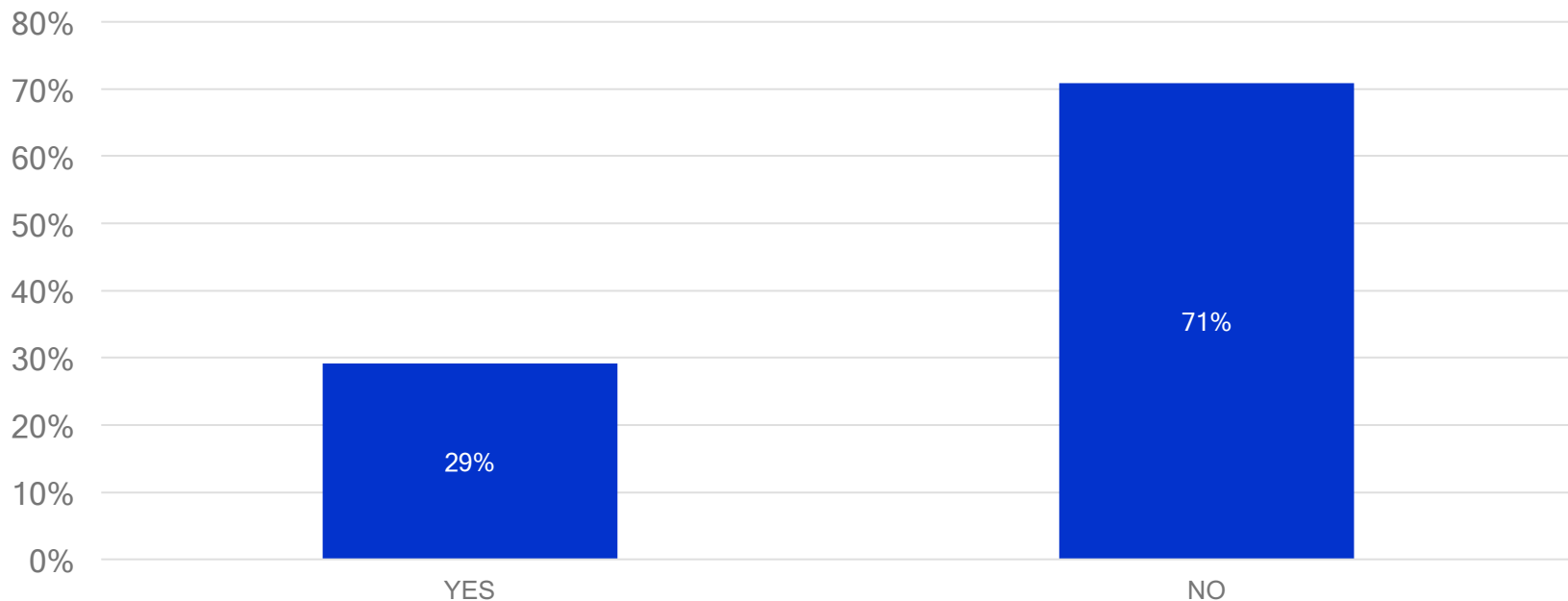


V. Black Market Analysis – Will Demand Flow To Regulated Markets? (3/5)

The bad news? As indicated earlier in our consumer profile, the mobile product is important to the sports betting customer, and in the absence of a mobile option in regulated markets, an overwhelming majority of customers would stick with the black market option.

If sports betting became legal in your state, but was only available at the nearest local casino (commercial or tribal) and there was no mobile app or website, would you stop placing illegal bets?

(N = 346)



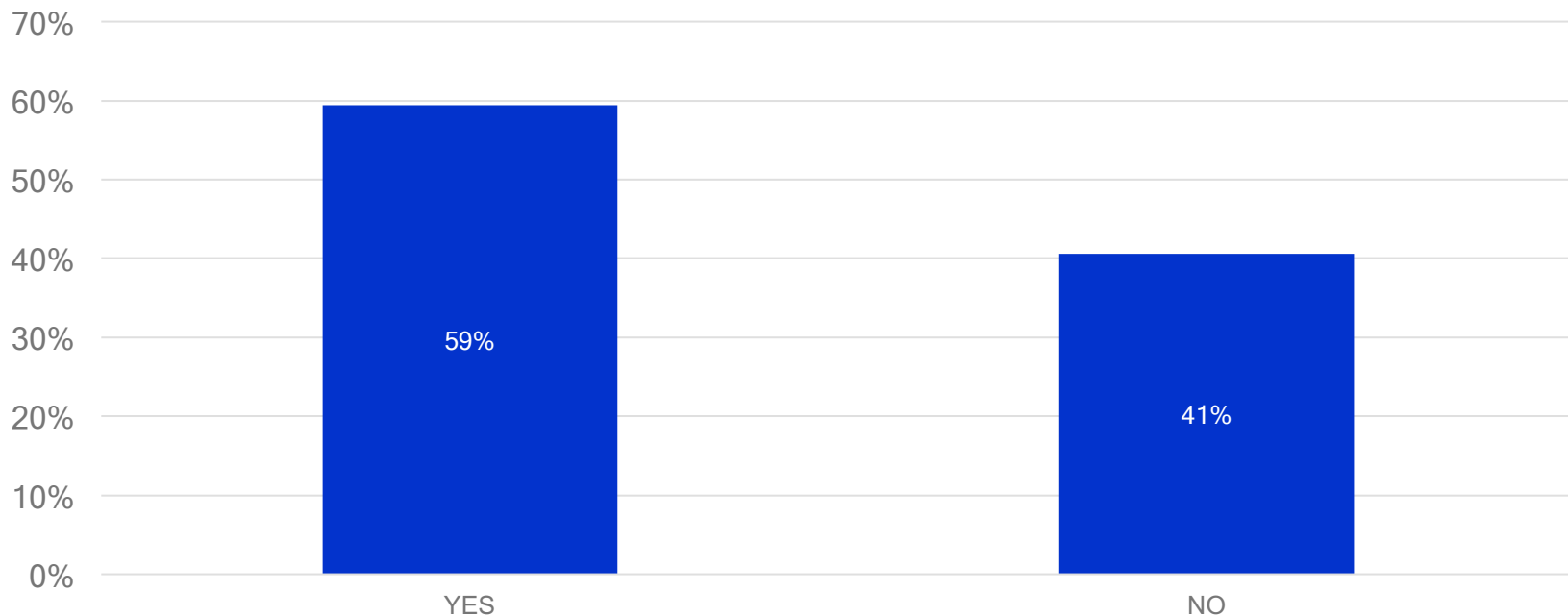


V. Black Market Analysis – Will Demand Flow To Regulated Markets? (4/5)

Of course, how much demand flows to regulated markets is only one part of the picture. Regulated operators will likely enjoy greater levels of trust, which could increase both bet frequency and bet size.

If sports betting became legal/regulated in your home state would you increase the number of times you bet on sports a year?

