Antitrust and Mobile Sports Gambling

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Online sports gambling is one of America’s fastest-growing industries.¹ In Murphy v. National Collegiate Athletic Association (2018), the Supreme Court struck down the federal law that banned gambling on sports, the Professional and Amateur Sports Protection Act (PASPA).² After PASPA was passed in 1992, nearly all bets were placed illegally. According to the American Gaming Association, of the $4.76 billion wagered on the 2018 Super Bowl—shortly before the Murphy decision—97 percent of the money was gambled illegally.³ PASPA permitted sports gambling in Nevada, which had already legalized the practice, but prevented all other states from hosting sportsbooks.

Murphy brought the sports gambling industry out of the shadows. The NFL and other leagues lobbied aggressively for legalizing gambling, recognizing the revenue potential. Thirty-eight states and the District of Columbia have since passed laws allowing bets to be placed within their borders.⁴ Five years after Murphy, the industry continues to grow rapidly. In 2023, US sports gambling achieved $10.92 billion in revenue, up 44.5% from 2022.⁵ FanDuel and DraftKings are the key players in this market, but new entrants may threaten their dominance.⁶ Disney recently launched ESPN Bet, which will feature on its ESPN broadcast network. Fanatics, a large sports apparel brand, has acquired a competitor called PointsBet.⁷ As of the end of 2023, FanDuel and DraftKings accounted for 69% of the market, while ESPN Bet, the third largest sportsbook, held 8% of the market.⁸

Since the Supreme Court opened the door to piecemeal, state-by-state legalization of mobile sports gambling, no national regulatory framework has been created to govern the industry. In the context of weak regulation, much attention has been placed on the risks and costs of gambling to consumers. Unregulated access to online gambling can significantly impact vulnerable populations, particularly minors and individuals with gambling addictions.⁹ Already, the boom in sports betting has led to an increase in inquiries to the National Problem Gambling Helpline Network, which received 270,000 calls, texts, and chats in 2022—a 45 percent jump from 2020 to 2021.¹₀

⁷ Id.
⁹ Joe Hernandez, Sports betting ads are everywhere. Some worry gamblers will pay a steep price, NPR, https://www.npr.org/2022/06/18/1104952410/sports-betting-ads-sports-gambling (last visited Mar. 19, 2024).
¹₀ Id.
This paper surveys the issues associated with unregulated sports gambling with a focus on its implications for antitrust regulation. Part I analyzes concerns about algorithmic collusion, raising the possibility that online sportsbooks could collude with one another through algorithms that set betting odds in an anticompetitive manner. Part II analyzes concerns about ownership of the data necessary to run a gambling site, as sports leagues have a monopoly over this data. Part III surveys the European Union’s regulation of sports gambling, which is more robust and has a longer history than the United States. Lastly, Part IV discusses additional issues of consumer protection and pricing that relate to the online choice architecture of the gambling industry.

I. Algorithmic Collusion in Sportsbook Oddsmaking

The typical sportsbook is directed by a head oddsmaker who oversees a team of in-house statisticians and data analysts.\(^{11}\) The team consults data sources and runs computer algorithms to generate odds. They also rely on non-quantitative information such as injury reports from inside sources.\(^{12}\) Their objective is to set odds, and change them over time, to attract an equal amount of betting on both sides of each wager. For example, if Team A and Team B play tomorrow and the sportsbook believes Team A has a 60% chance of winning, the implied odds offered for betting on the game may be that Team A has a 65% chance of winning and Team B has a 45% chance of winning, a sum of 110%. By taking bets on a wider range of outcomes than are possible, the sportsbook makes a profit on average. The percentage deducted from the gamblers’ winnings is called the vig or “vig.”\(^{13}\)

Sportsbooks minimize risk if bettors place an equal amount of money on Team A and Team B. So if the game is approaching and gamblers disproportionately are betting on Team A, the sportsbook is incentivized to adjust the odds to be more favorable to Team B, reducing profit (the “vig”) but insulating them from losses if Team A wins. This requires a delicate mathematical balance between risk and profit potential. The extent to which algorithms control this balance is an industry secret, but it’s reasonable to suspect that human decision-makers are increasingly minimized.\(^{14}\) Especially as machine learning and AI technologies advance, the speed, precision, and decisiveness of algorithms may justify a largely inhuman approach to day-to-day oddsmaking.

There is also some direct coordination between sportsbooks in oddsmaking. Some sportsbooks hire third-party firms that provide odds for multiple clients, and others simply copy odds from one another. A company called CG Technology, for example, traditionally provides


\(^{12}\) See infra Part IV for discussion of the role of inside sources.


\(^{14}\) See McGrath & Pempus, supra note 11 (explaining that oddsmakers rely on “sources such as computer algorithms, power rankings and outside consultants to set prices”).
sports odds for brick-and-mortar casinos in Nevada. Another company, Don Best Sports, is said to perform a similar function for many online sportsbooks.

A. Regulating Algorithmic Collusion in Sportsbook Oddsmaking

It’s an open question in American antitrust regulation how much algorithmic coordination can constitute collusion under the law. Current American antitrust laws permit tacit collusion without explicit agreement, but sophisticated algorithms are pressing the limits of this as they make collusion without explicit human agreement increasingly possible and profitable. Pricing software has existed for decades, but technological developments have caused models to shift from extensive manual adjustment to now responding almost instantaneously to marketplace dynamics without any human interaction. For sportsbooks, this means that their odds-setting algorithms can automatically account for a player being ruled out or a sudden rainstorm that might affect the odds tied to a game. As DraftKings executive Paul Liberman has acknowledged, AI algorithms are involved in “pricing . . . odds feeds when you go and make a bet.” Some models may also be programmed to respond to other sportsbooks’ changes in odds, but this is also an industry secret. Similar programs in other industries have been shown to increase margins, with the greatest effects where multiple firms in the same industry adopt algorithmic pricing software.

