

Analysis of Tennessee's Proposed Minimum Hold Requirement

Eilers&Krejcik

Tennessee's legislature charted a unique and innovative course to a legal sports betting market, a course with the potential to deliver a robust market that will generate significant economic benefits for Tennessee while effectively siphoning demand from the illegal sports betting industry.

The initial regulations proposed for Tennessee's market, however, threaten to undermine that potential. Specifically, we believe that the proposed requirement laid out in 15.1.11 that a "Sports Gaming Operator's aggregate annual payout shall not exceed 85%" (hereafter referred to as the **minimum hold requirement**) runs counter to the very purpose of bringing legal sports betting to the state.

The practical impact of the requirement is that legal sportsbooks in Tennessee are required to pay out no more than \$.85 for every \$1 wagered, resulting in a hold percentage of at least 15%. For reference, the natural hold percentage in other U.S. markets hovers closer to 7.5%. The minimum hold requirement - which has almost no precedent in other regulated markets - therefore creates an unnatural market distortion.

We urge policymakers to consider the following observations and arguments before approving 15.1.11 as proposed:

France's online sports betting market, the model for Tennessee's minimum hold requirement, has severely underperformed. The French market (the only major market with a minimum hold requirement) has failed to generate meaningful consumer participation and lags far behind other major markets in terms of revenue and competition.

A minimum hold requirement undermines Tennessee's legal sports betting market. Minimum hold requirements drive worse pricing and product, leaving consumers open to considering legal sports betting products from other states or those available in the illegal market.

A minimum hold requirement will decrease revenue to the state. Decreased participation among bettors and operators raises the real potential that Tennessee will generate less revenue from sports betting as a result of the minimum hold requirement.

As proposed, 15.1.11 is fundamentally flawed policy. At a minimum, the proposed regulation is too underdeveloped to serve as effective policy. Further, 15.1.11 will result in unintended consequences, undermines the effectiveness of regulators, and appears to actively work against the intent of the Tennessee legislators who passed sports betting.

\$10.9 million

The projected annual loss of state revenue as a result of the minimum hold requirement

55[%]

Projected decline in operator participation (10 vs 22) as a result of the minimum hold requirement

80%

Projected decline in illegal market demand capture as a result of the minimum hold requirement

Authors



Chris Grove Principal, Sports & Emerging Verticals cgrove@ekgamingllc.com



Chris Krafcik Managing Director, Sports & Emerging Verticals <u>ckrafcik@ekgamingllc.com</u>



Alun Bowden Senior Consultant, European Markets abowden@ekgamingllc.com



Becca Giden Senior Analyst, Sports & Emerging Verticals rgiden@ekgamingllc.com



Damon Singer Analyst, Sports & Emerging Verticals

About Eilers & Krejcik Gaming

Eilers & Krejcik Gaming LLC is an independent research and consulting firm with branches in Orange County, California and Las Vegas, Nevada. The firm's focus is on product, market, and policy analysis related to the global regulated gambling market. Clients include operators, suppliers, private equity and venture capital firms, institutional investors, and state governments.

The firm's work on the U.S. regulated sports betting issue includes a series of 50-state projections that have become the widely accepted basis for discussion of the U.S. market's potential. Recent state-governmental engagements have included West Virginia and Indiana, for which Eilers & Krejcik Gaming provided comprehensive market projections, economic impact projections, and fiscal analyses relating to sports betting and online gambling.



Overview

Our analysis of the proposed **minimum hold requirement** is grounded in a number of sources.

Our primary source is an in-depth examination of France's online sports betting market both in isolation and in comparison to other relevant international markets. France is the only major market that has introduced a minimum hold requirement and has the same 85% threshold as Tennessee, making it the best available comparable for forecasting the impacts of a minimum hold requirement in Tennessee.

For our analysis of likely consumer reactions to the minimum hold requirement, we rely on multiple surveys, including our own 2019 survey of over 2,000 potential U.S. sports bettors.

We also utilize several proprietary models to project how a minimum hold requirement will affect revenue that flows to Tennessee from legal sports betting. These models draw upon our extensive experience with historical and projected performance of both international and U.S. sports betting markets.

This study was commissioned by <u>iDEA Growth</u> and authored independently by Eilers & Krejcik Gaming. iDEA Growth had no influence or control over the research process or the ultimate conclusions of the study.

Contents

I. Analysis: France's Sports Betting Market

II. Market Risks From The Minimum Hold Requirement

- How Sports Betting Differs From Other Products
- Disappointing Experience For Consumers
- <u>Spend Shifts To Neighboring States</u>
- Illegal Sports Betting Market Thrives
- Material Decrease In Competition
- <u>Stakeholder Reactions To Minimum Hold Requirement</u>

III. Revenue Risks From The Minimum Hold Requirement

- Loss Of Direct Revenue
- <u>Methodology Overview</u>
- <u>Additional Negative Economic Impacts</u>

IV. Policy Risks From A Minimum Hold Requirement

- Undermining The Intent Of The Legislature
- Decreasing Effectiveness Of Regulators
- <u>Unintended Consequences</u>

V. Unanswered Questions Regarding The Minimum Hold Requirement

Appendix A - In-Depth Look At The French Market Appendix B - Methodology Appendix C - Survey Results



SECTION I:

Analysis: France's Online Sports Betting Market



1.1. Overview

WHY IS THE FRENCH MARKET RELEVANT? France is the only other major jurisdiction with a minimum hold requirement. Additionally, the minimum hold requirement mirrors the threshold of 85% proposed by Tennessee. That makes France a uniquely relevant point of comparison for anyone seeking to understand how a minimum hold requirement might impact Tennessee's legal online sports betting market.

HOW HAS THE FRENCH MARKET PERFORMED? By any recognized measure, the French market for online sports betting has dramatically underperformed other European markets. It should be noted that this is largely by design, as France's market was built from the ground up to be less appealing to sports bettors.

A BRIEF BACKGROUND ON THE FRENCH ONLINE SPORTS BETTING MARKET. France launched regulated online gambling in June 2010, moving from a state monopoly to an open licensed environment for sports betting, horse racing betting, and poker with casino banned. France had at the time a large pari-mutuel horse racing betting sector and a very limited land-based sports betting sector, mostly around prediction games, as well as a large land-based casino and lottery sector.

Sports betting was largely a product that began in the regulated market in 2010 in the online market. From the outset the regulator, Arjel, sought to limit authorized gambling games to those with a perceived lower risk of problem gambling and gambling addiction, hence banning casino, and to protect the rights and integrity of sports bodes. Within sports betting a number of player safety aspects were added including tightly controlling the types of bets available to be offered.

One of the main aspects intended to safeguard player safety was a maximum return-to-player limit of 85%. In practice this results in a minimum hold margin of 15% for operators in the market, which needs to be managed over the course of each twelve-month period to allow for natural variance in sports betting results. The thesis for this was in part based on the concept that high-frequency gambling with a high return to player (or low hold percentage) tends to have a higher incidence of problem gambling, a concept that is by and large unsupported both by relevant research and France's experience to date.

FRANCE ALSO ADOPTED OTHER RESTRICTIVE POLICIES. Bets are only permitted if they are on an "exhaustive list" drawn up by state regulator ARJEL after advice from the relevant sports federations. Additionally, operators need the permission of the relevant sports authorities to offer bets on their sports. There were also limits imposed on operators in terms of not being able to re-settle bets offered in error or to refuse bets from long-term winning players. Finally, France imposed a tax rate of 9.1% on turnover, which roughly translates to a tax rate of 50% on revenue. We recognize that all of these policies have contributed to France's underperformance and have made our best attempts to isolate the impact of the minimum hold requirement when drawing our conclusions.



1.2. Comparing France To Other Major European Markets

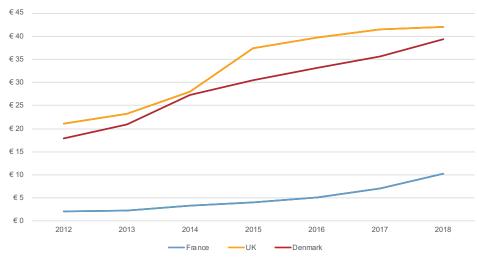


Figure 1.1: Legal Sports Betting Revenue Per Capita

GGR per capita in the UK and Danish market, generally considered the benchmark of a well performing market and the closest comps with the New Jersey market, are between €35-40 compared to just below €10 in France.

France has begun to overtake the Italian online sports betting market, but it should be noted that considerable efforts have been made in Italy to curtail online betting activity including a full ban on gambling advertising and Italy is also a market that is considered one of the weakest in revenue terms in the European sector.

Finally, we note that France's recent growth appears to be driven in part by an informal relaxing of the minimum hold requirement.



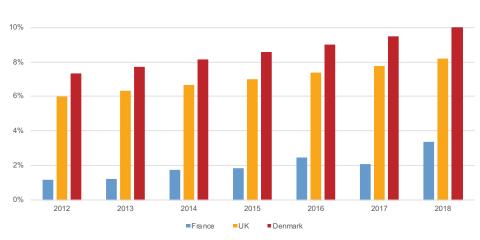


Figure 1.2: Legal Sports Betting Penetration Rate

12%

The legal online sports betting product in France is simply reaching a far smaller share of the total population when compared to other European markets where data is available.

We note that our penetration estimates for New Jersey (roughly 4% of the population) also eclipse France's penetration rate despite the fact that the New Jersey market has been active for less than two years vs nearly a decade of operation in France.