(N = 347)

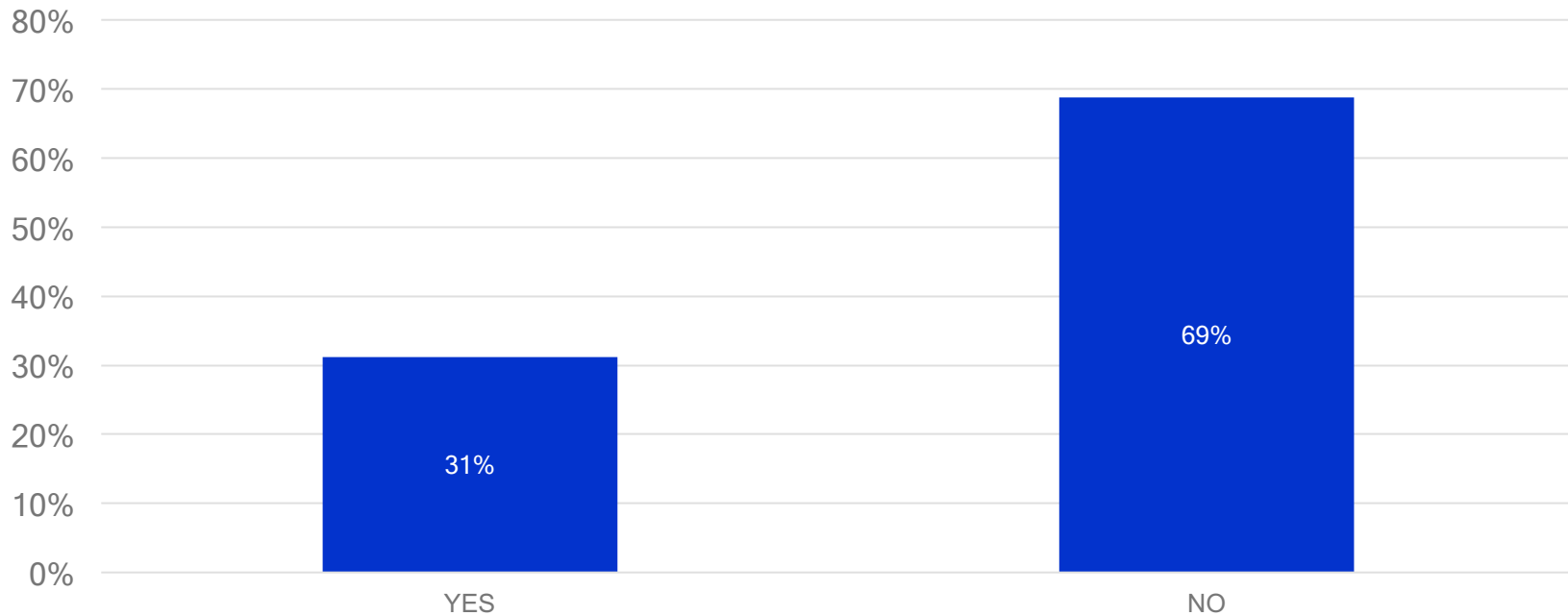




V. Black Market Analysis – Will Demand Flow To Regulated Markets? (5/5)

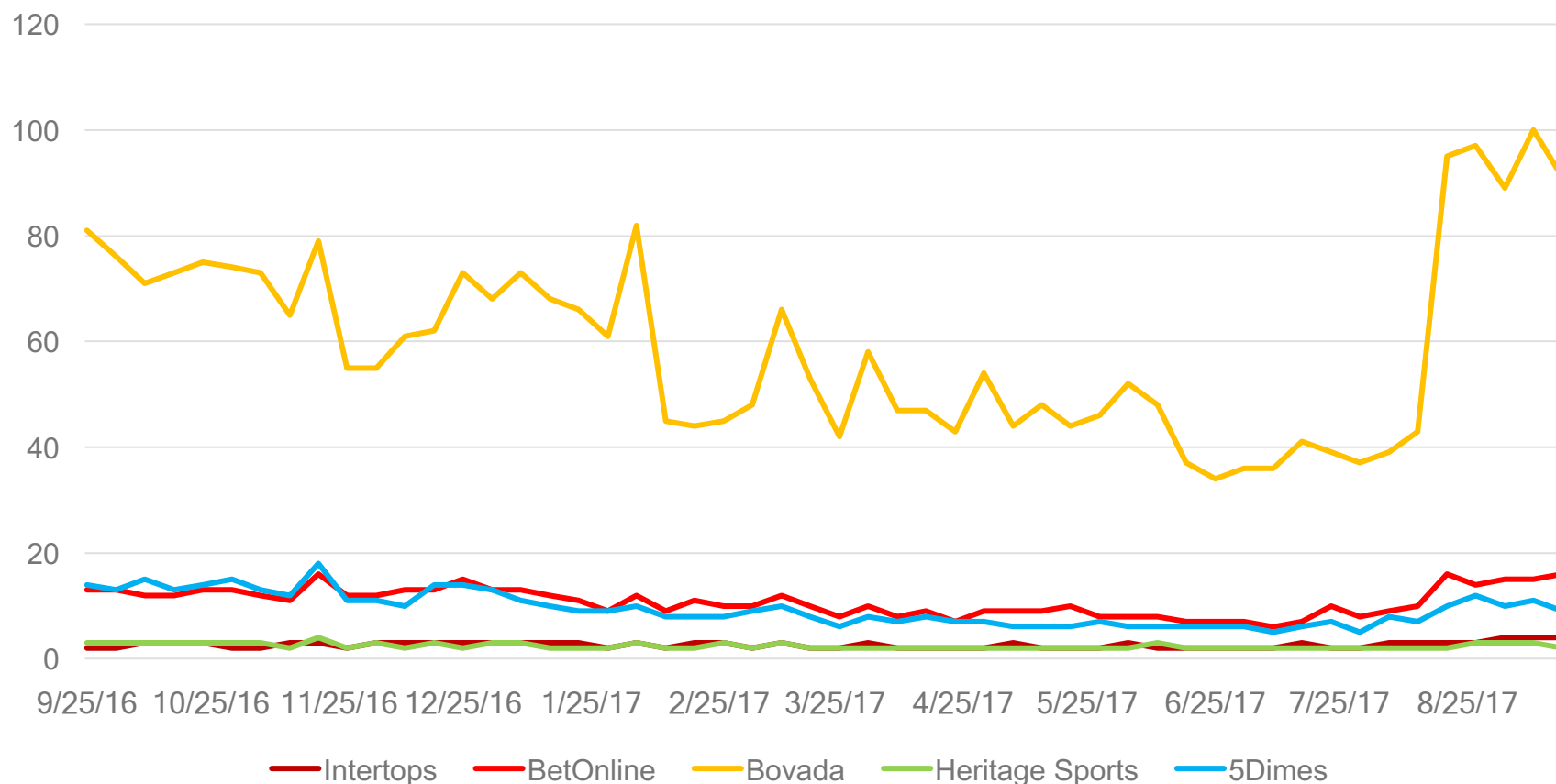
If sports betting became legal/regulated in your home state would you increase your average bet size?

(N = 346)