Before reaching the question of whether sportsbooks’ algorithms talk to one another in a way that constitutes collusion, it is worth examining how oddsmaking occurs within the context of modern antitrust law. First, sportsbook odds should be thought of as prices the same way that milk is priced at the supermarket. The sportsbooks extract a premium from consumers in the form of the “vig,” discussed above, the same way a supermarket marks up milk from its supplier to cover overhead and make a profit. Under competitive market assumptions, supermarkets offer the price most attractive to consumers to sell the quantity that maximizes revenue. Sportsbooks have the same incentives so long as there is sufficient competition. It is permissible to take odds from third-party consultants, or even copy from one another, so long as the market is reasonably elastic to more and less favorable odds. If FanDuel sets odds with a large “vig” (e.g. giving each of two evenly-matched teams an implied 60% chance of victory against one another), DraftKings or any

16 Id. On their LinkedIn profile, they assert that “Our data is so sharp many of our clients include ‘Handicappers’ who use our data to improve their own understandings and plagiarize them as their own.” Don Best Sports, LINKEDIN, https://www.linkedin.com/in/donbesttrading/ (last visited Mar. 19, 2024).
18 See Kart Kandula, Addressing The Potential and Pitfalls of Dynamic Pricing Algorithms (Thurman Arnold Project Department of Justice Conference, 2023), https://som.yale.edu/sites/default/files/2023-05/TAP_Algorithmic_Collusion_Paper_2_1_0.pdf
other sportsbook would stand to profit by undercutting FanDuel’s “vig” by giving each team an implied 55% chance of victory rather than 60%.

This is where algorithmic collusion factors in. The public has little information on how much FanDuel, DraftKings, or any of the minor sportsbooks rely on human decision-makers, algorithms, or a combination to set their odds. For the market in oddsmaking to be efficient relies on several assumptions that antitrust enforcers may want to question. Three are highlighted here.

First, how much do the sportsbooks plagiarize one another or use each other’s odds to calculate theirs? If all algorithms are programmed to automatically achieve parity with FanDuel, for example, competition in the marketplace is undermined. FanDuel would have broad power to set less favorable odds without being undercut until a manual oddsmaker intervened. Even if a sportsbook could find a competitive advantage in undercutting FanDuel’s odds, it loses the capacity to do so if its algorithm is programmed to track FanDuel (or to track another sportsbook that tracks FanDuel). In a famous example of a pricing spiral along these lines, two booksellers using Amazon’s algorithmic pricing tools caused the price of a book to soar to $24 million dollars because each book was programmed to be slightly more expensive than the other.  The likelihood of this kind of algorithmic error in gambling odds depends on details of the sportsbooks’ algorithms that are not public information.

Second, to what extent does the typical bettor compare odds across sportsbooks? Signing up for a sportsbook is a time investment, and comparing the odds of the same bet across multiple sportsbooks every time they place a bet would be a massive undertaking for a regular gambler. The competitive market rests on the assumption that gamblers are willing and able to do so, but there is little empirical research on this question.

Third, to what extent does the typical bettor understand whether a bet is more or less favorable to them? If we consider complicated bets, such as parleys, legitimate concerns arise about the cognitive capacity of bettors to notice whether the odds are in their favor. Consider the following bets:

Team A is listed at -180 to defeat Team B, and Team C is +230 to defeat Team D. Parlayed together, Team A and Team C are set at +290 to both win. A bettor may see value in linking these bets together if they feel confident Team A will win and they want to get better odds on the result of Team C vs. Team D. Converting these bets to implied odds, Team A is 64% likely to win on its own and Team C is 30% likely to win on its own. The parlay at +290 is a 26% implied likelihood of success, but the true likelihood of both a 64% occurrence and a 30% occurrence is only 19%.

Because few bettors recognize they’re getting a bad deal, the competitive assumption of perfect information is shattered. Even if another sportsbook offers more favorable odds on the

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22 See infra Part IV for discussion of switching costs and dependency.
same parlay, bettors may not have the willingness or the capacity to check other options. It would disincentivize sportsbooks from trying to undercut one another if gamblers have diminished capacity to flag when they’re getting a bad deal and either seek out odds for the same bet on other platforms or place these two bets separately.

This illustrates why it may be possible for oddsmaking algorithms to collude with one another without 1) consumers noticing or 2) a non-colluding algorithm jumping in to offer better deals and take market share away from a dominant sportsbook. Discerning how much these algorithms speak to one another, and whether this communication should be considered an agreement to collude under American antitrust laws, requires looking under the hood at online sportsbooks’ proprietary systems.

B. **Additional Risks and Challenges from Micro-Betting**

“Micro-betting” is another trend in online sports gambling that should draw attention. Micro-betting refers to bets that sportsbooks offer at short intervals on events in a game that are about to happen. In baseball, for example, a bettor can gamble on whether Shohei Ohtani will get a hit as he steps up to the plate on their TV screen. A specialized micro-betting sportsbook called Simplebet takes bets on tiny outcomes like the speed of the next pitch, “Is it going to be faster than 94.5 mph?” Micro-bets such as pitch speed pose several issues. In 2023, after the introduction of the MLB pitch clock, the average time between pitches was 15.3 seconds. Suppose a bettor has a TV that lags a few seconds behind the real-time game, or suppose they are betting while looking for updates on the ESPN app, which could be even slower. One concern is that a bettor may think they’re betting on the speed of the third pitch in the plate appearance when they’re actually betting on the fourth because of this lag. These small bets could be hotbeds for small forms of deception that either allow the sportsbook to gain an edge or undermine the assumption that bettors have complete information on what they’re betting on.