1.2. Comparing France To Other Major European Markets (Con't)

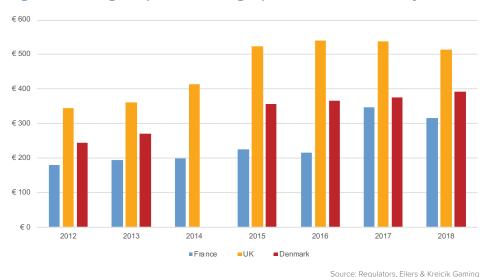
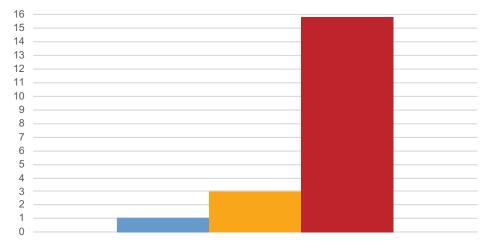


Figure 1.3: Legal Sports Betting Spend Per Active Player

Not only is legal sports betting in France engaging a far smaller share of the population when compared to other European markets, but the players who are in engaged in legal sports betting are less productive from a revenue standpoint despite the increased hold requirement.

To put it another way: Even though sports betting operators in France are making more on each individual bet than operators in the UK or Denmark, French operators are still making less overall per player than operators in those markets.

Figure 1.4: Licensees Per 5 Million People



Our final chart shows that France's framework for legal sports betting has not only depressed consumer participation, but also operator participation.

It is telling that Denmark, with a population of roughly 5.6 million, has more licensed sports betting operators (18) than France, where the population is approaching 67 million (13).

The UK, a more like-for-like comparison in population terms, has over three times the number of licensed sports betting operators than France (40 vs 13).

France UK Denmark

1.3. Conclusions

Our analysis of the French sports betting market leads us to a clear conclusion: Adopting a minimum hold requirement has undermined the performance of France's market. We see little reason to believe that the story would be materially different for Tennessee.

Below we articulate the distinct impacts the minimum hold requirement has had on France's market, along with our confidence assessment of each impact. For a more thorough discussion of these topics, please see Appendix A. We note that other aspects of France's regulatory scheme, most notably the tax rate, have also contributed to these impacts. Our analysis attempts to account for these compounding factors, but we readily admit that they are difficult to fully disentangle.

Impact	Notes	Confidence Level
Reduced licensees	France has undeniably failed to attract the same number of licensees as other jurisdictions, resulting in a less diverse and less competitive market.	High confidence
Reduced capture of existing illegal market activity	Despite significant efforts from French regulators and the ability to IP block illegal sites, a robust illegal market continues to serve players from France, with demand driven at least in part by the inferior legal sports betting product.	High confidence
More illegal market activity	French regulators have raised concerns that the inferior legal product may lead some new players to drop out of the regulated market and explore illegal products as an alternative.	High confidence
Lower per-capita spend and lower player values	Uncompetitive pricing has artificially depressed market penetration and resulted in lower spend per active player versus other European markets.	Medium to high confidence
Slower growth rates	Growth in the French market coincided directly with the apparent decision by regulators to informally relax the minimum hold requirement.	Medium confidence

Figure 1.5: Impacts Of The Minimum Hold Requirement On A Legal Sports Betting Market

Source: Eilers & Krejcik Gaming

ilers&Kreicik





2.1. How Sports Betting Differs From Other Gambling Products

To understand the risks that a minimum hold requirement presents to Tennessee's legal sports betting market, it's helpful to appreciate how sports betting differs fundamentally from other gambling products. In the table below, we describe how sports betting stands apart on three dimensions: **Revenue volatility** (how stable and predictable is the revenue generated for the operator?), **price sensitivity** (how obvious is pricing to the consumer and how much do they care?), and **illegal market competition** (how available are illegal market alternatives and how do they size up to the legal product?).

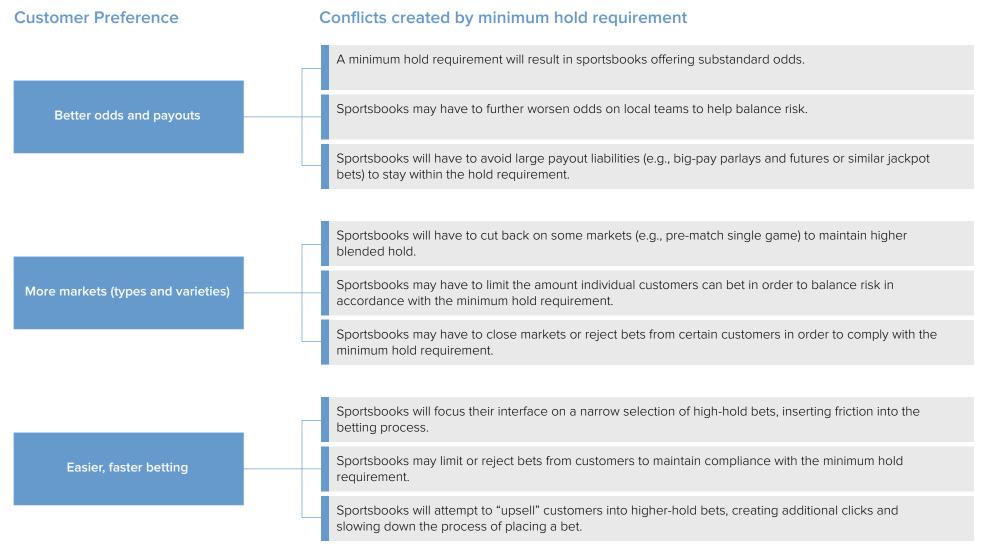
Product	Revenue volatility	Price sensitivity	Illegal market competition
Sports betting	High . Sportsbooks have no control over the events that power betting outcomes and have only limited control over the inflow of bets that determine their risk distribution.	High . Odds are generally transparent to the bettor, who can easily compare pricing at other sportsbooks. Bettors generally cite odds as a primary factor in sportsbook choice.	High . Illegal sports betting is arguably the most widespread form of illegal gambling. Enforcement is difficult. Illegal products, from the corner bookie to the offshore sportsbook, are sophisticated and ubiquitous.
State lottery	Low . State lotteries can directly dictate fixed prize matrices. The primary revenue variable is ticket sales. State lotteries can reliably predict revenue as a function of total sales. The lottery cannot lose.	Low . Consumers are vaguely aware of the poor odds and high takeout involved in state lotteries. But the high levels of participation despite those conditions clearly suggests that consumers are not concerned about the odds.	Low . While there are some illegal lotteries and ways to access competing lotteries online, those products are generally high-friction and lack the compelling features of legal state lotteries (e.g., large jackpots, ease of purchase, trust).
Slots	Low . Slot machine payouts can be fixed within a tight, predictable range. Adding high-payout features like progressive jackpots can increase volatility to a degree, but it is still unlikely that a given slot game will generate a loss for any meaningful period of time.	Low . Slot pricing is generally obscured, making it difficult for the player to compare one machine to the next. Slot players obviously prefer winning to losing, but the games are designed to deliver an experience that provides a counterweight to the inevitable loss.	Moderate . Offshore illegal casinos are widely available and provide a competitive product. On the retail side, illegal casinos are a fact of life in many states, but tend to be small in scale and attractive to a relatively minor slice of the casino customer population.

Figure 2.1: Comparing Sports Betting To Other Gambling Products



2.2. Minimum Hold Requirements Create A Disappointing Experience For Consumers

As the graphic below illustrates, the minimum hold requirement is in direct conflict with many of the primary preferences reported and displayed by customers in the legal U.S. online sports betting market. Customer preferences below are drawn from a mix of our proprietary surveys and third-party surveys.



Source: Eilers & Krejcik Gaming



2.3. Minimum Hold Requirements Cause Sports Betting Spend To Shift To Neighboring States

Sports bettors will have little difficulty comparing the markets and pricing made available by operators in other states. For those bettors who don't want to take the time to compare odds directly, numerous sports betting media sites and apps will make the job simple by placing odds from various states and operators side-by-side.

There is no argument on the point that Tennessee's minimum hold requirement will force operators to offer worse odds than operators offer in other states. This reality creates two risks, each of which could siphon significant demand for legal sports betting from Tennessee and shift that demand to other states.

- 1. Bettors may travel to neighboring states to bet. Our surveys of sports bettors have consistently shown that a significant number of them are willing to drive in order to place a bet. In our most recent survey of consumers in lowa, 16% would drive up to 15 minutes, 26% would drive up to a half-hour, and 32% would drive up to an hour to place a bet. These surveys are supported by the practical experience of operators in New Jersey, where some 20% of total bets are flowing in from neighboring New York. With so much of Tennessee's population within an hour's drive of a state expected to have online sports betting in the next 2 years, the risk that poor product and pricing will motivate Tennesseans to place their bets out of state is significant.
- 2. Bettors may use proxies in other states to bet. There is little to practically prevent a Tennessee resident from creating an account at a New Jersey sportsbook and then using a friend or business partner located in New Jersey to actually place the bets. While casual bettors are unlikely to go through the effort involved in this kind of set up, higher-volume or otherwise price-sensitive bettors will absolutely be motivated by hold rates that are likely to be 50%+ less than what is on offer in Tennessee.