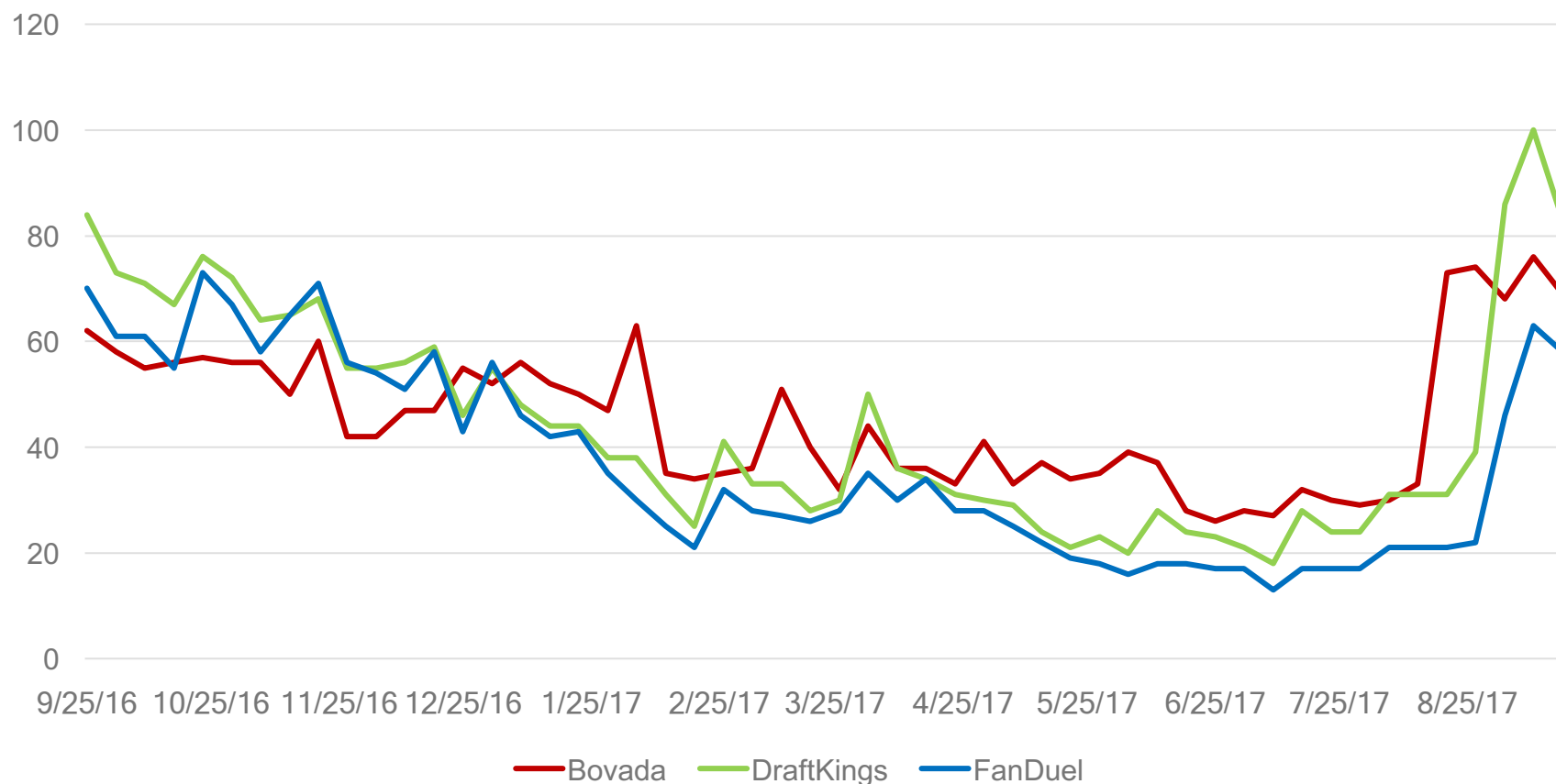
V. Black Market Analysis – Google Trends For Top Sportsbook Brands

The following chart shows Google Trends search interest data for top online sports betting brands. Brands were selected from SportsbookReview.com's list of top-rated sites for U.S. players. Google Trends is not a perfect indicator of traffic, but we believe it provides helpful general context when appreciating relative volume of consumer interest.



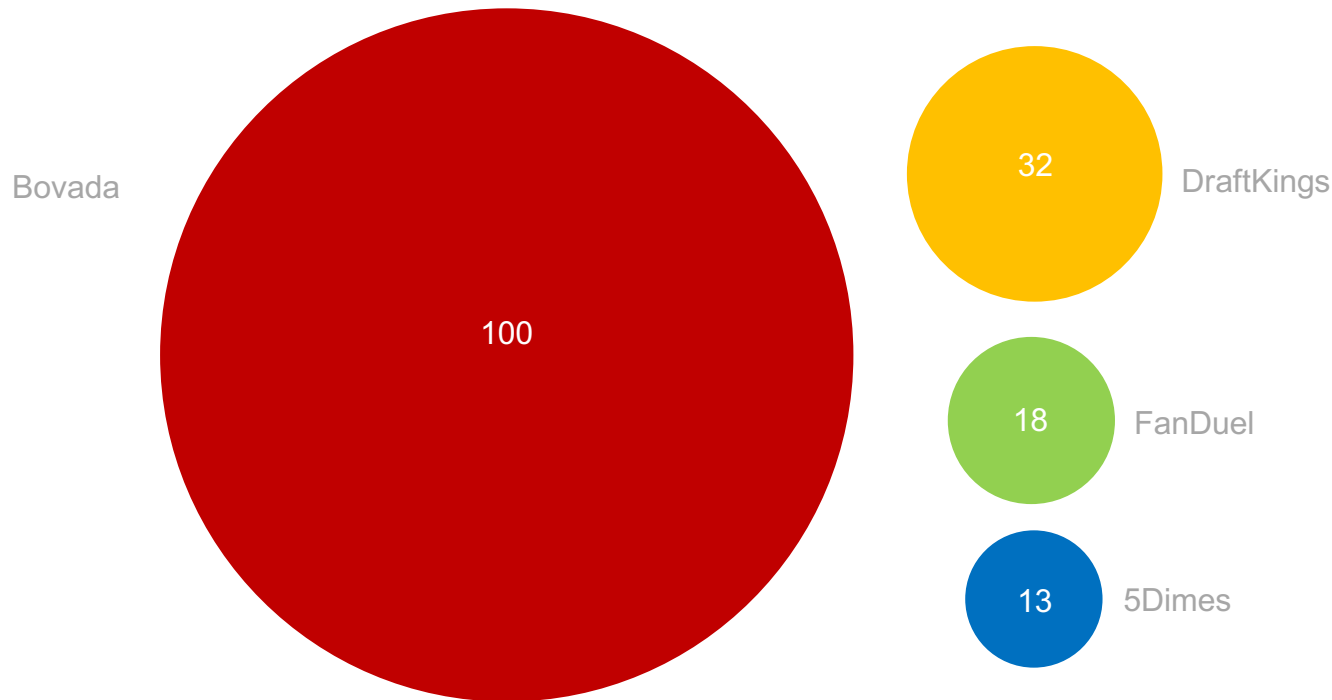
V. Black Market Analysis – Google Trends, DFS vs. Sports Betting

The following chart shows Google Trends search interest data for Bovada (a leading offshore betting brand) vs. DraftKings and FanDuel (the leading daily fantasy sports brands). Again, Google Trends data comes with some caveats, but we still find it instructive, and the chart below lends some support for our lower-than-average estimates of the size of the black market for sports betting in the United States.



V. Black Market Analysis – Relative Web Traffic Leading Up To NFL 2017

Below are our estimates of relative traffic (unique visitors) from the United States at Bovada (sports betting), 5Dimes (sports betting), FanDuel (DFS), and DraftKings (DFS) in the weeks leading up to the start of the NFL season. Estimates include web and mobile traffic, but do not capture traffic in iOS / Android apps, meaning that DraftKings and FanDuel are likely underrepresented by the estimates below. Bovada is likely over-represented as the site offers sports betting, casino, and poker products. Again, traffic is not the same as revenue, but we still find the competitiveness of DFS brands telling in terms of appreciating the likely size of the offshore sports betting market.





Regulated Sports Betting: Defining The U.S. Opportunity

I. Projections

II. Legislative Landscape

III. Sports Betting And The Supreme Court

IV. Regulatory Scenarios For U.S. Sports Betting

V. Black Market Analysis

VI. Key Stakeholder Analysis

VII. Impact On Other Verticals

VIII. The View From Europe

IX. Appendix

VI. Key Stakeholder Analysis - Overview

In this section we consider two classes of regulated sports betting stakeholders: operators and non-operators.

Operators are stakeholders who will participate directly in the process of offering sports betting products to consumers. Stakeholders in this class may be key license holders or the consumer-facing brand for a sports betting product.

In the slides that follow, we offer a broad comparative analysis of some of the major operator stakeholders (e.g., tribal casinos, racetracks, DFS sites, Nevada casinos) who could potentially contest the market for regulated online sports betting along with an additional analysis of select examples of specific companies from each broad type of stakeholder (e.g., Hard Rock, Stronach, DraftKings, Caesars).

The list is not exhaustive, nor is it meant as an assertion that every stakeholder listed will necessarily participate in regulated sports betting.