A second, more speculative concern is that lightly-regulated sportsbooks like Simplebet could be gaming lag times to illegally manipulate bets. Suppose a gambler places a bet on “over 94.5 mph” for the next pitch but places the bet in a gray zone right before the pitch happens and the bet is cut off. This creates opportunity for fraud if a sportsbook like Simplebet can adjudicate delays through their algorithm in ways that illegally manipulates results in their favor. A third concern is how micro-betting opens greater possibility for inside information and tampering at the expense of “regular” customers. This may seem like irrational speculation, but the recent baseball

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[24] Id.


II. Monopolizing Sports Data

The modern era of sports information is defined by big data, and its future promises even broader landscapes with player biometrics, near-instantaneous stadium-to-bettor transmission, and evolving analytical possibilities. Historically, the forms of sports data collected included event results and player physical testing results, such as their vertical jump, bench press, or 40-yard dash. But improvements in monitoring devices allow every movement and health metric to be captured throughout an event or practice. This data can be incorporated into sportsbook models to better predict competition outcomes and make sportsbooks even more profitable in the long-run. They also raise difficult legal questions. For instance, can a player sell their health data to sportsbooks? Would that transaction violate insider trading rules? Perhaps the sports league in which the player competes might press a claim for ownership over that player’s data. Among these and other legal dilemmas, the possibility that leagues and sportsbooks will leverage exclusive control over sports data to gain control of the sports data market looms large.

Professional sports leagues already exercise a monopoly over hosting the highest level of contests in their respective sport. In fact, Major League Baseball is mostly exempt from antitrust laws. Other sports leagues, including hockey, football and basketball, have partial exemptions for negotiating broadcast agreements. Of course, these exemptions do not grant sports leagues total immunity from antitrust violations. If a league engages in exclusionary conduct that limits new competition in another industry, for instance, they could face antitrust liability. The importance of data to sportsbooks’ profit models and the substantial opportunity for league control over its access places it at the center of any antitrust discussion on the industry. Several of the major possibilities for anticompetitive violations related to proprietary data include collective data licensing, data commerce monopolization, and integrity fees.

A. Collective Data Licensing

One way that sports leagues may violate antitrust law is through collective data licensing. Teams are often the only sources where third parties can acquire data concerning team practices or

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30 Id.


player health and biometrics. In order to leverage this proprietary access, some leagues might require that member teams sell their data collectively at the league level. An exclusive league-wide data licensing policy would preclude a potential purchaser from licensing the rights to statistical data from just a single team. Already, the MLB and other professional sports leagues have begun the process of collectivizing and selling their data in just this fashion. Their coordination may implicate Section 1 of the Sherman Act, which covers concerted action that harms competition.

In American Needle, Inc. v. National Football League and National Collegiate Athletic Association v. Board of Regents of the University of Oklahoma, the Supreme Court acknowledged that collective licensing of professional sports team trademarks and television broadcasting rights could constitute an antitrust violation. These cases permitted concerted action where teams were pursuing a common objective, such as using league-wide policies to provide the highest level of viewer engagement with sporting competitions. But when teams instead act as “separate economic actors pursuing separate economic interests,” they risk engaging in restricted activity. This occurred when professional sports teams in the NFL collectivized merchandise sales. According to the Court, each team’s interest in merchandise sales was independent of other teams’ sales success. For teams engaging in league-wide data sales, there seems to be a similar argument that the teams would otherwise be independent actors seeking to earn the highest price for their data regardless of how successfully other teams sell theirs.

At the same time, other rulings permit a greater measure of collective negotiation when entities leave room for individual competition. For example, in Broadcast Music, Inc. v. Columbia Broadcasting System, Inc., the Court rejected an antitrust challenge to the collective licensing of materials produced by individual composers, authors, and publishers. It held that the pooling of individuals’ copyrights for the purpose of offering a blanket music license was pro-competitive under a full rule of reason analysis because individuals could still sell their copyrights outside of the collective arrangement. Similarly, if leagues developed a policy where potential purchasers could choose between an individual team’s or league-wide data, it could stand a good chance of being upheld.

34 Osborne, supra note 29, at 37–39.
36 Id.
39 Id. at 197.
40 Id. at 200–202.
41 Holden, supra note 33, at 132–133.
42 441 U.S. 1, 5 (1979).
43 Id. at 24–25.
44 Holden, supra note 33, at 126.
In an analysis under Section 1 of the Sherman Act, a court would also weigh potential anticompetitive effects from concerted action with potential pro-competitive justifications to reach a profit-maximizing outcome. There are several practical reasons why a court might consider collective data licensing pro-competitive. For instance, a centralized approach could substantially reduce transaction costs for potential licensees, enhance inter-league competition, or improve in-game competitive balance through shared profits. Moreover, there is arguably lower demand for an individual team’s data compared to league-wide data because sportsbooks offer betting on an entire league’s competitions, not just those in a single regional market.

B. Data Commerce Monopolization

Some leagues appear to be capitalizing on their monopoly over the market for hosting the highest level of competition in their respective sport to capture the data and sports betting market, which could violate Section 2 of the Sherman Act. Central to the sportsbook model is access to the highest quality predictive data. This data helps sportsbooks set their odds at profit-maximizing levels, and the rapid growth of sports betting has driven a surge in the data’s associated value. Leagues market their data as superior and with the lowest latency, even where some third parties have managed to collect and distribute data. Although the leagues’ marketing pitches may be based on reality, they have taken additional steps to exert their existing market power to corner the market.