4.5 million

Number of Tennessee residents (~67%) who are within an hour's drive or less of a state that we expect to authorize online sports betting by 2022.

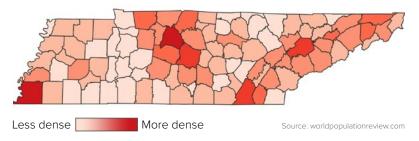


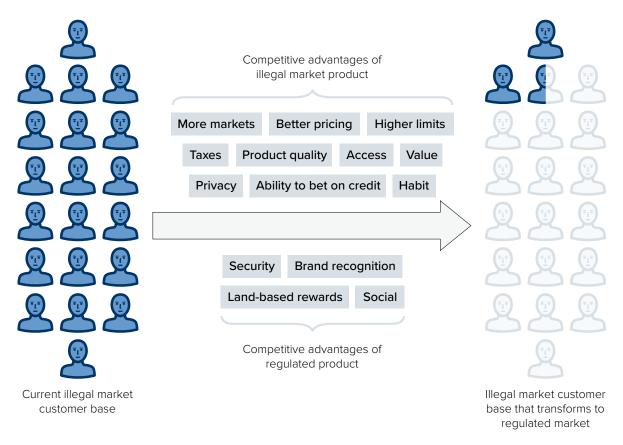
Figure 2.2: TN Population Density By County



2.4. Minimum Hold Requirements Allow The Illegal Sports Betting Market To Thrive

The illegal market offers a number of advantages that the legal market will be hard pressed to match. As the illustration below shows, the legal market will compete on inherently asymmetric terms and is therefore at a structural disadvantage to the illegal market. Adding a minimum hold requirement, which will force operators to offer some combination of worse pricing, fewer markets, and lower limits, adds significant additional weight to a scale that is already tipped in favor of illegal sports betting operators.

Figure 2.3: The Illegal Market From A Consumer's Point Of View



80%

We estimate that the presence of the minimum hold requirement will result in Tennessee capturing 80% less of the illegal sports betting market than it would capture in the absence of the minimum hold requirement.

Source: Eilers & Krejcik Gaming. In the absence of the minimum hold requirement, we would expect illegal market capture in Tennessee to hover around 60%. The product issues created my minimum hold decrease that capture rate to 12%, for a decrease of 80%.



2.5. Minimum Hold Requirements Cause A Material Decrease In Competition

1) FRANCE'S EXPERIENCE SHOWS A CONNECTION BETWEEN MINIMUM HOLD REQUIREMENTS AND DECREASED OPERATOR

PARTICIPATION. The previous discussion of the French online sports betting market draws a clear connection between minimum hold requirements and decreased operator participation. The table below reinforces the deep disparity in the number of licensed operators in France versus other major European markets. A lack of operators depresses marketing spend, competition, innovation, and generally lowers the appeal of legal sports betting for consumers.

We note that the comparable markets - Denmark and the UK - are two of the most commonly employed markets for forecasting the performance of legal sports betting in the United States.

Figure 2.4: Number Of Licensed Operators In Select International Markets

Country	Population (rounded)	Number of licensed operators	
France	66.9 million	13	
UK	67.5 million	40	
Denmark	5.6 million	18	

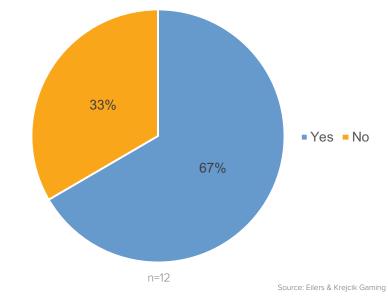
Source: Regulators, Eilers & Krejcik Gaming

2) OPERATORS ARE ALREADY SKEPTICAL OF THE TENNESSEE

OPPORTUNITY. While Tennessee has clear appeal to sports betting operators due to the "all comers" approach to licensure, there are other aspects of the state's market which are less appealing, including the tax rate, the annual license fee, the relatively small population, the absence of casino products, and the restrictions on college sports wagering.

Minimum hold requirements alone might dissuade some operators from participating in Tennessee. But when combined with other hurdles, minimum hold requirements will cause many operators to rethink the market altogether, as our survey of operators considering the Tennessee market clearly demonstrates.

Figure 2.5: Is the 15% minimum hold requirement causing your company to reconsider participating in the Tennessee sports betting market?



▲ BACK TO CONTENTS | 15



2.6. Stakeholder Reactions To The Minimum Hold Requirement

Below are selected excerpts from our anonymous survey of sports betting operators and software providers regarding the expected impact of the minimum hold requirement. The overwhelming consensus across respondents was that the requirement will negatively impact Tennessee's legal sports betting market.

Operators will not invest in marketing and player retention in the same way they otherwise would which stunts the market Offshore books actually get stronger in the state because word of mouth will spread that you get much better odds there.

Would-be participants will continue to wager on the black market. Programs that rely on budgeted funds coming from the sports betting expansion will suffer.

I think some operators that would otherwise enter the market will decide not to or they will prioritize other states first before entering the market. I think companies will decide not to invest as heavily in marketing and retention in the state because they think that money will be better spent in other states. It will have a disastrous impact. Existing sports bettors will stay with the illegal market and new sports bettors will be offered untenable odds. TN will have no ability to compete with other legal jurisdictions.

This will minimize their opportunity for max payouts and likely encourage the illegal market.

The best operators may skip the market entirely. There won't be much competition for the remaining operators.

Players will lose faster than they otherwise should, increasing risk of responsible gaming issues and impacting player retention rates from operators.

Operators have no choice but to make a significant change to their standard offering to try and hold 15% and that means a bad experience for the consumer. Consumer stickiness will be very low and operators will not invest in keeping the casual player. Players in the state will not see the same promotions and the illegal market will become even stronger in the state.



SECTION III:

State Revenue Risks From A Minimum Hold Requirement



3.1. Minimum Hold Requirements May Decrease Direct Revenue From Sports Betting To The State

Whatever the intent of the minimum hold requirement, our conclusion is that it will likely decrease the amount of total revenue that flows to the state from regulated sports betting.

Our conclusion is based on three independent models we developed for projecting the shape and performance of the Tennessee legal sports betting market. Those models are described briefly on the following slide and fully articulated in Appendix B.

The decrease in revenue is perhaps counterintuitive to some. After all, if one decreased the payout to consumers from the state lottery, the expected outcome would be that the state lottery would see an increase in revenue.

But sports betting and the lottery are two very different products existing in two very different contexts. Lottery players are generally not price sensitive, while sports bettors are. And the lottery does not face meaningful competition from an entrenched illegal market, while legal sports betting must compete with dozens of experienced and sophisticated illegal competitors serving the U.S. market from offshore jurisdictions that are largely beyond the reach of U.S. law enforcement.

The revenue decrease is driven by two factors:

- **1. Decreased demand.** As detailed in Section 2, the inferior product resulting from the minimum hold requirement will ultimately decrease total activity in Tennessee's legal sports betting market.
- 2. Decreased license fee revenue. Tennessee charges operators a significant annual license fee (\$750k). A portion of the expected overall revenue decrease will stem from decreased participation by operators due to the hold requirement, resulting in fewer licenses issued and fewer license fees collected.

\$10.98 million

Projected decrease in annual revenue to the state from legal sports betting as a result of the minimum hold requirement.

That represents a decrease of 19.8% from Tennessee's expected revenue in the absence of a minimum hold requirement.



3.1. Minimum Hold Requirements May Decrease Direct Revenue From Sports Betting... (Con't)

Below we offer an overview of the independent models we developed for projecting the performance of Tennessee's legal sports betting market under a minimum hold requirement. A full description of each model is available in Appendix B.

Model	Description	How many operators participate?	Total license fee revenue	What is total handle?	What is market value?	Total tax revenue	Total revenue
Baseline with organic hold rate	Our projection for the TN market in the absence of a minimum hold requirement	22	\$16,500,000	\$2,438,375,000.00	\$195,070,000.00	\$39,014,000.00	\$55,514,000
	Alte	ernative mode	Is incorporating	the minimum hold rec	juirement:		
Customer Composition model	Assesses how different types of customers are likely to respond to differences in pricing and product	10	\$7,500,000	\$1,414,257,500.00	\$212,138,625.00	\$42,427,725.00	\$49,927,725
Product Mix model	Assesses how the emphasis on high-hold products intersects with known patterns of bettor demand	10	\$7,500,000	\$1,513,011,687.50	\$226,951,753.13	\$45,390,350.63	\$52,890,351
GGR Comp model	Extrapolates the likely performance of the TN market from the gap between France and the UK / Denmark	10	\$7,500,000	N/A	\$116,461,584.73	\$23,292,316.95	\$30,792,317

Figure 3.1: Projecting The Revenue Loss To Tennessee From The Minimum Hold Requirement

Average (unweighted) \$44,536,798

Difference from organic case \$10,977,202

Percentage difference from organic case 19.77%

Source: Eilers & Krejcik Gaming



3.2. Minimum Hold Requirements May Decrease Positive Economic Impact Of Sports Betting To The State

In addition to the direct revenue impact of the minimum hold requirement, there are several other potential risks to the state in terms of the decrease in or loss of associated positive economic impacts. A brief qualitative discussion of those risks follows. A quantitative analysis of these impacts is beyond the scope of our comments, but may be a valuable area of future study for regulators or the legislature.