Non-operators are stakeholders who are unlikely to participate directly in the actual process of consumer wagering, but who will play a substantial supporting / enabling role and draw material economic benefit from regulated sports betting.

We readily admit that the line between operators and non-operators is somewhat arbitrary and fluid. For example: We have placed data companies in the non-operator class, but one could argue that they are closer to the operator class. We have placed DFS sites in the operator class, but they may end up functioning more as a marketing tool for an operator as opposed to choosing direct involvement in the operator side. We have placed platforms in the non-operator class, but some operators are also platform








VI. Key Stakeholder Analysis – Assessing Potential Operators (1/4)

	Nevada casinos	Other multi-state commercial casinos	Regional commercial casinos	Tribal casinos	State lotteries
Existing product expertise	High	Low	Low	Low	Low
Customer database size	High	Medium	Low	Low	Medium
Multi-state reach	High	Medium	Low	Low	Low
Regulatory advantage	High	High	High	High	High
Lobbying power	High	High	Medium	High	High







VI. Key Stakeholder Analysis – Assessing Potential Operators (2/4)

	Racetracks	Advance deposit wagering operators	International sportsbooks	Daily fantasy sports sites	Media companies
Existing product expertise	Medium	Medium	High	Medium	Low
Customer database size	Low	High	Low	High	High
Multi-state reach	Medium	High	Low	High	High
Regulatory advantage	High	High	Low	Medium	Low
Lobbying power	Medium	Low	Low	High	High

VI. Key Stakeholder Analysis – Assessing Potential Operators (3/4)

					
Existing product expertise	Medium	Low	Medium	Medium	Low
Customer database size	High	High	Medium	High	Medium
Multi-state reach	Medium	High	High	High	Medium
Regulatory advantage	High	High	High	Medium	High
Lobbying power	High	High	High	High	Medium

VI. Key Stakeholder Analysis – Assessing Potential Operators (4/4)

	 verizon	 CHURCHILL DOWNS	 betfair  PADDYPOWER	 William HILL RACE & SPORTS BOOK	 RUSHSTREET GAMING™
Existing product expertise	Low	Medium	High	High	Medium
Customer database size	High	High	High	Low	Medium
Multi-state reach	High	High	High	Low	Medium
Regulatory advantage	Low	High	Medium	Medium	High
Lobbying power	High	High	Medium	Medium	Medium

VI. Key Stakeholder Analysis – Non-Operator Stakeholders (1/2)

Sports Leagues

Despite some commentary to the contrary, we do not believe that sports leagues have any interest in serving as operators of a consumer-facing sports betting product. The benefits to leagues would come in the form of direct revenue from data fees, content fees, and marketing partnerships. Leagues would also enjoy significant ancillary benefit in terms of increased event viewership and fan engagement.

Sports Media

Regulated sports betting will provide a significant opportunity for sports media outlets such as ESPN. Not only will we likely see a lift in overall viewership, but unique content dedicated to sports betting (similar to the significant amount of content developed around fantasy sports) will likely provide a stream of low-cost, high-interest content for broadcast, digital, and print outlets focused on sports.

Customer Acquisition Partners

We expect a significant influx of advertising dollars to follow regulation. Because the market is likely to be highly fragmented, primary beneficiaries will be outlets that can deliver a highly-targeted audience (e.g., Facebook and Google) along with outlets with a strongly defined local audience (e.g., regionalized sports radio). The broader the market becomes, the more the benefit extends to national media outlets.

VI. Key Stakeholder Analysis – Non-Operator Stakeholders (2/2)

Platform / Hardware Suppliers

There will be some crossover between operators and platform suppliers (much as there is in the NJ market) in the regulated sports betting market, but non-operator suppliers such as Scientific (especially following the NYX acquisition) and IGT are likely to benefit. We do believe the market will be incredibly competitive from a platform perspective, and the primary value may be in cross-selling other services to sportsbook operator partners.

Service Providers

Regulated sports betting will bring additional opportunities for compliance providers (e.g., testing labs). Those opportunities will expand in volume and scope in markets that include an online sports betting component, where the list of service providers will widen to include KYC providers, geolocation solutions, and a broader array of payment providers.

Data Companies

We see a number of opportunities on the data front, including for existing companies like Betgenius and Sportradar that provide a data bridge between leagues and sportsbooks, but also for companies who identify better ways to digitize game data, new ways to manipulate data to create unique betting opportunities for consumers, or methods for integrating data into the betting / viewing experience.



Regulated Sports Betting: Defining The U.S. Opportunity

I. Projections

II. Legislative Landscape

III. Sports Betting And The Supreme Court

IV. Regulatory Scenarios For U.S. Sports Betting

V. Black Market Analysis

VI. Key Stakeholder Analysis

VII. Impact On Other Verticals

VIII. The View From Europe

IX. Appendix

VII. Impact Of Regulated Sports Betting – DFS (1/2)

OVERALL IMPACT

POSITIVE

We believe that the introduction of regulated sports betting will be a clear net positive for the daily fantasy sports industry, and for paid fantasy sports in general. We believe that fantasy sports and sports betting are broadly complementary products (somewhat akin to table games and slots); some consumers may enjoy both, but we argue that crossover will actually result in more net spend even if there is a segment of the DFS market that is cannibalized.

We do not imagine it will take casinos long to recognize that fantasy sports are a logical part of any sports betting product portfolio, a dynamic which could spark a wave of investment and innovation on the product side for DFS. On the customer side, DFS will benefit from access to the significant customer databases of land-based casinos and enjoy a lift from the marketing onslaught that will accompany regulated sports betting.

HOW DFS BENEFITS FROM REGULATED SPORTS BETTING

- Increased investment and innovation.
- Cross-sell to and from regulated sports betting products.
- Access to a broader customer base (both online and in land-based environments).
- May speed resolution of legal / regulatory ambiguity in states where the question has yet to be settled.
- Could resolve tension between casino / fantasy sports lobbies.

HOW DFS IS THREATENED BY REGULATED SPORTS BETTING

- Convergence of fantasy sports and sports betting could complicate financing outlook for existing DFS companies.
- Convergence could complicate existing deep marketing partnerships with pro sports teams.
- Convergence could complicate the legislative approach of defining fantasy contests as “not gambling” under state law and ability of industry to secure minimum age of 18 in future bills.
- Possibility of cannibalization.