In exchange for naming a sportsbook as an official betting partner, leagues sometimes might require that the sportsbook purchase official league data. According to multiple reports, the MLB and other leagues have already started to form exclusive partnerships with sportsbooks. Several leagues have pushed their reach for control a step further and have lobbied legislatures for statutory requirements that sportsbooks purchase official league data rather than third-party alternatives. These partnerships and statutory protections may only further limit competition in the sports data market.

Another potential issue is the high level of common ownership of professional sports teams, data brokers, and sportsbooks. Common ownership structures have recently been the subject of heightened antitrust scrutiny, particularly in the context of increased equity market dominance by

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46 Holden, supra note 33, at 122–126.
47 Id. at 77.
institutional investors. There is evidence that common ownership can suppress competition, and it has led some to suggest that the issue should be addressed by antitrust enforcers. In the industry for professional sports, several billionaire team owners hold substantial stakes in the data brokers as well as in the sportsbooks at the end of the chain. Although common ownership alone does not raise any red flags, it may impact how league data and media partnerships are established.

In fact, the common ownership has been followed by substantial consolidation among data brokers, facilitated by exclusive league contracts. For instance, in 2019, the NBA announced official partnerships with Sportradar and Genius that would confer distribution rights to official league data—both companies are owned in part by Mark Cuban and Michael Jordan, team owners in the NBA. The NBA data broker deal was followed by an announcement of a similar deal by the MLB. Just a few years ago, Sportradar claimed to control over 90% of some statewide sports data markets. Abroad, these companies have faced antitrust lawsuits as a result of their exclusive deals with sports leagues, although the suits have only resulted in settlements so far. These cases considered whether the contracts constituted an abuse of a dominant position that permitted the data broker to extract monopoly rents for the duration of their exclusive deal.

C. Integrity Fees

Professional sports leagues’ reach for control over who can use their data and at what cost has also extended into federal and state legislatures. Several leagues are lobbying for mandates that sportsbooks either use official league data exclusively or pay an “integrity fee,” which would grant leagues a cut (around one percent) of wagers placed on their sporting events through legalized sportsbooks. If integrity fees were enacted in every jurisdiction, the leagues’ cut would be on the order of $2 billion dollars annually. League commissioners justify the integrity fee, in part, as

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52 See e.g., O.E.C.D., Hearing on Common Ownership by institutional investors and its impact on competition - Note by the United States (Dec. 6, 2017) (discussing the “possibility of active efforts to coordinate the decisions of competitors by or through common owners”).

53 See e.g., José Azar, Martin C. Schmalz & Isabel Tecu, Anticompetitive Effects of Common Ownership, 73 J. OF FIN. 1 (2018) (arguing that common ownership of airlines has amplified anticompetitive pressure on the industry); José Azar, Sahil Raina, & Martin Schmalz, Ultimate Ownership and Bank Competition (2019) (arguing that common ownership of banks has amplified anticompetitive pressure on the industry).


55 Id.

56 Id.


58 Id.


payment by sportsbooks for use of the leagues’ intellectual property. They also view it as a form of compensation for the additional measures leagues have taken in response to the threat sports gambling poses to intra-league competition. However, the amount spent on these measures pales in comparison to the far larger amount leagues stand to gain from integrity fees.

The integrity fee could be anticompetitive because it makes the use of “official data” the cheaper option. By imposing a fee on sportsbooks that opt to use unofficial data sources, leagues effectively raise the cost of doing business with these alternative data providers. This would drive sportsbooks toward using official league data to avoid the added expense from the integrity fee, thereby consolidating the leagues’ control over the market for sports betting data. This could stifle competition by marginalizing independent data providers and reducing the variety of data sources available to sportsbooks.

Nevertheless, integrity fees stand a good chance of being enacted, at least on a state-by-state basis. While no states have passed an integrity fee, state legislators have introduced proposals in at least ten states, according to a study conducted in 2018. The integrity fee originated and has been implemented across the international sports betting landscape, with countries such as France and Australia mandating sportsbooks pay leagues a small fee for the right to take wagers on their events. A theoretical analysis of the various lobbying and electoral pressures around the issue suggests that the legislative incentives point toward integrity fees eventually being passed into law in the United States as well.

Without a statutory basis for integrity fees, however, any league claim that is grounded in an alleged intellectual property right over game data is unlikely to be successful. Leagues lack patent rights over their data, and copyright claims over game results face hurdles because the information has historically been considered to be in the public domain. Further, trade secret protections might apply to certain refined data types, but not most replicable information that arises from public sporting events.

61 Holden, supra note 59, at 38; John Holden, Making Sense of Sports’ Leagues Search for Sports betting Fees, LEGAL SPORTS REP. (Jun. 18, 2018) (quoting MLB Commissioner Robert Manfred, “We think that the integrity fee—a negotiable number somewhere below one percent at this point—is an appropriate recognition of the fact that the gambling industry is riding our intellectual property, our content, and is presenting a threat to our competition from an integrity perspective so that we’re going to have to spend money to prevent that threat from becoming a reality.”).
62 Holden, supra note 59, at 38.
63 Id. at 37.
64 Id. at 42–45.
66 Holden, supra note 59, at 42.
67 Holden, supra note 33, at 101–07.
68 Id. at 102.
69 Id. at 104–05.
70 Id. at 105.
III. EU Regulation of Online Sports Gambling

Regulation of gambling in the EU may help inform American regulatory practices. Most EU countries have some form of legalized online gambling. These countries must organize and regulate the industry in compliance with the laws of the European Union. The EU’s laws accommodate a wide range of regulatory options. Today, 25 of the 29 EU countries have a multi-licensing regime, meaning there are competitive and regulated online gambling markets where both private and public sportsbook operators can apply for licenses. Only two countries, Finland and Norway, govern online gambling with a total monopoly. A key reason for the shift to multi-licensing is that when gambling odds in a country are not as competitive as in other countries, consumers can turn to the “gray market,” placing bets illegally on international websites that do not adhere to the country’s consumer protections.