Impact	Notes	Confidence level
Decreased marketing spend	A decrease in total operators or the overall competitiveness of the market ultimately leads to a decrease in total marketing spend. Given the local nature of Tennessee's sports betting market, local media outlets (e.g., local print, radio, and television) are likely to feel the brunt of this decrease in spend. For context, we estimate that online sports betting operators in New Jersey will spend over \$100 million annually in marketing once that market reaches maturity.	High confidence
Decreased local operator participation	Tennessee's licensure model is unique in allowing all qualified participants. This model would naturally attract interest from local operators (e.g., local sports personalities, venues, or other stakeholders with a significant audience in Tennessee). But the decreased opportunity resulting from the minimum hold requirement is most likely to freeze out these smaller operators. As local operators drop out, the state also loses the economic impact (e.g., jobs) those local operators would have generated.	High confidence
Decreased startup participation	Again, we believe that Tennessee's licensure model would have proven especially attractive to startups looking to test innovative takes on legal sports betting. But with the minimum hold requirement tipping the scales in the favor of the deepest- pocketed operators, startups may be less willing to utilize the Tennessee market as a sandbox, depriving the state of high-quality jobs and a possible magnet for broader startup activity.	Medium confidence

Figure 3.2: Additional Negative Economic Impacts Of The Minimum Hold Requirement

Source: Eilers & Krejcik Gaming



SECTION IV:

Policy Risks Of A Minimum Hold Requirement

BHH



4.1. The Minimum Hold Requirement Does Not Reflect The Intent Of The Legislature

AUTHORIZING LEGISLATION MAKES NO MENTION OF A MINIMUM HOLD REQUIREMENT

We are unable to find a reference to a minimum hold requirement or a similar concept in the engrossed version of HB1.

We note that the Legislature did not shy away from dictating the minutiae of sports betting policy in HB1 (e.g., enacting specific limitations on college sports betting), suggesting that lawmakers were considering the issue at a granular level and consciously chose to not include a minimum hold requirement.

THE MINIMUM HOLD REQUIREMENT CUTS AGAINST THE STATED GOALS OF KEY LEGISLATIVE STAKEHOLDERS

After the Supreme Court struck down PASPA, Rep. Michael Curcio (R-Dickson), the chair of the House Judiciary Committee, said the Supreme Court's decision almost required the state to take action. "If we take no action, we are condoning the black market," Curcio said.

When first prefiling the bill (it originally provided for both retail and online sportsbooks), bill sponsor Rick Staples <u>noted</u> that sports betting "would make a lot of money in taxes collected by having this in local bars or restaurants. And once again those local dollars are going to road improvements, infrastructure and schools so the dollars coming into the locals are earmarked."

During one of the bill's committee hearings, Staples responded to concerns about consumer safety by noting that "there are nefarious and criminal individuals that seek to take advantage of something that is meant to be positive and controlled. There will always be a criminal element. Currently without this piece of legislation, online gaming is taking place in this state, and those dollars are going to offshore accounts ..."

After the bill passed the House in April 2019, Staples <u>remarked</u> "What this piece of legislation is doing more than anything is looking to capture dollars that we can put to good use." Reflecting on the bill after it became law, Staples <u>commented</u>, "It's good to be the first in something that will generate, and maintain, dollars in our state."

These comments offer clarity on the legislative intent behind authorizing sports betting: To generate the maximum tax revenue for Tennessee while depriving the illegal market of demand. As the minimum hold requirement works against both goals, it appears to run counter to legislative intent.

We further note that the bill is clearly designed to promote an open, competitive market. Otherwise, the Legislature would have enacted some type of cap or similar restrictions on the number of total licenses. As the minimum hold requirement artificially limits competition, it appears to run further in contradiction to the intent of the Tennessee Legislature.



4.2. The Minimum Hold Requirement May Undermine The Effectiveness Of Regulators

As proposed, 15.1.11 lacks the necessary detail to act as effective policy (see Section 5 for further discussion). But even if the regulation is fleshed out, it will still represent a significant threat to the authority and effectiveness of Tennessee regulators.

OPERATORS WILL TEST THE POLICY, CREATING AN UNDUE REGULATORY BURDEN

Offering better pricing is one of the key competitive differentiators available to sportsbooks. This reality all but guarantees that operators will seek to identify and exploit loopholes in the minimum hold requirement in order to gain a competitive advantage. We have already seen this scenario play out in France, where operators are constantly testing the boundaries of the requirement.

Tennessee regulators are likely to be caught in a game of cat and mouse with operators, and may be handcuffed by inadequate regulations. This in turn may lead regulators to constantly iterate the minimum hold requirement, creating a frustrating situation for operators.

In any case, the above dynamic will siphon critical and finite regulatory resources away from the core functions involved in launching and overseeing a legal sports betting market. To put it another way: Every hour spent on enforcing the minimum hold requirement is an hour not spent on a foundational element of regulating sports betting (e.g., AML, preventing underage gambling, mitigating problem gambling).

STAKEHOLDERS MAY SEEK A LEGISLATIVE REMEDY

Given the likely negative impacts of the minimum hold requirement and the disconnect between legislative intent and the minimum hold requirement, there is some chance that sports betting stakeholders may seek a legislative remedy should 15.1.11 be enacted as proposed.

That path would result in confusion among licensees and consumers along with possible delays for Tennessee's legal sports betting market. It would also engender an adversarial dynamic between licensees and regulators and further distract regulators from their core mission of launching a safe, effective, and optimal market for legal sports betting in Tennessee.



4.3. Unintended Consequences Are Likely To Arise From The Minimum Hold Requirement

The minimum hold requirement is not standard policy in any major sports betting market outside of France. And France's market is not a direct analogue for Tennessee's market (e.g., different size, goals, betting culture). As a result, it is reasonable to assume that the enactment of a minimum hold requirement will result in unintended consequences for Tennessee's market. For the sake of discussion, we have briefly highlighted a few such potential consequences below.

DELAYED LAUNCH

Uncertainty and disagreement surrounding a minimum hold requirement could cause a delay in the launch of Tennessee's legal sports betting market, unnecessarily costing the state revenue and allowing the illegal market to further entrench.

GROWTH IN THE ILLEGAL MARKET

The marketing and general coverage of the launch of the legal market will undoubtedly ignite interest among some consumers who had not previously bet on sports. But the inferiority of the legal product may lead those customers to search for superior alternatives, and illegal market sites are numerous and easy to find.

GREATER THAN EXPECTED RATES OF OPERATOR FAILURE

The unpredictability sown by the minimum hold requirement may result in more operators entering and then retreating from the Tennessee market. An excessive number of operator failures undermines both the consumer experience and broader consumer trust in the legal market.

UNBALANCED COMPETITIVE DYNAMICS

The opportunity to exploit the minimum hold requirement for competitive gain in ways that are not immediately evident raises the possibility that the relatively balanced competitive dynamics observed in other states may not be replicated in Tennessee, creating the potential for a further erosion of the consumer experience.

EVOLUTION OF SPORTS BETTING IN THE DIRECTION OF CASINO GAMES

Forced to maintain artificially high hold rates and to draw the maximum amount of revenue per player from an artificially limited player pool, sportsbooks may begin to develop sports betting games that bear a closer and closer resemblance to casino gambling games such as slots.





SECTION V:

Unanswered Questions Surrounding The Minimum Hold Requirement



5.1. As Currently Drafted, The Minimum Hold Regulation Is Prohibitively Incomplete

Setting aside any debate over the relative merits of a minimum hold requirement, it's clear that such a requirement is a substantial force that exerts influence over nearly all aspects of a regulated sports betting market. Given that influence, we believe it is untenable that the proposed regulation offers absolutely no detail regarding enactment or enforcement. Such a significant policy cannot reasonably be comprehensively articulated in the space of ten words. In the table below, we offer a non-exhaustive list of the key questions left unanswered by 15.1.11 as proposed.

Question	Notes
How does the hold requirement interplay with free play or other player bonuses?	 15.1.11 refers to "aggregate annual payout" but the proposed regulations do not define that term. Meanwhile, 15.1.2 provides a definition for "adjusted gross income" that prohibits the deduction of free play or similar bonuses from an operator's net income for the purposes of calculating tax due. This leaves open the significant question of whether or not free play and similar bonuses do or do not count for the purposes of calculating an operator's "aggregate annual payout" and therefore their compliance with the minimum hold requirement.
How does the hold requirement interplay with futures bets or other bets that stretch over calendar years?	 Futures bets often stretch across calendar years. For example, most Super Bowl futures bets are placed in one year and resolve in the next calendar year. The proposed regulations are silent on how such bets should be treated for the purposes of calculating "aggregate annual payout." This silence is problematic due to the material imbalance such bets can create. Imagine an operator who takes \$25 million in futures bets on the Super Bowl in 2019. If the bets are booked in the year received, the operator's aggregate annual payout will be padded in 2019 due to \$25 million of "revenue" that isn't offset by any liability as the bets won't be paid out until 2020. Similarly, the operator will face an unbalanced liability in 2020 when those bets have to be paid out. Operators may face similar situations with parlays that stretch across calendar years, although these are less common than the futures situation outlined above.