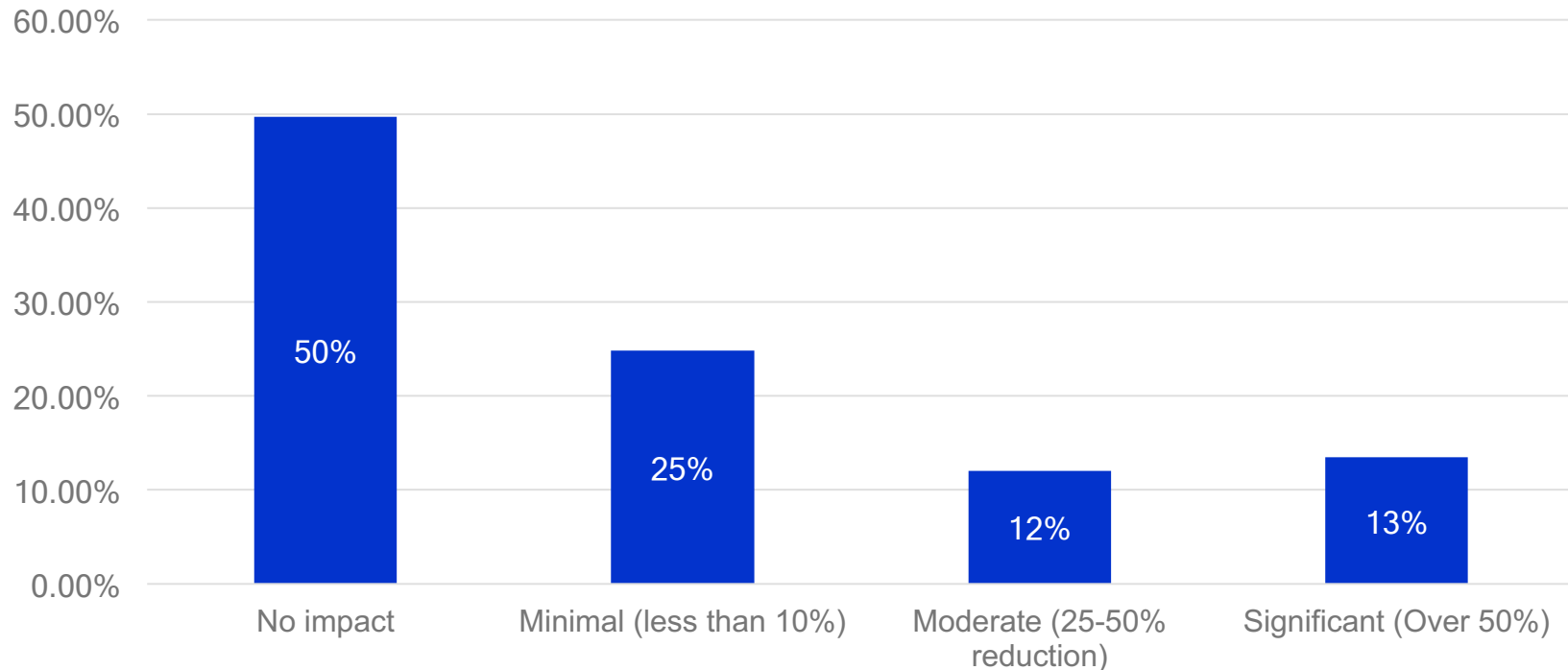


VII. Impact Of Regulated Sports Betting – DFS (2/2)

Our survey results reinforce the conclusion that daily fantasy sports spend is unlikely to be meaningfully undercut by the presence of regulated sports betting. Again, we believe the two products are more complementary than competitive.

How much would you reduce the amount of money you spent on DFS if sports betting became legal/regulated in your home state?

(N = 141)



VII. Impact Of Regulated Sports Betting – Casinos

OVERALL IMPACT

POSITIVE

It's difficult to appreciate regulated sports betting as anything but a win for commercial and tribal casinos in the broad sense. Sports betting will likely drive additional foot traffic, cross-sell, and has the potential to bring a largely new audience to a casino property.

With that said, it's important to appreciate that while the net impact will be positive, that's not the same as asserting that all casinos will benefit from sports betting, or that all casinos that do benefit will benefit equally. Some properties will execute the opportunity better than others. That disruptive force could shift market share and resources from one competitor to another.

We believe that dynamic could be especially powerful in states that allow online sports betting. Casinos that execute better will have a critical advantage that could multiply as more and more gambling moves online.

HOW CASINOS BENEFIT FROM REGULATED SPORTS BETTING

- Increased foot traffic and revenue.
- Possible cross-sell to other gambling games, especially poker and table games.
- Access to a largely new audience.
- Opportunity to position themselves for digital future in states where online sports betting is allowed.
- Boost to national database for multi-state operators.

HOW CASINOS ARE THREATENED BY REGULATED SPORTS BETTING

- Disruption caused by introduction of a new product could reshape the competitive landscape in certain markets, especially if sports betting is allowed in both land-based and online formats.

VII. Impact Of Regulated Sports Betting – Las Vegas Sports Betting (1/2)

OVERALL IMPACT

NEUTRAL

We believe the introduction of regulated sports betting in states other than Nevada is unlikely to have a material impact on sports betting in Las Vegas.

While there will certainly be some cannibalization, we believe that any loss will be easily balanced by the new traffic driven to Las Vegas sportsbooks in the form of customers who are now more familiar and comfortable with the product thanks to the experience they've gained with it at their local casino. We point to a similar phenomenon with poker during the 2000s as anecdotal support for this position.

Ultimately, Las Vegas sportsbooks will continue to provide a destination experience for fans and bettors, and sports betting will remain an attractive amenity to the existing tourist base, so there's little for Vegas to fear from expansion of regulated sports betting.

HOW VEGAS BOOKS BENEFIT FROM REGULATED SPORTS BETTING

- Larger market for regulated sports betting will drive product innovation that will filter back to the Las Vegas market.
- National brands with a Vegas presence will expand their local database via sports betting, providing a new vein of potential customers for the Las Vegas sportsbook experience.
- Customers who gain comfort with the product via the local casino may be more apt to try sports betting in Las Vegas than they otherwise would.

HOW VEGAS BOOKS ARE THREATENED BY REGULATED SPORTS BETTING

- Possibility of cannibalization.
- Superior online / mobile experience in other markets could disincentivize consumers from betting while in Vegas due to perceived inferiority of product.

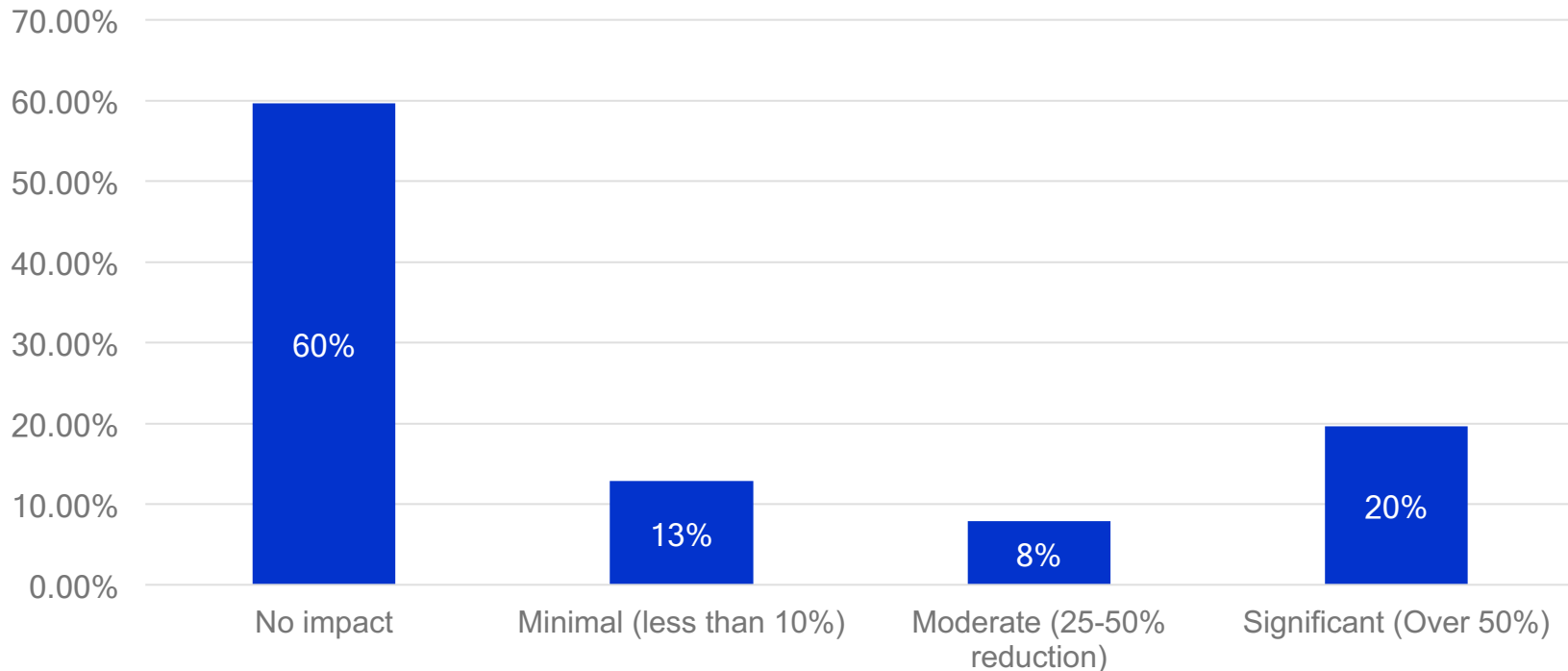


VII. Impact Of Regulated Sports Betting – Las Vegas Sports Betting (2/2)

The results of our survey reinforce the notion that the introduction of regulated sports betting in other states is unlikely to have a significant impact on the amount existing bettors wager on sports when they come to Las Vegas.