Many EU countries have more robust consumer protections than the US for online gambling. For example, like in some US states, all but two EU Member States require self-exclusion tools where gambling addicts can register themselves and be barred from placing bets. However, unlike the US, twelve EU Member States prohibit companies from sending targeted advertisements to people on these self-exclusion lists. Furthermore, sixteen Member States have established an independent gambling authority tasked with monitoring and enforcing gambling regulation.

The European Union, as a body, has not passed any laws specific to online gambling. Member States’ gambling regimes must comply with the "fundamental freedoms" outlined in the Treaty on the Functioning of the European Union (TFEU), and the interpretation of these freedoms by the EU Court of Justice. The Court has issued several decisions on how countries can regulate their online gambling industries, which may be instructive as American regulators think through how to protect consumers from the risks of online sports gambling. Notably, the Court focuses its attention on what purposes are motivating a country to legislate in the area of online gambling.

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75 Id.
A. Relevant EU Case Law

Before the internet, the EU Court of Justice recognized the wide discretion of countries to regulate gambling services in the interest of consumer protection. In Schindler (1999), the Court classified prohibitions on advertising and selling lottery tickets as a restriction on the “freedom to provide services,” one of the fundamental freedoms of the TFEU. Nonetheless, the Court held that because these regulations were passed to protect consumers and maintain “public order,” the laws were a justifiable restriction of the freedom to provide services.

In other cases specific to online gambling, the European Court of Justice (ECJ) articulated this as a proportionality test that limits countries' discretion to regulate the online gambling industry. The proportionality test formalized the competing interests, as identified in Schindler, of facilitating the freedom to provide services and limiting the dangers of gambling. The Zennati (1999) decision was the first to directly address online sports gambling. Mr. Zennati, an employee of an English sportsbook, was charged under Italian law for taking bets from Italian citizens on foreign sporting events and placing them with an English sportsbook via the internet and fax. At the time, Italian law only permitted sports gambling under a limited number of licenses given to horseracing and the National Olympic Committee. The Court held that EU countries' laws must respect the recognized cross-border freedom to provide services within the EU, but Italy met this standard because its restrictive measure (limited licensing) applied to both Italian and foreign sportsbooks equally. To limit the freedom to provide services, the government must 1) have a public interest such as consumer protection, preventing gambling addictions, preventing fraud and other crimes, or the general preservation of “public order,” and 2) must not discriminate between foreign and domestic sportsbooks.

Subsequent cases clarified the limits of this proportionality test. Gambelli (2003) followed a similar fact pattern to Zennati: English betting agents, operating as part of a company licensed in England, were prosecuted for taking bets in Italy after failing to obtain an Italian betting license. Here, however, the ECJ concluded that Italy was motivated by tax revenue to deny licenses to these English companies rather than an ethical obligation to limit gambling. Because Italy took steps to encourage gambling through the licensed sportsbooks, the Court inferred that denying licenses to the English sportsbooks was discriminatory. Further, they defined enhancing tax revenue as an improper reason to restrict the freedom to provide services. In Commission v Italy (2007), the ECJ similarly found that the automatic renewal of Italy’s horse racing licenses, without an opportunity for other sportsbooks to bid for these licenses, violated the proportionality test as there was little reason to close off bidding opportunities aside from favoritism.

77 *Id.* at 8.
78 *Id.* at 9-10.
79 *Id.*
80 *Id.* at 11-12.
81 *Id.* at 14.
More recent cases have clarified these principles with respect to online gambling businesses that parallel the structure of DraftKings and FanDuel. In 2017, Maltese company Unibet International Ltd. challenged the validity of Hungary’s regulatory regime for online gambling. Unibet argued that Hungary makes it practically impossible for foreign gambling sites to obtain licensing to operate in Hungary. The ECJ agreed, finding that aspects of the licensing regime established in Hungary have no overriding public policy purpose, such as one based on consumer protection. Because Unibet’s freedom to provide cross-border services was violated without any such valid purpose, Hungary’s law was inconsistent with EU law.82

However, in a separate case challenging the broader Hungarian regulatory scheme, the ECJ deferred to the Hungarian legislature. In 2018, the Court upheld Hungary’s dual system of regulating online sports betting: some gaming services are offered by a monopoly established by the state, and other services are offered by multiple services licensed by the state. This system, as a whole, does not sufficiently violate the freedom to provide services.83 Member countries have discretion to select the way they regulate mobile sports gambling so long as it is nondiscriminatory and the purpose of regulating adheres to the proportionality test.

B. Comparing EU and US Regulation

The ECJ explicitly distinguishes between “good” and “bad” reasons to restrict sports gambling. When European countries regulate with a moral or ethical obligation to reduce gambling addiction or prevent fraud, for example, the ECJ has upheld such laws as a legitimate reason to limit the cross-border economic freedoms embedded in the EU charter. But when a country does so only as a way to enhance tax revenue, or when the court cannot discern a valid moral or ethical effect of a country’s legislation, it has struck down the law.

American state regulation of sports gambling, on the other hand, has been criticized by many as blind pursuit of tax revenue. It is well documented that state legislators have been driven to legalize online sports gambling as a way to enhance tax revenue.84 New York, for example, legalized the industry in 2022 with a 51% tax on gross revenue.85 This motivation is exactly what the ECJ would characterize as an improper reason to limit the freedom to provide cross-border services. In the United States, however, there is no constitutional principle that makes it improper for sportsbooks set up in New Jersey to be subject to tax rules in New York. US courts therefore place no requirement on New York to justify its 51% gross revenue tax as a way to preserve “public order” or prevent addiction or crime.