Figure 5.1: Unanswered Questions Regarding The Minimum Hold Requirement



5.1. As Currently Drafted, The Minimum Hold Regulation Is Prohibitively Incomplete (Con't)

Question	Notes
How does hold requirement interplay with layoff bets?	The proposed regulations allow for layoff wagers (defined as "a Wager placed by a Sports Gaming Operator with another Sports Gaming Operator for the purpose of offsetting Player Wagers") but it is unclear how such wagers would be treated for the purposes of calculating "aggregate annual payout."
How does the hold requirement interplay with the tax requirements in Tennessee?	Let's say an operator books \$100 in bets and \$6 in revenue in Year 1. In Tennessee, state tax owed would be 20% of that \$6, or \$1.20. But because that operator didn't meet the minimum hold requirement, would it be required to true up—that is, to pay taxes on the additional \$9 of revenue (\$1.80) it would have needed to satisfy the 15% minimum hold requirement? Would true-up payments necessitate some kind of minimum capital reserve requirement? And how might such a requirement (further) hamper the ability of operators to run ads / offer promos / otherwise invest in Tennessee?
What are the penalties for breaching the minimum hold requirement?	While the TEL has broad powers to rescind the license of any operator who runs afoul of regulatory requirements, we note that there are no specific penalties articulated for a violation of the minimum hold requirement. Is there a grace period? Are there possible exceptions? Is an operator who goes over the limit by a tenth of a percent subject to the same penalties as an operator who goes over the limit by 10%? These questions become especially germane given the lack of clarity around how compliance with the minimum hold requirement will actually be calculated.

Figure 5.1: Unanswered Questions Regarding The Minimum Hold Requirement (Con't)

Source: Eilers & Krejcik Gaming



APPENDIX A:

In-Depth Analysis Of The French Sports Betting Market



Key Issues With French Legislative Impact

SMALL NUMBER OF OPERATORS

Only 13 active sports betting licenses for a population of 66m.

LOW REVENUE PER CAPITA

Gross gaming revenue per capita for online sports betting is €10.30 as of CY18, compared to €37-39 in the UK and Danish markets. In the first five years of the French market GGR per capita was below €4.

LEAKAGE TO BLACK MARKET

While the active black market is fairly low at around 15-20% of the regulated market, this has required substantial blocking and ongoing enforcement from the French regulator and government.



France launched regulated online gambling in June 2010, moving from a state monopoly to an open licensed environment for sports betting, horse racing betting and poker. The two state-owned gambling monopolies were the lottery and sports operator Francaise des Jeux (FDJ) and the horse-racing betting operator Pari Mutuel Urbain (PMU) who are now both active participants in the regulated market.

France prior to regulation had a large pari-mutuel horse racing betting sector, a very limited land-based sports betting sector, mostly around prediction games, as well as a large land-based casino and lottery sector. From the outset the regulator, Arjel, sought to limit authorised gambling games to those with a perceived lower risk of problem gambling addiction and to protect the rights and integrity of sports bodies. Online casino was banned outright as it was viewed as the product with the largest risk factor for problem gambling.

France was set up as a very operator-unfriendly environment, with a number of restrictions on the products available to be marketed to players. Although perhaps the biggest aspect of this being the tax rate at 9.1% of turnover (handle).

It's important to note that this wasn't a decision made in a vacuum, with France looking to be a stand-out in terms of its approach, as there were a number of other European markets either already regulating online gambling or moving to a regulated environment during this period.

Country	Date regulated	Tax and restrictions summary
UK	2007	15% GGR, no restrictions
Italy	2009	2% turnover (now 20% GGR), some restrictions
Spain	2011	25% GGR (moved to 20% GGR), some restrictions
Denmark	2011	20% GGR, no restrictions
Belgium	2011	11% GGR, no RTP max, some restrictions
France	2010	9% turnover, heavy restrictions

France aimed to create a heavily restricted and controlled online gambling environment with revenue growth and tax raising potential running secondary to the ability to contain problem gambling and the growth of the online sector. France had, and retains, a large land-based casino industry that it sought to protect as well as a large horse-racing industry that could have been vulnerable to online competition.

The Creation Of The Sports Betting Market



Sports betting in France was largely a product that began in the regulated market in 2010 as an online product. The land-based offering remains under the monopoly control of FDJ and is a much more limited parlay-based betting option. Prior to 2010 the only fully featured sports betting options were on the grey market.

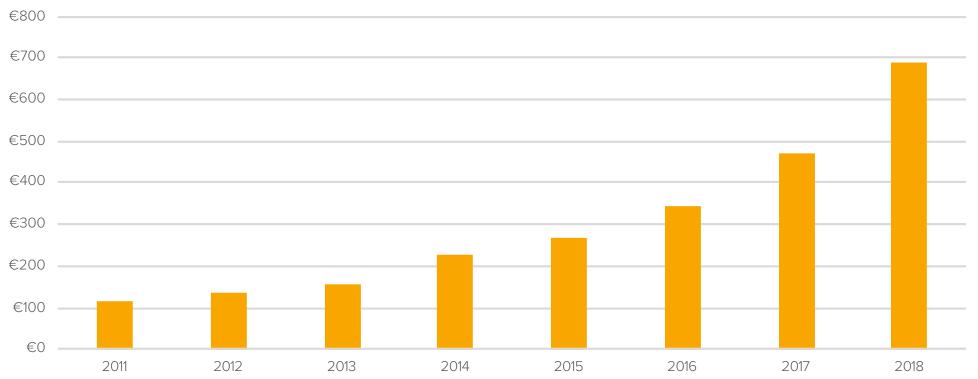
Within sports betting a number of player safety aspects were added including tightly controlling the types of bets available to be offered. One of the main aspects intended to safeguard player safety was a maximum return-to-player limit of 85%.

In practice this results in a minimum hold margin of 15% for operators in the market, which needs to be managed over the course of each twelve-month period to allow for natural variance in sports betting results. The thesis for this was in-part based on the concept that high RTP high frequency gambling tends to have a higher incidence of problem gambling.

Alongside this, bets are only permitted if they are on an "exhaustive list" drawn up by ARJEL after advice from sports federations concerned and operators need the permission of the relevant sports authorities to offer bets on their sports. There were also limits imposed on operators in terms of not being able to re-settle bets offered in error or to refuse bets from long-term winning players.

Despite strong initial interest from operators, this tightly controlled and limited market led to a much more gradual rollout of sports betting in France than in some major European markets. The 16 operators who applied for licences thinned out to 9 by the following year and revenues remained at a modest level through 2015.

French Hold (€m) 2011-2018



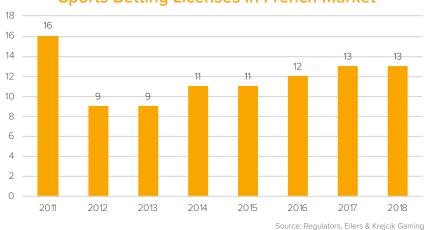


As at the end of 2018 there were 13 sports betting licences in the French market. They are mostly a mix of endemic operators and start-ups focused specifically on the French market. GVC through its bwin brand has been present since the beginning of the market and The Stars Group rolled out sports betting in 2016 having held a poker licence since 2010. Kindred Group was one of the largest operators in France but held off entering the market for two years over concerns as to operating conditions. Other operators who chose not to enter the regulated market include bet365, William Hill, Paddy Power, Betfair and 888.

French sports betting operators:				
GVC	The multi-national operator is the owner of the bwin brand, which was one of the largest operators in pre-regulated grey market			
Betclic	This is a privately owned operator who was a large existing operator in the pre-regulated grey market not least through its Everest Poker brand			
France Pari	This was originally a pari-mutuel betting start-up created for the French market to try and take on the PMU			
Genybet	This is primarily a horse racing focused operator and was originally a subsidiary of PMU			
Joaonline	This is the online brand of the French Joa casino group			
FDJ	FDJ is the ex-state owned land-based sports and lottery monopoly			
Netbet (2012)	International sports betting brand linked to major sports betting supplier SBTech			
PMU	The horse race betting monopoly operates a sports betting site powered by Flutter's B2B division			
TSG (2016)	The Stars Group was present in France since 2010 through its poker site pokerstars and expanded into sports betting in 2016			
Kindred (2012)	Operated the Unibet brand, which was one of the biggest in France. Handed back their license in 2011 but re-entered by acquiring the Solfive brands in 2012			
Vbet (2017)	International sports betting brand linked to sports betting platform supplier Betconstruct			
Winamax	Poker start-up created for the French market			
Zeturf	Horse racing focused French operator			



France's online gambling market requires licences for specific verticals. Operators with a sports betting licence peaked in the first full year of operation with 16 but quickly fell back to 9 as operators, including Kindred, Intralot and 888, struggled to make a profit in the market and handed back their licences.



Sports Betting Licenses In French Market

We can see that as with most of the major regulated markets the number of operators has remained broadly stable over the past decade. As operators have adjusted to market conditions and as the market itself has grown in terms of revenues, we have seen this number gradually rise and it sits at 13 operators in total as at the close of 2018.

The addition of major operators has been limited to those with a presence in the existing grey market, and therefore revenues to lose, rather than major European operators looking to gain share.