How much would you reduce the amount of money you spent on sports betting in Vegas if sports betting became legal/regulated in your home state?

(N = 280)



VII. Impact Of Regulated Sports Betting – Online Gambling

OVERALL IMPACT

LEAN POSITIVE

When considering the impact of regulated sports betting on regulated online gambling, there are two important dimensions in play. The first is the impact on existing markets such as New Jersey. There we believe the impact would be undeniably positive, as those states are likely to authorize online sports betting along with land-based. The existence of online sports betting should do nothing but fuel customer acquisition for online poker and casino gambling, with little fear of cannibalization.

The second dimension – how regulated sports betting will interact with attempts to introduce regulated online gambling in additional states – is a more complicated question. We could see sports betting “jumping ahead” of iGaming and further delaying efforts, or iGaming and sports betting advancing as a legislative duo.

HOW REGULATED ONLINE GAMBLING BENEFITS FROM REGULATED SPORTS BETTING

- Expands market in states that offer both online poker / casino and online sports betting. Attracts new customers and provides overall lift via increased competition among operators, increased marketing, and so on.
- Could provide a legislative boost if states are willing to consider sports betting and online gambling as a single package.

HOW REGULATED ONLINE GAMBLING IS THREATENED BY REGULATED SPORTS BETTING

- States that authorize sports betting may decide to “pause” before considering additional expansion of gambling, a dynamic that could cause additional delays for regulated online gambling.

VII. Impact Of Regulated Sports Betting – Horse Racing

OVERALL IMPACT

NEUTRAL

The impact of regulated sports betting on horse racing is another complicated question. On one hand, we believe there is significant crossover between the current audience for horse race betting and sports betting, so there's the potential for cannibalization. One could argue that much of that cannibalization is already accounted for in the status quo via black market sports betting supply.

On the other hand, we expect that racing operators will be heavily involved in regulated sports betting, and the influx of new resources and new customers could provide a long-term boon for the industry. There's both the possibility of cross-selling horse racing to sports bettors (although we admit we are unsure as to how powerful this effect will be) and the broader impact of greater customer flow through racing facilities and online channels in states that authorize online sports betting.

HOW RACING BENEFITS FROM REGULATED SPORTS BETTING

- Increased investment and innovation.
- Cross-sell to and from regulated sports betting products.
- Access to a broader customer base (both online and in land-based environments).

HOW RACING IS THREATENED BY REGULATED SPORTS BETTING

- Possibility of cannibalization.



Regulated Sports Betting: Defining The U.S. Opportunity

I. Projections

II. Legislative Landscape

III. Sports Betting And The Supreme Court

IV. Regulatory Scenarios For U.S. Sports Betting

V. Black Market Analysis

VI. Key Stakeholder Analysis

VII. Impact On Other Verticals

VIII. The View From Europe

IX. Appendix

VIII. The View From Europe – Operators Looking Toward The U.S. (1/2)

There are two major European operators with an existing U.S. sports betting presence in the market who are almost certain to play a role in any state-by-state or federal roll-out: Paddy Power Betfair, the world's largest publicly listed online gambling operator, with £1.9b (est) in FY17 revenues; and William Hill, the UK's second largest land-based bookmaker with a large online presence, with £1.7b (est) in FY 17 revenues.

	Existing U.S. Business	Key Partners	Key Advantages
Paddy Power Betfair 	<ul style="list-style-type: none"> Operator of TVG horse race betting business, with approx. \$100m in '17 revenues Operator of Betfair Exchange in New Jersey, peer-to-peer horse race betting Operator of Draft 	<ul style="list-style-type: none"> Golden Nugget, New Jersey, partner on its U.S. online casino Partner with a number of major U.S. horse racing tracks, taking commission for feeding bets into their pari-mutuel betting pools 	<ul style="list-style-type: none"> Strong in-house tech platform with record for mobile innovation Market leading trading and risk management Existing land-based business in the UK has highest EBITDA per shop in the market
William Hill 	<ul style="list-style-type: none"> Operators of largest Nevada sports betting business by number of outlets with approx. \$80m in '17 revenue Operates sports lottery for state of Delaware Operates pari-mutuel racing betting in Iowa 	<ul style="list-style-type: none"> Monmouth Park, New Jersey, agreed partner for sports betting Sports betting partners in Nevada include: Plaza, Binions, SLS and Downtown Grand Caesars, partner in Iowa racebook 	<ul style="list-style-type: none"> Strong track record in the Nevada market and experience of working with multiple partners Deep experience of both land-based and online betting Strong mobile product

VIII. The View From Europe – Operators Looking Toward The U.S. (2/2)

In addition to PPB and William Hill, we expect a number of other international operators – many of whom also have existing ties to the U.S. – to consider a play in the market for regulated sports betting in the United States.



GVC Holdings is the owner of the bwin and partypoker brands and currently operates online casino and poker sites in the New Jersey market. It owns its own online sportsbook platform, trading, and risk management, which it offers on a B2B basis. A likely operational partner for U.S.-based groups.



Rapidly growing online sports betting operator that is believed to be considering a U.S. strategy. It has a market-leading mobile product but has less platform and trading expertise than the likes of GVC and Paddy Power Betfair and no existing B2B business. Likely to enter the market cautiously, and unlikely to do so via a major acquisition.



The UK's largest land-based betting operator with international operations in Belgium, Spain, and Italy as well as a substantial online presence. Strong track record of integrating its land-based and online operations in both the UK and Italy but no experience or partnerships in the U.S. market.



Greek lottery and sports betting platform operator with a small presence in the U.S. VLT market and a substantial European sports betting business with approx. €600m (est.) '17 revenue primarily from Bulgaria, Turkey, and Poland. Strong B2B offering with true omni-channel platform.



Primarily an online casino and poker operator, 888 does have an existing U.S. business and operates in New Jersey, Nevada and Delaware. It has a small but growing sports betting business in Europe and should not be ruled out as a player in any U.S. market that includes an online or mobile component.



A B2B spin-off from online gambling operator Kindred Group, Kambi is one of the main sportsbook platform providers and works with both land-based and online operators including 888, Rank, and Nagaworld. It is likely to make a major play at any emerging U.S. sports betting market.