83 Sporting Odds Ltd v Nemzeti Adó- és Vámhivatal Központi Irányítása, COUNSEL MAG., https://www.counselmagazine.co.uk/content/Sporting-Odds-Ltd-v-Nemzeti-Ad%c3%b3s-%c3%a9s-V%c3%a1mhivatal-K%c3%b6zponti-Ir%c3%a9ny%c3%a1t%c3%a1sa
85 Id.
Could the American federal government learn any lessons from the EU’s application of its treaties to online sports gambling? Presently, states can select the regulatory regime that maximizes mobile sportsbook profits, thereby maximizing their tax revenues. The federal government could introduce requirements that these laws must not discourage competition between sportsbooks or must contain certain guardrails that protect consumer welfare, but they have not done so. This is important because, as discussed in Part IV, interaction with the market does not align with consumers’ best interests when the consumer is addicted to the product or has a mistaken understanding of a bet’s chances of success or failure. If states are too focused on maximizing tax revenues, they may not appropriately protect vulnerable people from forms of exploitation. The same criticism has been aimed at state practices surrounding the promotion and administration of lotteries.\(^86\)

The ECJ has gone to great lengths to define the parameters of what constitutes a legitimate public policy rationale for regulating the industry. Perhaps these principles, refined by two decades of case law, can serve as guideposts for American legislatures as they think through how state law ought to be shaped and preempted to protect consumers from the well-recognized harms of sports gambling. That said, the ECJ has done little from an antitrust perspective to direct how European countries can set up their online sports gambling industries. As long as countries adhere to these principles and do not discriminate against cross-border companies relative to domestic companies, they are permitted to establish monopolies, free markets, and everything in between.

IV. Online Choice Architecture

A. Psychological Dependency and Manipulation

Gambling is a form of behavioral addiction that until recently has been excluded from formal psychiatric diagnoses.\(^87\) However, psychological research has demonstrated that the neural pathways through which behavioral addictions are developed are similar to those of users with physical addictions.\(^88\) Just like a cigarette company, by raising nicotine content, can increase addiction and sales, gambling apps can increase in-app stimuli to enhance behavioral addiction among users. There are many ways that mobile gambling platforms may build and capitalize on bettors’ dependencies. These strategies are often similar to the methods that social media companies employ to draw users into their applications, only the risk of harm to bettors’ wallets is more immediate.

To be sure, there is something about sports betting that breaks the mold when identifying at-risk gamblers in general. According to a National Council on Problem Gambling (NCPG) survey, a college graduate is twice as likely to bet on sports compared to someone with a high


\(^{88}\) Id.
school diploma, and the likelihood of someone betting on sports increases with income. Part of the explanation for this trend is probably that sports betting is viewed differently by bettors compared to non-sports betting, as it has been more tightly linked to gambling problems and cognitive distortions related to illusion of control, probability control, and interpretive control. There is also not the same stigma around mobile sports betting that is associated with casinos. Some of the difference in stigma, however, has been created by the billions of dollars sportsbooks have funneled into ads with celebrities and professional athletes as well as on networks like ESPN that possess a positive public reputation.

But unlike in-person sports betting, mobile sportsbooks benefit from the inherent addictiveness of their platforms. A substantial body of research points to the unique qualities of addictiveness associated with mobile platforms. In addition to the broad possibilities for adopting an addictive platform design, health research suggests that mobile gambling may be especially effective at building addiction. Several research studies reveal a considerable persistence of mobile bettors despite consistent losses. Moreover, a report from the United Kingdom’s House of Lords assessed that 60% of gambling profits came from just 5% of bettors, revealing a significant risk that companies may be able to profit from certain mobile users who are particularly susceptible.

There is also evidence that the schedules of reinforcement found in gambling interact with how people tend to use their smartphones, which may expedite the acquisition of maladaptive learned behaviors like problem gambling. One way that smartphone users develop addiction is through extensive but intermittent interaction with their devices. These patterns of behavior have the potential to make mobile gambling especially addictive. Betting apps, like other digital platforms and social media apps, target individual users to obtain maximal interaction with the app over time. These targeting tactics might include the display of certain bets that the app determines will be particularly attractive to an individual user and promotions or other inducements to further lure that bettor. For instance, if the mobile gambling app recognize a user’s growing reticence to bet on the app, the app may offer a free bet to re-engage the bettor.

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91 Id.
96 See James, supra note 94, at 37–38.
Additionally, mobile apps rely on varied reward intervals to build behavioral addiction, and
gambling apps are no different.97 Consumers are left wondering: when will I receive a notification?
What is the score? Did my team win? The prevalence of notifications or nudges to remind users
enhances any “swiping” and analogous actions that provide small amounts of immediate
gratification and create similar attractions.98 The structural design of a platform, whether it be
YouTube, Facebook, or DraftKings, can be optimized to maximize stimulation, increasing the
overall time users spend on a platform. Algorithms set to maximize engagement will track what
users focus on and steer them toward the material that is profitable for the platform.99

Some steps have been taken to limit the prevalence of problem gambling that results from
mobile (and other forms of) gambling and provide support to those who suffer from it. Sports
leagues, states, and gambling operators themselves have directed millions in funding toward
organizations like the NCPG, which offer helplines and limited resources for problem gamblers.100
Michigan, for instance, offers a self-exclusion option that allows bettors to essentially ban
themselves from being able to place bets online for a certain amount of time.101 After that period,
counseling resources are offered. There are also protective features built into some betting apps.
FanDuel’s mobile app gives users the option of checking how much time they have spent in the
app and how much they have wagered over a certain period, though the feature is not automatically
viewable for all users. Notably, it is more advantageous for sports betting operators to help users,
at least help them enough so that they remain consistent customers for a longer period.