Notable Absentees



Comparisons With The UK Market

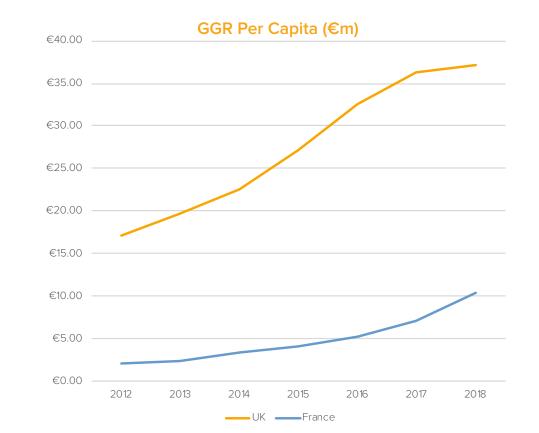
The UK market has been operational since the late 1990s when operators provided online betting services into the UK market from offshore, and the regulatory efforts have broadly been a drawn-out process of coaxing then forcing operators back onshore in terms of licensing and tax.

The Gambling Act of 2005, effective 2007, was a piece of legislation that laid out the framework and permitted mainstream advertising for the first time and this was updated in 2011 to add-in a requirement to pay tax on a point of consumption basis where tax was based on revenues generated in the UK regardless of the companies domicile.

From the outset the UK has been attractive to operators due to its liberal regulatory environment and large online gambling market, the largest in Europe. Operators are free to set their own margins and broadly free to offer any bet types, markets or sports they desire with only small levels of oversight from the regulator on this aspect.

It is difficult to give an accurate comparable estimate for active operators due to the large number of <0.5% market share firms but we believe around 40 operators of meaningful size are present in the UK currently, even accounting for some high-profile withdrawals from the market in the last two years.

France compares poorly with the UK on every metric of market competitiveness with far fewer operators and less revenue both on an absolute and per capita basis.



	UK Online Sports Betting	French Online Sports Betting
Population	66m	65m
Licenses	~40	13
Tax rate	15% GGR	9.1% handle
Typical margin	8%	16%
Restrictions on bets	No	Yes
Market size CY18	€2.4b	€691m



Comparisons With The Danish Market



Denmark opened up to regulated online gambling in January 2012 with online sports betting, online casino, online poker and online bingo all licensed and regulated in an open market for the first time. Prior to this gambling was technically limited to the monopoly operator Danske Spil, although in practice there was a very large grey market served by a number of international operators.

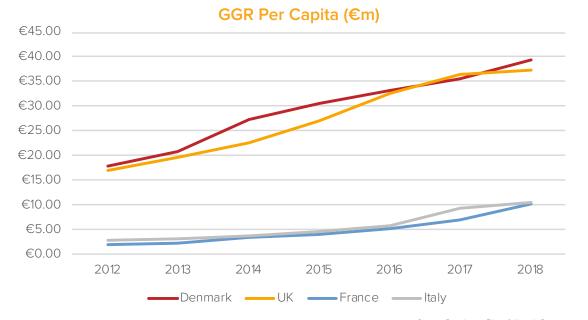
Denmark's regulations were designed in part to ensure as much capture of this market into the regulated sector as possible. Tax rates were set at a reasonable 20% GGR, but there were restrictions placed on marketing and a number of player safety mechanisms were baked into the legislation.

A total of 26 companies applied for sports betting licences in 2011, with 19 awarded and 16 remaining active in the market in 2013 falling back to 15 by 2015. As at 2018 there were 18 licences active in the market in the sports betting vertical and leakage to the black market is not considered significant.



	Danish Sports Betting	French Sports Betting
Population:	5.7m	65m
Licenses:	18	13
Tax rate:	20% GGR	9.1% handle
Typical margin:	10%	16%
Restrictions on bets:	No	Yes
Market size CY18:	€224m	€691m

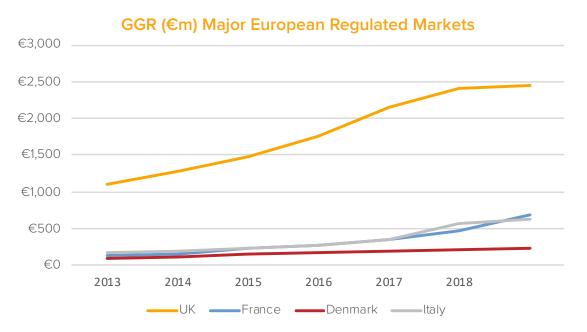




France underperforms the major Northern European regulated markets on every major metric including GGR per capita, actives and spend per active. This is a function primarily of the more limited product offering and the lower number of licences in the market.

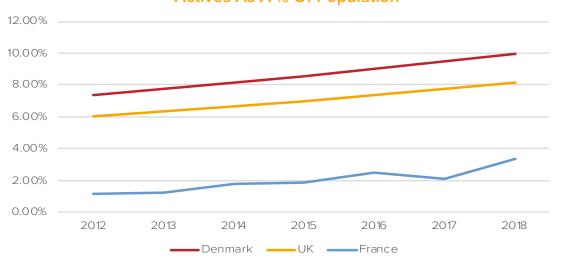
GGR per capita in the UK and Danish market, generally considered the benchmark of a well performing market and the closest comps with the New Jersey market, are between €35-40 compared to just below €10 in France.

Source: Regulators, Eilers & Krejcik Gaming



We note the market has begun to overtake the Italian online sports betting market, but it should be noted that considerable efforts have been made in Italy to curtail online betting activity including a full ban on gambling advertising. Italy is also a market that is considered one of the weakest in revenue terms in the European sector.

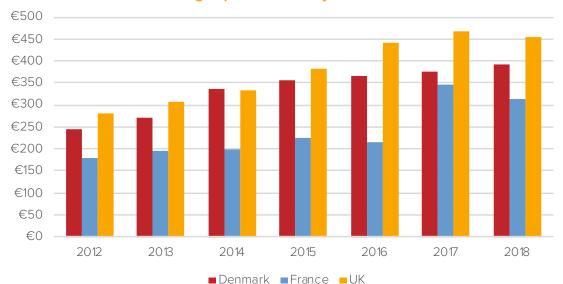




Actives As A % Of Population

The impact of the 85% rule on the market is hard to separate from other variables, but its impact is likely two-fold in reducing the absolute number of players and also in reducing the player value.

By adopting a high margin the French market retains an inability to attract the segment of sports bettors whose decisions are driven by value and best price. This market will not just be serious gamblers, but also recreational players who may be attracted by perceived value. The product does not appeal to this segment not least while other options exist on the black market.



Avg. Spend Per Player Annual

The second factor is the inability to extract more value from the player base through more repeated engagement. We can draw a comparison to the UK market where growth has been explosive when aligned with more promotions that effectively mean the operators bet to a lower margin as well as tighter pricing generally.

Source: Regulators, Eilers & Krejcik Gaming

Source: Regulators, Eilers & Krejcik Gaming



We note the strong recent growth in the French market and based on operator reports it appears one element driving this is more competitive pricing on key events and what operators describe as a more permissive approach to day-to-day margin and margins on key markets.

Senior Executive from French-facing firm:

"The sheer price aggressiveness that has filtered in over the last 5 years, means it's not unusual to see as low as 1% theoretical margin on some soccer matches, which is entirely ridiculous considering the 85% cap. It laughs in the face of the regulator."

Senior Trader from French-facing firm:

"Realistically it's impossible to bet to the margins some of the competitors bet to and return 85%."

Senior Executive from French-facing firm:

"I think there are some operators in there that really understand their market and we know from ARJEL public communications that some of these have breached the 85% with no consequences, this has allowed them to become bolder."

Senior Trader from French-facing firm:

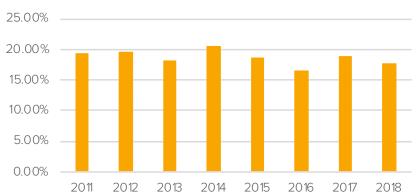
"The ones that have made major market share gains in recent years do not seem to be playing ball when it comes to trading margin, if it is there single versus parlay or pre-match to in-play splits must be unprecedented."

Summary:

Recent growth in France appears to be aligned with the operators working against the spirit of the 85% rule rather than with it and operators appear to be testing the limits of the regulations or finding a form of workaround.



Operators generally report compliance with the requirement to be reasonably straightforward, with some fairly important provisos around competitive pressures. One noted: "In reality hitting the margin is relatively easy (we've never failed to do so, even when they won World Cup), but doing so and actually gaining market share is impossible."



French Hold Rates

The process requires operators to have unique trading teams focused on the French market specifically, and this favours larger operators or niche start-ups over smaller firms looking at multi-state or multi-region business models.

Senior Trader from French-facing firm:

"In terms of working around it we use a higher theoretical margin, although this is driven by the tax situation as much as the 85% RTP. We also prohibit singles on very low margin bets."

Senior Executive from French-facing firm:

"We have a dedicated team that create a bespoke pricing and risk strategy. It's been made even tougher with the push against restricting customers, although the latter is being managed well with the regulator to date."

Summary:

Operators need to create unique teams and invest in bespoke trading strategies for the French market but will still struggle to gain market share without being able to pull the pricing lever.

The Impact On Customers Of The 85% Rule

The betting offering in France is fundamentally different to most major European markets. It is considerably more limited in the number of markets and number of sports on offer due to the requirement for betting markets to be authorised both by Arjel and the respective sports leagues.

The main difference due to the 85% rule is in the pricing. Odds are notably less consumer friendly than in the wider European market. If we look at Unibet.fr compared to Unibet.co.uk we can see there is a wide discrepancy in odds on a typical soccer game with odds of 2.15 in France being 2.35 in the UK.