VIII. The View From Europe – Major Market Snapshots (1/2)

<u>Market</u>	<u>2017 Revenue (est)</u>	<u>Discussion</u>
UK	£4.67b	<ul style="list-style-type: none"> Europe's largest sports betting market due to early liberalization of online gambling and widespread land-based betting with almost 9,000 retail outlets Online accounts for 56% of the total betting market Horse racing is included in UK numbers as there is no nationally owned pari-mutuel operator and nearly all betting is on a fixed-odds basis via private operators
Germany	€1.09b	<ul style="list-style-type: none"> Land-based betting is the largest component of the market at an estimated 56% Both online and land-based are forecast to grow with continued investment from both local and foreign operators in the market Germany is a quasi-regulated market with operators taxed at 5% of turnover but not subject to any official licensing regime
Italy	€992m	<ul style="list-style-type: none"> Land-based betting is the largest sector with 59% of total revenues Online is the fastest-growing segment and forecast to overtake land-based by 2022 Horse racing is very small additional segment with €130m in revenues in 2017 Margins are being squeezed in both land-based and online as competitive pressures increase from foreign operators
France	€933m	<ul style="list-style-type: none"> Land-based betting is the exclusive domain of the state monopoly FDJ and is the largest component of the market at 61% of total revenues. Online is the fastest growing component of the market but suffers from high tax rates deterring foreign investment Horse racing is a huge business in France with €1.9b in revenues annually but is on a pari-mutuel basis and permitted solely through monopoly operators PMU

VIII. The View From Europe – Major Market Snapshots (2/2)

MAJOR EUROPEAN MARKETS DATA

Country	Land-based	Online
UK		
Handle	£8.9b	£23.4b
Revenue	£1.6b	£2.07b
Player Base (est.)	6,120,000	3,350,000
Penetration rate	11%	6.4%
Mobile as %	N/A	65%
France		
Handle	€3.1b	€2.6b
Revenue	€566m	€367m
Player Base (est.)	2,220,000	1,699,000
Penetration rate	4.3%	3.3%
Mobile as %	N/A	55%
Italy		
Handle	€3.08b	€5.07b
Revenue	€586m	€406m
Player Base (est.)	2,570,000	1,790,000
Penetration rate	4.8%	3.2%
Mobile as %	N/A	56%
Germany		
Handle	€3.1b	€4.1b
Revenue	€605m	€484m
Player Base (est.)	3,090,000	1,900,000
Penetration rate	4.6%	2.8%
Mobile as %	N/A	51%

Additional notes and context

- Sports betting hold margins have been consistently trending down as players shift from land-based to online. Margins in the online space trend towards 7-9% in the long-term compared to the 17-20% range in most land-based markets, although there is some downward pressure here too.
- Online player values are far higher in mature markets such as the UK. In emerging online markets such as Italy, LTVs are closer but will trend towards more clear separation over time. Land-based LTVs are broadly stable and increasing in some markets but the absolute number of players is expected to decline.
- Mobile is the key driver of revenue growth in all regulated markets and is as high as 75% of online revenues among some of the leading European operators. Mobile as a percentage of online is a useful metric for analyzing the maturity of a market.

VIII. The View From Europe – Key Product Trends

Cash Out

Cash Out allows users to close out bets in-play and has become a ubiquitous feature of UK online sports betting. Betfair, which was the first firm to launch the product, reported 7m cash outs in FY 2015 and it continues to be a hugely popular tool for players and operators as additional margin is factored into the cash out price. Land-based operators use cash out as a recruitment tool to sign players up to their mobile apps.

User Generated Betting Markets

The rise of user generated betting has taken the industry slightly by surprise since Sky Bet launched RequestABet in mid-2015. Users ask for odds on a single or more commonly multiple market (parlay) via social media and this will be added to the site. It allows for much larger odds bets on football in particular and has proved so popular all the major European operators are now offering their own version of RequestABet.

Pricing Compression

Competition in the online sector particularly has led to operators competing fiercely on pricing with enhanced odds, early payouts, free bets, and conditional refunds now commonplace in the market for existing players. This has forced down margins and increased volatility as operators look to push players into higher margin accumulator style bets. The aggressive pricing “wars” are also beginning to impact previously robust land-based margins.

Omni-Channel

Omni-channel is the term for the integration of land-based with online and mobile and has proved a major driver of revenue growth for some operators in the major European markets. At Ladbrokes Coral, for example, online user acquisition is increasingly coming through land-based outlets and LTVs of both land-based and online players are being improved in turn. The growth of self-service betting terminals will only continue to increase this trend.

In-Play

In-play betting is by no means new to the European market, but its usage by both operators and users is becoming increasingly sophisticated and it is now the majority of both revenue and turnover at most major online operators. Improvements to pricing algorithms and trading models allow for more bets, including in-play accumulators, and a wider range of markets. In-play remains attractive as despite its lower margin, it is considerably less volatile.



Regulated Sports Betting: Defining The U.S. Opportunity

I. Projections

II. Legislative Landscape

III. Sports Betting And The Supreme Court

IV. Regulatory Scenarios For U.S. Sports Betting

V. Black Market Analysis

VI. Key Stakeholder Analysis

VII. Impact On Other Verticals

VIII. The View From Europe

IX. Appendix

IX. Appendix – Sports Betting Survey Details (1/2)

Methodology

In September 2017, we conducted a survey regarding the nature and prevalence of illegal sports betting in the United States.

The survey was administered via SurveyMonkey, a well-regarded online survey provider. We surveyed two distinct groups:

- **GROUP 1:** A SurveyMonkey audience (1,044 responses).
- **GROUP 2:** An audience solicited through our professional channels (Twitter, email list, etc.) (705 responses).

Per SurveyMonkey's [margin of error calculator](#), our total sample size resulted in a 3% margin of error at a 99% confidence level.

The survey had a 97% completion rate and a typical completion time of 1 minute. Depending on the answers provided, respondents were asked anywhere from a total of 5 to 15 questions.

Notes and Caveats

- Survey answers provided in the report reflect the blended responses of both groups.
- We appreciate that the audience collected through our professional channels (GROUP 2) is likely non-representative of the general population. We pursued that audience specifically to gain a larger sample of respondents who would be willing to admit to making illegal bets and willing to describe their experience honestly.

We believe we accomplished that goal; while only 3% of the SurveyMoney audience (GROUP 1) indicated that they had made an “illegal sports bet” in the last 12 months, 48% of GROUP 2 admitted to making an illegal bet in the last 12 months. This allowed us to acquire a sub-audience of 372 respondents who self-identified as illegal bettors, good for a 5% margin of error at a 95% confidence rate on questions regarding the betting habits and patterns of consumers participating in the U.S. black market.

IX. Appendix – Sports Betting Survey Details (2/2)

Notes and Caveats (continued)

- We appreciate that the phrasing of our primary screening question (“Have you placed an illegal sports bet in the past year with an online website, local bookie, etc.”) likely resulted in some suppression of honest responses. Despite this risk, we felt it necessary to phrase the question unambiguously in order to avoid false positives from respondents who may have bet on sports in Vegas, bet money on fantasy sports contests, and so on.
- We believe the SurveyMonkey panel, while generally representative, is likely to under-represent when it comes to the sports betting question. This is a function of [how the panel is constructed](#) and is reflected in the skew toward female respondents vs. the general population (SM: 53% female / 46% male / 1% other or prefer not to say). This skew is magnified within the context of sports betting, which is a male-dominated vertical. We accounted for this skew when factoring the SurveyMonkey results into our broader model for estimating the size of the black market for sports betting in the United States.

IX. Appendix – State-Regulated Sports Betting Projections (1/3)

Methodology

We present four scenarios in our state-by-state projections:

Scenario 1: Land-based only with limited availability.

Scenario 2: Land-based only with wide availability.

Scenario 3: Land-based and online with a limited online product.

Scenario 4: Land-based and online with a robust online product.

- Our **land-based projection for all scenarios** is grounded in the Nevada locals market (i.e., excluding tourist spend) for land-based sports betting. For each state, the comparison to the Nevada locals land-based sports betting market is adjusted to reflect differences in population, age, unemployment rates, individual income, current levels of land-based gambling spend, and the perceived competitiveness of the market.
- In Scenario 1, we assign a generalized credit to each state based on the assumption that some percentage of the market for online betting in Nevada would flow back to land-based outlets in the absence of online betting.
- In Scenario 2, we constructed a state-specific revenue multiplier based on the number of existing gambling outlets (e.g., casinos, racetracks, OTBs, route outlets) in the state relative to population.
- Our **online projection for Scenario 3** is grounded in the Nevada locals online sports betting market. For each state, the comparison to the Nevada locals online sports betting market is adjusted to reflect differences in population, internet penetration rates, age, unemployment rates, individual income, current levels of land-based gambling spend, and the perceived competitiveness of the market.
- Our **online projection for Scenario 4** is grounded in the UK market for online sports betting. For each state, the comparison to the UK online sports betting market is adjusted to reflect population, per capita GDP, and the perceived competitiveness of the market.