But even with this support, if consumers do not understand their own behavioral biases,
they cannot evaluate which product is better for them. They may be unable to assess either the
level of addictiveness or the profitability from engagement with a certain app. Most mobile
gamblers presumably fall into this category. Due to the gamblers’ behavioral biases, any
anticompetitive action in the industry should receive heightened scrutiny in court. A body of
empirical scholarship developed over recent decades has challenged the traditional notion of the
rational consumer, and it has started to shape antitrust precedent.102 For instance, the Supreme
Court in *Eastman Kodak v. Image Technical Services* took the position that consumers might decide
to forgo consideration of whether they are receiving the best deal when presented with a bundle of
goods.103 These individuals—famously labeled “irrational consumers” by Justice Scalia—made it
possible for Kodak to extract monopoly rents even though one component in the company’s
bundle remained in a competitive market. Similarly, the behavioral biases created by mobile apps

97 See James Niels Rosenquist, Fiona M. Scott Morton, Samuel N. Weinstein, *Addictive Technology and Its
Implications for Antitrust Enforcement*, 100 N.C. L. REV. 432, 446–49 (2022).
98 Id.
99 Id.
100 Eric Adelson, *As Sportsbetting Goes Mainstream, Addiction Experts are on High Alert*, WASHINGTON POST
(Sept. 6, 2022, 6:00 AM), https://www.washingtonpost.com/sports/2022/09/06/sports-gambling-addiction/.
101 Id.
102 Rosenquist, supra note 97, at 469.
combined with the inherent addictiveness of gambling place consumers in the mobile sports betting market at heightened risk of consumer manipulation.\footnote{104 See Section IV.B. The computational complexity required for consumers to understand whether they are receiving a good deal in a sports bet will similarly be a central component of any antitrust analysis related to the irrationality of consumers in the market for sportsbetting.}

There is evidence that courts may be willing to closely scrutinize any tactics that are deployed by mobile platforms such as sports betting apps to increase consumer addiction. For instance, lawsuits that present the addictiveness of social media platforms as a consumer protection issue have been viable in court. Arguing that various social media applications were designed to be addictive and known to pose a particular harm to the health of minors, a group of over thirty state attorneys general as well as school districts and parents of children raised claims under the Children’s Online Privacy Protection Act, The Federal Trade Commission Act, and state consumer protection laws.\footnote{105 In Re: Social Media Adolescent Addiction/Personal Injury Products Liability Litigation, No. 4:22-md-03047-YGR, 2023 WL 7524912 (N.D. Cal. 2023).} These cases have already survived the motion to dismiss stage and were consolidated as multidistrict litigation in 2022. Although the litigation concentrates on the social media platforms’ impact on minors (who are not legally allowed to bet on the gambling apps), they underscore how mobile platforms, including sportsbetting platforms, that reduce consumer choice and competition through their addictiveness can face additional liability in court because of that design.

Despite some voluntary preventative measures, gambling apps do not fit into the traditional consumer welfare paradigm.\footnote{106 Rosenquist, supra note 97, at 436–439.} For individuals, more engagement with the app does not necessarily correspond to increased value. By contrast, greater engagement can be directly tied to lost value because the average bettor consistently loses against the house. Combined with the literature on gambling addiction and the tactics mobile sports betting companies deploy to draw in users, this suggests that consumers will likely struggle to leverage their consumer power in the mobile sports betting market to select the games and apps that are healthier or more profitable for them. Both antitrust enforcement and consumer protections are needed to ensure that the market operates fairly.

B. Pricing and Other Consumer Protection Issues

Because mobile sports gambling can create psychological dependency and addiction, it’s important to examine the extent to which consumers are getting a fair deal. The pricing strategies of sportsbooks are complicated because the “prices” are expressed as gambling odds. Sportsbooks often set generous odds on common, frequently-placed bets to lure in customers, but provide odds that are mathematically less generous for bets placed by experienced users who may be more addicted to the platform. Sportsbooks spend millions to advertise “boosts” that place odds at more favorable levels for consumers on a limited number of bets.\footnote{107 What Is A Sports Betting Odds Boost?, THE LINES, https://www.thelines.com/betting/odds-boost/ (last visited Mar. 19, 2024).} These odds boosts are equivalent to price discounts, so it’s notable when such discounts are used to secure market share of an addictive
product and evaporate over time in the sportsbooks with the largest market shares. There is little empirical analysis of the extent to which niche, less-advertised bets placed by more addicted bettors are more favorable to the sportsbooks than the more advertised and “boosted” bets. But if one firm were to achieve a dominant market share, these kinds of discounts may become less common.

Some comparisons can be drawn between this dynamic and allegations of predatory pricing that have been made against companies like Amazon and Uber for undercutting competitors to eliminate competition. The FTC’s lawsuit against Amazon argues that Amazon has too much power to drive out competition in the online shopping market, incentivizing competitors to partner with Amazon as third-party sellers and use Amazon’s expensive fulfillment services. Of course, this theory must still be tested in the courts.

Because of the addictive nature of mobile sports gambling, cognitive biases can exacerbate pricing issues. The sportsbooks have a financial interest in encouraging impulsive betting and discouraging bettors from comparing odds across sportsbooks in search of the best deal. Furthermore, because calculating implied odds can be highly complex, few bettors likely have the cognitive capacity to sift through all odds to get the "best deal." As discussed, without investing substantial time and using a calculator, bettors likely can’t discern whether the best deal is to place two bets separately or parlayed together. While a parlay might look more attractive because of cognitive biases—especially to gamblers who are more addicted and betting impulsively—it could be mathematically more favorable to place these bets separately.