To use basketball, the third most popular betting sport in France, as a more direct comparison with the US we can see from this example from unibet.fr the two core markets are priced at what would be in US odds:

Total (216.5): -137/-141

The respective prices on the bwin.com site are:

Total (216.5): -118/-102

Total points (Extensions included) Less than 209.5 2.36 Over 209.5 1.36 8% -92% Less than 210.5 Over 210.5 3% -Less than 211.5 Over 211.5 Less than 212.5 Over 212.5 2.05 Less than 213.5 Over 213.5 Less than 214.5 1.88 Over 214.5 Less than 215.5 Over 215.5 1.80 Less than 216.5 Over 216.5 Less than 217.5 Over 217.5 1.67

Unibet.fr

Over 215	1.74	Under 215	2.12
Over 215.5	1.78	Under 215.5	2.07
Over 216	1.81	Under 216	2.02
Over 216.5	1.85	Under 216.5	1.98
Over 217	1.89	Under 217	1.93
Over 217.5	1.93	Under 217.5	1.89

Unibet.co.uk

Summary:

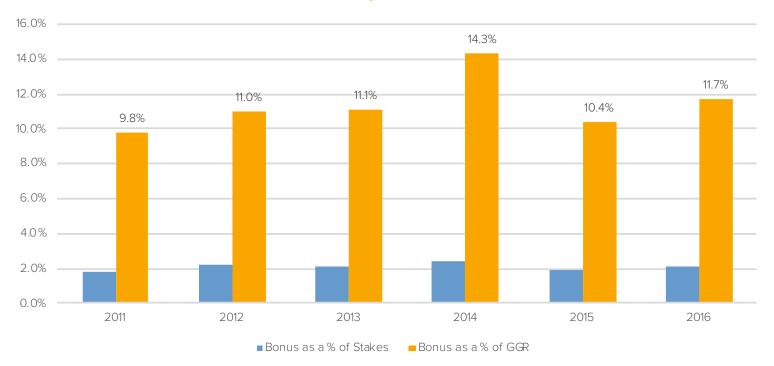
If US customers are expecting to be allowed a "fair bet" and not face huge restrictions then maintaining a minimum hold rate of 15% becomes increasingly untenable.

ilers&Krejcik



Free play as well as bonuses and promotions are much less widespread in France than in the other major regulated European markets. Bonusing does exist, however, and is generally at around 11% of GGR, which is notably lower than most European markets where 20-30% is generally the norm.

Bonusing is broadly restricted to sign-up offers and to multiple (parlay) bets at the major operators due to the dual desire to protect both bottom line and margin. RTP calculations in terms of compliance with the law are based on RTP after bonusing has been adjusted for, although tax rates will include bonus spend.



Bonus Spend In France

Operators active in several European markets report far less bonusing but an increase in volume and activity in recent years.

Executive at major European operator: There are still promos, bonuses and free bets. A lot of effort over the last few years on parlay bonuses such as paying x% bonus depending on how many selections in your parlay which makes perfect sense.

Summary:

Customers get far fewer promotions and offers although bonusing does still exist in a meaningful way in the market.



Arjel estimates the number of players at French-facing online casinos at between 0.3 and 0.5 million. We would estimate the sports betting market at around 10-20% the size of this and likely worth no more than €50m a year in total revenues.

It should be noted that France has very few operators from the old grey market era still supplying into the market. This would not be the case in a regulated US state. It is also notable that even with these restraints there was initially still a large black market and it has taken notably aggressive and resource heavy efforts from the French regulator to reduce the impact.

We note from the 2011 report, the first full year following regulation, Arjel noted:

"2011 did not see the sports betting sector grow as expected. The sector suffered a palpable drop in activity on all fronts: bets fell by 23%, its gross gaming revenue by 10% and the number of active players' accounts compared with the last quarter of 2010 by 17%. This drop in sports betting volumes is cause for concern for the regulator – if the players abandoning the legal market were to stumble upon illegal websites."

In terms of enforcement the French regulator has gone to considerable efforts in terms of IP blocking and legal notices, which are unlikely to be as simple and effective from a US state regulator to the established offshore market.

In 2012 Arjel noted:

"In total, since the opening of the market in June 2010, 1367 formal notices were sent by ARJEL to 942 different sites and / or their hosts."

In 2016 4 sports betting sites and 44 URLs were blocked.

In 2018 8 sites and 19 URLs were blocked.

Summary:

Leakage to the black market still occurs despite substantial efforts from the regulator and minimal presence from the pre-regulation grey market.



Based on evidence from France we believe a generally restrictive operating environment would lead to:

- Reduced licensees (high confidence)
- Lower per capita spend (medium to high confidence)
- More black-market activity (high confidence)
- Reduced capture of existing unregulated market (high confidence)
- Slower growth rates (medium confidence)



APPENDIX B:

Tenneessee Sports Betting Revenue Projection Methodology



B.1. Customer Composition Model

Our first approach to projecting the impact of the minimum hold requirement on Tennessee's legal sports betting market attempts to divide sports betting consumers into a handful of key cohorts. Once separated into those cohorts, we then assess (i) the relative contribution of each cohort to Tennessee's legal sports betting market, (ii) the likely attrition rate of each cohort under the minimum hold requirement, and (iii) the revised contribution of each cohort to the market. The difference between the initial expected contribution and the revised contribution represents the projected market decline in terms of total activity as a result of the minimum hold requirement.

Composition of the market w	organic hold	Composition with minimum hold requirement in place		Composition with minimum hold requirement in place
		Cohort attrition rate	Revised contribution to market	Assumptions
Illegal market transfer	15%	_	3%	Majority of illegal market demand (already depressed by college wagering restrictions) stays in the illegal market due to clear pricing advantage.
High volume	8%	100%	0%	High volume bettors are price-sensitive by nature and will migrate to illegal market or other states. These bettors may also face restrictions from legal TN sportsbooks due to the need for bookmakers to limit volatility in order to meet hold targets.
Moderate volume	4%	75%	1%	Less attrition here although still relatively easy for these bettors to shift action to other sites with better pricing (e.g., illegal, other states)
Low volume	3%	50%	2%	This cohort is less price sensitive and more convenience-based. But the most convenient thing for them to do is to continue with their current betting setup, meaning that any additional bit of friction involved with the legal product will reduce conversion from the illegal market.

Figure B.1: Customer Composition Model Detail



[Continued on next page]



B.1. Customer Composition Model (Con't)

Composition of the market w/	organic hold	old		Composition with minimum hold requirement in place	
		Cohort attrition rate	Revised contribution to market	Assumptions	
Social/casual bettor transfer	25%	_	13%		
High volume	5%	95%	0%	While the "social / casual" label may not conjure up images of high-stakes bettors, the reality is that many social bettors are high volume players (e.g., high-stakes private fantasy football leagues). They are price aware if somewhat less price sensitive than active bettors in the illegal market, and will be satisfied keeping their play contained within private channels (or exploring options in other states) if the legal market cannot provide reasonable value for money.	
Moderate volume	10%	50%	5%	Similar to the high volume cohort, these players are price aware and have plenty of competition for their business. Their peer groups are likely to actively explore alternatives and share findings.	
Low volume	10%	20%	8%	Less attrition here as these bettors are not as price aware or price sensitive; many only bet during major events. With that said, the nature of their betting habits (in groups of friends) gives them plenty of opportunities to be exposed to alternatives.	
New customers	60%	_	42%	We believe that new customers perceive a higher cost of switching than our other customer groups due to the legal product being their first point of exposure to betting.	
High volume	10%	95%	1%	Even with that advantage, high volume players in this group will still be price-sensitive and will evaluate alternatives, especially given that their experienced peers are likely to expose them to such alternatives.	
Moderate volume	20%	23%	16%	As with our other groups, moderate volume players are likely to be less price-sensitive and less motivated to switch than high volume players due to their reduced exposure. But a meaningful number of players in this cohort (i.e., those closer to the higher end of the volume spectrum) will be aware of and consider alternatives.	
Low volume	30%	13%	26%	The lowest volume players are generally the least likely to be price-sensitive or to be impacted by bookmaker restrictions.	
Total	100%		58%		

42%
Amount that the hold requirement reduces the market by

Source: Eilers & Krejcik Gaming



B.2. Product Mix Model

Our second approach to projecting the impact of the minimum hold requirement on Tennessee's legal sports betting market is based in an assessment of the typical distribution of single-event bets (e.g., prematch and in-play) versus multi-event (e.g., parlays, futures, and contests). This distinction is critical as it is easier for operators to disguise poor odds in multi-event wagers. With the minimum hold requirement creating prohibitively and obviously poor pricing for single-event bets, demand for these types of bets will plummet, leaving a market primarily driven by multi-event bets. The model attempts to capture how the relative absence of single-event bets will impact overall activity in the market.

Figure B.2: Product Mix Model Detail

Contribution of different bet types to total market				
Single-event (e.g., prematch and in-play)	82.50%			
Multi-event (e.g., parlays, futures, contests)	17.50%			
Impact of required 15% hold				
Share of single-event demand that is destroyed by 15% hold pricing	70.00%			
Share of single-event demand that drifts organically over into multi-event	15.00%			
Share that persists despite pricing	15.00%			
Share operators can recapture by offering new multi-event products	9.00%			
New market				
Single-event	24.75%			
Multi-event	37.30%			
Total	62.05%			
Market decrease driven by minimum hold requirement	37.95%			

Source: Eilers & Krejcik Gaming



B.3. GGR Comp Model

Our third approach to projecting the impact of the minimum hold requirement on Tennessee's legal sports betting market simply takes the relative performance of France's market compared to a blend of the online sports betting markets in the UK and Denmark. We then assign some share of the difference to factors other than the minimum hold requirement in France (e.g., the tax rate) and extrapolate a new value for the Tennessee legal sports betting market based on the remaining differential.