IX. Appendix – State-Regulated Sports Betting Projections (2/3)

Methodology

In addition to our state-by-state projections, we also offer a baseline projection for the total U.S. market size by revenue at the end of 2023.

- To arrive at our baseline projection, we assume 32 states will be live by the end of 2023. For the sake of simplicity, we assume that PASPA will be repealed at the start of 2018 (even though the odds are that a repeal, if it occurs, will take place closer to mid-year) and that all states who authorize will have a full year of revenue in 2023 (even though there is some chance that some states will have less than a full year due to authorizing late in 2022 or during 2023 itself).
- We utilize market size at relative maturity for each state (i.e., a baseline from which the market will grow slowly and potentially plateau) to construct our projection. In reality it may take states a few years (some states more, some states less) to achieve that level of revenue.
- Of those 32 states, identified in our “Legislative Landscape” section as Wave 1 and Wave 2 states, we assume:
 - 3 (MO, NV, VT) will fall under our Scenario 1 model (land-based only, restricted supply).
 - 14 (AZ, CA, CO, ID, KS, KY, LA, ME, MT, ND, OH, OK, VA, WY) will fall under our Scenario 2 model (land-based only, liberal supply).
 - The remaining 15 (CT, DE, IA, IL, IN, MA, MD, MI, MS, NJ, NV, NY, PA, WA, WV) will fall under our Scenario 3 model (land-based and online with a limited online product).

IX. Appendix – State-Regulated Sports Betting Projections (3/3)

Other Assumptions, Notes, and Caveats

- Due to the complexity of the alternative, our model effectively assumes most states legalize simultaneously. In reality, any given state could see a substantially higher market size should the states surrounding it not legalize (e.g., New Jersey and Connecticut would likely be materially larger markets if New York does not legalize).
- Over time, we expect that the mobile revenue of every market will increase, even if the overall revenue stays stable.
- Our model assumes a regulatory scenario similar to the status quo in Nevada, meaning that regulation is state-dominated with minimal federal involvement. Heavier federal involvement could depress revenue by increasing costs and decreasing profit potential.
- Our model assumes states adopt a reasonable tax rate for sports betting (sub 15%, ideally sub 10%). If states move above these thresholds, there will be a direct, negative impact on revenue from sports betting.
- Our model does not account for the reality that different states have different distributions of licensed gambling operators. All other things being equal, states where casinos are more equally distributed relative to the state's population would likely outperform states where casinos are less equally distributed in a scenario where sports betting was only available at land-based casinos.
- Our numbers do not reflect the ultimate potential of state sports betting markets, which will likely increase over time thanks to macro factors like increased mobile penetration, the advent of frictionless payments, and the introduction of new technologies such as AR / VR into the sports betting and broader gambling industries.

IX. Appendix – Sports Betting Black Market Estimates (1/3)

Assumptions, Notes, and Caveats

- We begin by admitting that sizing the black market for any activity is a tricky proposition, and that reasonable people can disagree on the size of the black market for sports betting in the United States. With that said, we do believe, following our research, that the sizes typically employed in media reporting on the matter (e.g., \$150bn in annual handle) are likely too high. It is worth noting that some industry insiders who we respect believe those numbers are actually too low.
- To arrive at our estimate, we triangulated data from a variety of sources, including:
 - Industry insiders directly involved with the offshore betting market.
 - Observers and analysts who follow the black market for sports betting in the U.S..
 - Surveys of Americans regarding sports betting participation (including our own survey along with surveys conducted by Ernst & Young, Gallup, and Rutgers).
 - Consumer participation in documented regulated sports betting markets such as the UK, France, Italy, and Germany.
- Our estimate is a function of three variables:
 1. The total number of active sports bettors in the U.S. black market.
 2. The average amount wagered by each in a given year.
 3. The average “hold” for operators.

IX. Appendix – Sports Betting Black Market Estimates (2/3)

To arrive at an estimate for our first variable – **number of active sports bettors** – we considered information from industry stakeholders and a variety of sports betting participation surveys.

As the table to the right shows, there are a broad range of results on the question of what percentage of Americans place illegal bets on sports, but we believe much of the variance can be explained by survey construction (primarily the lack of distinguishing between illegal and legal bets and the inclusion of betting activity such as office pools that doesn't actually flow to black market operators).

Ultimately, our analysis led us to conclude that approximately 5% to 6% of Americans 18 and over have bet on sports illegally using black market sites or bookies during the last year, or somewhere between **12.5 million to 15 million Americans**.

Sports Betting Participation Surveys		
Survey	% of participants that bet on sports in past year	Notes
Eilers & Krejcik (2017)	3%	Americans 18+. Survey asked specifically about illegal sports betting and specifically excluded casual / social bets such as bets between friends, office pools, etc. Survey panel skewed female.
Ernst & Young (2015)	28%	Americans 18+. Survey appears to have captured all sports betting activity, including both legal and illegal sports betting, office pools, social / casual betting. However, there is a chance that some amount of respondents may not identify all forms of social / casual bets as betting.
Gallup (2016)	10%	Americans 18+. Survey did not distinguish legal from illegal sports betting. Survey did distinguish a bet on a professional event and participation in an office pool. Survey did not reference other casual / social bets.
Rutgers (2016)	10%	New Jersey residents 18+. Survey appears to have captured all sports betting activity, including both legal and illegal sports betting, office pools, social / casual betting. However, there is a chance that some amount of respondents may not identify all forms of social / casual bets as betting.

IX. Appendix – Sports Betting Black Market Estimates (3/3)

To arrive at an estimate for our second variable – **annual amount wagered per bettor** – we considered information from industry stakeholders, our sports betting participation survey, and benchmarks from other markets.

As the table to the right shows, annual handle per player can vary widely both from product to product (i.e., land-based vs online) and market to market. But we nonetheless believe that a survey of international market handle provides useful context for appreciating the bounds of potential annual handle for U.S. sports bettors participating in the black market.

The baseline provided by international markets, along with the implied annual handle per bettor from our survey (roughly \$5,500) and other channel checks led us to settle on an **annual amount wagered per bettor ranging from \$3,900 to \$4,200**.

To arrive at an estimate for our third variable – **hold** – we relied on comps from international markets, the Nevada market, and feedback from industry stakeholders, leading us to settle on **an estimate of 5%** as an industry-wide average for hold in the black market for U.S. sports betting.

Annual est. handle per player in other countries			
	Land-based	Online	Total
Germany	€1,003.24	€2,157.89	€1,442.89
<i>Total handle</i>	€3,100,000,000	€4,100,000,000	€7,200,000,000
<i>Player base (est.)</i>	3,090,000	1,900,000	4,990,000
UK	£1,454	£6,985	£3,725
<i>Total handle</i>	£8,900,000,000	£23,400,000,000	£32,300,000,000
<i>Player base (est.)</i>	6,120,000	3,350,000	8,670,000
France	€1,396.40	€1,530.31	€1,454.45
<i>Total handle</i>	€3,100,000,000	€2,600,000,000	€5,700,000,000
<i>Player base (est.)</i>	2,220,000	1,699,000	3,919,000
Italy	€1,198.44	€2,832.40	€1,869.27
<i>Total handle</i>	€3,080,000,000	€5,070,000,000	€8,150,000,000
<i>Player base</i>	2,570,000	1,790,000	4,360,000

Source: Eilers & Krejcik Gaming LLC, various regulatory reports, various public company reports

Disclosure

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