Information asymmetries in the industry should also motivate regulators to pay attention to potential consumer protection issues. Sportsbooks employ league insiders—many of whom also act as journalists—to obtain information that informs how odds should be set to best approximate the value of betting on a game. If Team A and Team B are scheduled to play one another, but Team A’s best player has a soon-to-be-announced injury that impacts the likelihood of victory, sportsbooks pay top dollar to obtain early access to this information so bettors have less opportunity to bet on Team B at odds that will become less favorable once the injury is public knowledge.

Leading up to the 2023 NBA draft, behavior by NBA insider Shams Charania raised concerns along these lines. Like many leading insiders, Charania is both a journalist for The Athletic and an employee at FanDuel. Hours before the NBA draft, Charania tweeted that Scoot Henderson was "gaining serious momentum" to be selected second in the draft by the Charlotte Hornets. Before this tweet, FanDuel’s odds for the NBA draft listed Victor Wembanyama as a clear favorite to be picked first, Brandon Miller to be picked second, and Scoot Henderson to be picked third. After Charania’s tweet, the odds swung in Henderson’s favor to be picked second and betting volume increased. At its peak the odds were -380, meaning a gambler would have to wager $380 to win just $100 if the Hornets selected Henderson (an implied probability of 79%).

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110 Id.
When Brandon Miller was picked second instead of Henderson a few hours later, as FanDuel’s odds had originally indicated, those who rushed to bet on Scoot Henderson following Charania’s tweet lost money to Charania’s employer.\footnote{id}

This would be fraud if it were proven that Charania acted on behalf of FanDuel to spread false information that helped his employer profit. But either way, it illustrates the perverse incentives that infect the industry and the capabilities these companies possess to set odds in potentially manipulative ways using inside information. Only the less-informed gambler stands to lose.

V. Conclusion

The explosion of mobile sports gambling, and its deep integration into the experience of being an American sports fan, has the potential to harm vulnerable populations. This paper surveys considerations that regulators should bear in mind at the intersection of antitrust and these kinds of potential harm. This includes the possibility of algorithmic collusion, leagues’ power in the market for proprietary gambling-related data, and deceptive and manipulative design of online choice architecture. As the growth of mobile sports gambling rapidly outpaces societal reflection on its impact, we conclude with a few suggestions for regulators.

In the short term, regulators can monitor developments in a few areas of the industry. First, regulators can scrutinize the use of “boosts” and other promotions that are presented to customers in misleading ways or have the effect of pricing smaller competitors out of the market. Second, regulators can scrutinize constraints placed on access to proprietary league data. As this market develops—and gambling begins to incorporate forms of biometric data and other non-public, non-obvious pieces of information—this will become more of an issue. Third, more proactively, regulators can investigate and request non-public information from online sportsbooks that can inform further action. One area of interest should be non-public information on how sportsbooks coordinate with third parties and each other when setting odds or deciding which bets to make available to consumers. Another area of interest should be whether bets are ever priced by sportsbooks in ways intended to deceive gamblers or take advantage of gamblers’ biases. Special attention should be directed towards micro-bets and special micro-bet platforms like Simplebet. As discussed above, online gambling markets that make narrow bets available at rapid intervals are potentially problematic.

In the longer term, if competition in the online gambling market declines as the industry matures, regulators should scrutinize whether customers are still receiving fair values on their bets. If a sportsbook’s “vig” increases on both sides of the same bet, this constitutes evidence that the market for that bet has become less competitive. If consumers don’t respond flexibly and select a version of the bet on an app with more favorable odds than others—either because of psychological habituation or bias—sportsbooks may feel empowered to extract high rents from these vulnerable people.

\footnote{id} Id.
Regarding further research on the current market, regulators and academics can evaluate evidence on whether customers compare odds across multiple sportsbooks and select the most fair, competitive bet available. It’s problematic for long-term competition in the industry if customers become habituated to a single app such that they fail to notice if they’ve agreed to less favorable odds than on other apps. Like with social media and other digital platforms, the psychological and health effects of online gambling sites should be front and center. Sportsbooks may be positioned to take advantage of biases and manipulate customer behavior. Antitrust regulators can play a role in protecting consumers as this young industry becomes entrenched in the infrastructure of American sports.
Summary of Suggestions

Scrutinize how sportsbooks price bets and possible methods of collusion

• The FTC and DOJ should request information from online sportsbooks on the role of algorithms and third parties in setting sportsbook odds.

• The FTC and DOJ should scrutinize practices around especially problematic forms of gambling like micro-betting.

• The FTC and DOJ should monitor signals that the odds market is not competitive, such as increasing “vigs.”

Scrutinize efforts to monopolize the sports data market

• The FTC and DOJ should investigate league-wide collective data licensing agreements to determine whether they violate Section 1 of the Sherman Act.

• The FTC and DOJ should investigate exclusive league partnerships with data distributors such as Sportradar and Genius, which control over 90% of some statewide sports data markets.

• The FTC and DOJ should investigate the potential for collusion arising from common ownership of professional sports teams, data distributors, and sportsbooks.

• The FTC should advocate that any statutorily-enacted integrity fees apply nondiscriminatory to sportsbooks that purchase either official or third party league data.

Engage with states to develop stronger consumer protections

• The FTC should advocate for consumer protection legislation that limits mobile sports betting apps’ abilities to create addictions and deceive users. European Union practices should be informative.

Evaluate how bias, addiction, and informational asymmetry produce exploitive outcomes

• The FTC’s Bureau of Consumer Protection should investigate mobile gambling platform features that may deceive users.

• The FTC’s Bureau of Consumer Protection should also study consumer behavior in the market, including the extent to which consumers compare prices across sportsbooks or understand whether they are getting a good or bad deal on their bets.