TN baseline value	\$195,070,000
Per capita GGR of comp markets (Euro)*	
UK	41.3
Denmark	36
France	7.5
Relative performance of French market to blend of UK and Denmark	19.40%
Amount accounted for by tax rate	50%
Decrease in market	40.30%

Figure B.3: GGR Comp Model Detail

*Trailing 3y average, conversion rate 1.17 Pounds to 1 Euro

Source: Regulators, Eilers & Krejcik Gaming

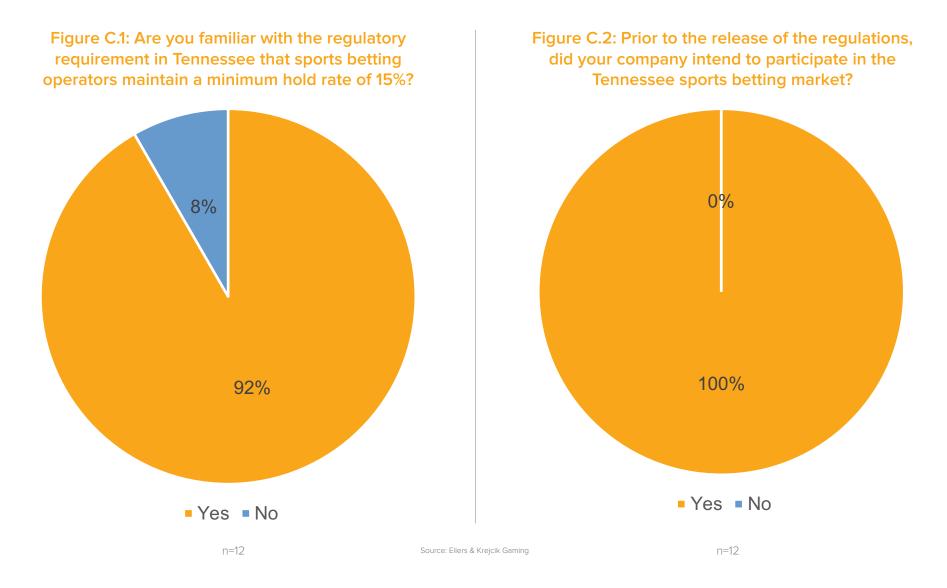


APPENDIX C:

Operator Survey Results

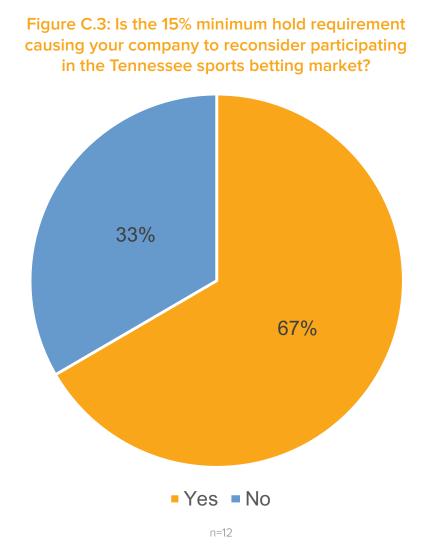


As part of our research, we surveyed a dozen stakeholders in the U.S. online sports betting market to capture their attitudes toward the minimum hold requirement. The answers to the anonymous survey are presented in the following slides.





As part of our research, we surveyed a dozen stakeholders in the U.S. online sports betting market to capture their attitudes toward the minimum hold requirement. The answers to the anonymous survey are presented in the following slides.



Source: Eilers & Krejcik Gaming



Figure C.4: Do you believe that the minimum hold requirement will have a negative impact on the consumer experience in Tennessee?If so, what are some reasons why? Please explain below. (Open-ended)

Traditional hold is around 6% in the legal market and likely less in the illegal market, so TN consumers will be returned about 250% less money than in those markets.

Ultimately, it will attract fewer sharks and professional punters.

Yes. Impossible to compete with the black market.

Yes, they will not want to play at our site when black market sites offer better pricing. And tenn's high SB tax rate and high annual fee of \$750k make this market less attractive than others in the first place

Not competitive with other markets. Consumers will see unfavorable/unfair odds and bet structures.

It will have a disastrous impact. Existing sports bettors will stay with the illegal market and new sports bettors will be offered untenable odds. TN will have no ability to compete with other legal jurisdictions.

Tennessee will be less competitive than other states and put operators in the state at a disadvantage.

Possibly, if it is in stark contrast with other markets

This will make the pricing in the market significantly worse than other jurisdictions.

Negative. Operators have no choice but to make a significant change to their standard offering to try and hold 15% and that means a bad experience for the consumer. Consumer stickiness will be very low and operators will not invest in keeping the casual player. Players in the state will not see the same promotions and the illegal market will become even stronger in the state.

Yes, the requirement treats sports betting as if it is a traditional lottery product based on a fixed prize matrix which will not work for sports betting.

Yes. This will minimize their opportunity for max payouts and likely encourage the illegal market.



Figure C.5: Do you believe that the minimum hold requirement will have a negative impact on the quality of the sports betting product in Tennessee? If so, what are some reasons why? Please explain below.

- Higher prices, fewer promotions/bonuses, fewer companies in the market.
- It will provide fewer profit opportunities for punters.
- Yes. As above.
- Yes, players will lose faster than they otherwise should, increasing risk of responsible gaming issues and impacting player retention rates from operators
- Yes. Consumers will face unrealistic odds and unfavorable returns. Less types of bets as well
- Yes, it will have a negative impact. The product being offered will be out of market.
- Certainly, as it will reduce the volume and reduce the economic opportunity for operators as well as the state.
- Yes operators may not be able to effectively operate
- Yes the best operators may skip the market entirely. There won't be much competition for the remaining operators.
- Yes because operators will not be able to run the same product in the state that they do in other places. Operators will prioritize improvements in other places before focusing on Tennessee because the economic opportunity is not the same.
- Yes. See above.
- Yes. They will look to better odds elsewhere such as the illegal market.



Figure C.6: Do you believe that the minimum hold requirement will increase or decrease revenue to the state from legal sports betting in Tennessee? If so, what are some reasons why? Please explain below.

Depends on total handle. I personally believe total handle decrease by 2.5x or more over our initial projections at about a 6% hold.	But if the state
believes that they can keep more handle than that, then sure I guess they might make more revenue than without the requirement.	

believe that it will ultimately decrease revenue to the state from legal sports betting as offshore and adjacent market betting will be priced	more
competitively.	

Substantially decrease

Decrease, fewer players equals Flores revenues

Decrease over time. Consumers will not see any value in betting legally in the state. They will stop, go over state lines or offshore.

Decrease

Decrease

Unsure

decrease - no one will play.

Decrease. I think some operators that would otherwise enter the market will decide not to or they will prioritize other states first before entering the market. I think companies will decide not to invest as heavily in marketing and retention in the state because they think that money will be better spent in other states. And I don't know why a consumer that is already betting -110 lines moves to the regulated market at -160

Decrease

decrease.



Figure C.7: What do you think are some potential unintended consequences of Tennessee's minimum hold requirement?

Size of illegal market increases dramatically. TN doesn't generate as much licensing revenue as they anticipate.

I think it will restrict growth in the market, but this may be intentional.

Less competition and stronger black market.

Keep operators from entering that state and those that do will not invest as much as they otherwise would

Limited operators, limited choices, reduced vs increased taxes to the state.

Players won't play

Would-be participants will continue to wager on the black market. Programs that rely on budgeted funds coming from the sports betting expansion will suffer.

Not receiving a lot of interest from several operators

There won't be any participation. They may end up with a single operator through the lottery, which was not the intent of the legislation.

Operators will not invest in marketing and player retention in the same way they otherwise would which stunts the market Offshore books actually get stronger in the state because word of mouth will spread that you get much better odds there

Sports betting operators haven't designed their products based on a fixed prize matrix. It will force operators to design a sports lottery game, and not offer true sports betting.

Proliferation of the illegal market



5 CORPORATE PARK | SUITE 110 | IRVINE CA | 92606 | WWW.EKGAMINGLLC.COM

Disclosure: Eilers & Krejcik Gaming, LLC is an independent research firm and is neither a registered broker dealer nor a registered investment advisor. No information contained in this report shall constitute as a recommendation or solicitation to buy or sell a security. Individuals receiving this report should consult with an investment advisor or registered representative before making an investment decision related to any information contained in this report. In addition, Eilers & Krejcik Gaming, LLC either does, or may seek to do business with any company mentioned in this report. This report was prepared for and distributed to clients of Eilers & Krejcik Gaming, LLC. If you are not the intended recipient and/or received this report in error, please delete this document and notify Eilers & Krejcik Gaming, LLC at dleary@ekgamingllc.com, or call 310-743-6239. This report is also protected by federal copyright law. Any unauthorized review, dissemination, or copying of this communication is strictly prohibited. By accessing, reading, storing, distributing and archiving this research report, you hereby agree, fully, and without dispute, to all terms and conditions outlined above.

