Video Games in the Twenty-First Century: Parallels between Loot Boxes and Gambling Create an Urgent Need for Regulatory Action

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Video Games in the Twenty-First Century: Parallels Between Loot Boxes and Gambling Create an Urgent Need for Regulatory Action

ABSTRACT

A loot box is a purchasable in-game digital container holding randomized virtual rewards. In recent years, loot boxes have become increasingly common in video games. A large number of major video game titles now incorporate loot boxes, and loot box sales now eclipse traditional game sales as the primary source of revenue for much of the video game industry. Given that more than half of teenagers play video games for several hours each day, the growth of loot boxes has sparked a contentious debate over whether loot boxes constitute a form of unregulated gambling targeted at children. This Note contributes to this debate by evaluating loot boxes from the gambling perspective. Although many loot boxes may fail to satisfy the traditional common-law definition of gambling, the parallels between loot boxes and gambling—especially in light of the prevalence of loot boxes in children’s video games—create an urgent need for regulatory action. Moreover, this Note argues that the Entertainment Safety Ratings Board (ESRB) should regulate loot boxes by enacting new rules requiring mandatory disclosure and labeling for video games containing loot boxes. Alternatively, if the ESRB fails to remedy the existing regulatory gap, the Federal Trade Commission should enact loot box regulation. Mandatory disclosure and labeling would enable players and parents to make informed choices regarding loot boxes.

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2017 was "the year of the loot box."1 The media coverage and public uproar surrounding this popular video game monetization device

reached its zenith in the face of an unprecedented number of complaints from consumers, enormous profits garnered from loot boxes by video game developers,\(^2\) the 2016 “skin gambling” scandal,\(^3\) the release of several high-profile games featuring loot boxes, and the general proliferation of loot boxes in video games.\(^4\) Loot boxes are purchasable digital containers within video games holding randomized rewards.\(^5\) With more than 50 percent of teenagers playing video games for multiple hours each day,\(^6\) the central question in the loot box controversy is whether loot boxes constitute a form of unregulated gambling targeted at children.\(^7\) This contentious debate has grabbed the attention of public regulators, politicians, age-rating boards, and other stakeholders around the globe.\(^8\) Many of these stakeholders took action by issuing statements and warnings, opening investigations,

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2. Loot boxes are a principal source of revenue for many game developers. Schwiddessen & Karius, \textit{supra} note 1, at 19. Revenue from loot boxes often surpasses revenue generated from the sale of the actual games themselves. \textit{Id.} Gamers were projected to spend approximately $30 billion on loot boxes in 2018. David Zendle & Paul Cairns, \textit{Video Game Loot Boxes Are Linked to Problem Gambling: Results of a Large-Scale Survey}, PLOS ONE (Nov. 21, 2018), https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0206767 [https://perma.cc/4SG2-ESGH]. This figure is projected to rise to $50 billion over the next four years. \textit{Id.}


4. Schwiddessen & Karius, \textit{supra} note 1, at 17, 22.


7. See Drummond & Sauer, \textit{supra} note 5.

publishing regulatory guidelines, enacting new legislation, and even initiating enforcement actions. The long-term consequences of these actions—many of which are currently manifesting—are unclear.

Loot boxes—also known as “loot crates” or “prize crates”—are currently unregulated in the United States. This Note considers loot boxes from a US gambling law perspective. Part I provides a foundational background on loot boxes and US gambling law. Part II analyzes whether loot boxes qualify as gambling and, if they do not, whether the United States should enact new regulation for loot boxes. Ultimately, while some loot boxes may satisfy the definition of gambling, many clearly do not. Nevertheless, the parallels between loot boxes and gambling—especially in light of the pervasiveness of loot boxes in video games targeted at children—create an urgent need for regulation. Part III advances two solutions to the loot box controversy. The optimal solution is for the video game industry’s self-regulatory organization to enact new rules requiring mandatory disclosure and labeling for games containing loot boxes. Alternatively, if the video game industry fails to self-regulate loot boxes, the federal government should take the necessary regulatory action.

I. BACKGROUND

This Part lays the foundation of the analysis and solution proposed in this Note by examining loot boxes and current US gambling law.

A. Loot Boxes

Loot boxes are an increasingly common feature in popular online social games and major video games. This Section discusses the

9. Id. at 17, 20, 28.
10. Id. at 17.
11. E.g., id. at 18; Derek Mei, Hooked on Loot Boxes, MEDIUM (Sept. 21, 2018), https://medium.com/behavior-design/hooked-on-loot-boxes-how-design-gets-us-addicted-79e45faebc05 [https://perma.cc/D3ST-M7MT].
13. Schwiddessen & Karius, supra note 1, at 28.
15. Id.
definition of loot boxes, the variations within loot boxes, and the history of loot boxes.

1. Definition of Loot Boxes

A loot box is an in-game digital container holding a random rewards mechanism (RRM). RRM consists of three components: an eligibility condition, a random procedure, and a reward. An eligibility condition is a requirement that a player must satisfy to trigger the RRM. Examples of eligibility conditions in loot boxes include spending a certain amount of time in a game, reaching a certain difficulty level, defeating a specific monster or other game challenge, or making an in-game micropayment. Satisfying an eligibility condition allows the player to “open” the loot box, triggering its random procedure. A random procedure is a chance-based process for delivering a reward through the RRM. Any outcome-randomizing programming method satisfies the random procedure requirement. A reward is a digital game element, often referred to as a digital asset, that is awarded to the player through the RRM. Examples of loot box rewards include in-game currency, characters, weapons, “skins,” game modes, game levels, color schemes, extra lives, and power-ups.

Loot boxes are distinct from other types of RRMs in two major ways. First, loot boxes emphasize and objectify the RRM's they

16. Nielsen & Grabarczyk, supra note 1, at 2; Drummond & Sauer, supra note 5.
18. Id.
19. Id. An in-game micropayment is a small payment—traditionally less than $1 but as much as $20—made within a game to the game publisher in exchange for in-game content. Micropayment, Investopedia, https://www.investopedia.com/terms/m/micropayment.asp [https://perma.cc/QU2Q-CDDM] (last updated June 24, 2018).
22. Id.
24. Nielsen & Grabarczyk, supra note 1, at 3.
25. A skin in a digital asset that changes the appearance, such as the color, of an in-character or game weapon. See Sztainert, supra note 20, at 1. Skins do not affect the utility or power of the affected character or weapon. See Schwiddessen & Karius, supra note 1, at 28-29.
Loot boxes often utilize exciting, flashy animation and sounds associated with success. For example, the loot boxes in Blizzard’s *Overwatch* present their RRMs as quivering boxes that, when opened, burst with colorful light, coins, and rewards accompanied by a triumphant chorus of brass instruments. Loot boxes also commonly feature animation and sounds linked with gambling and chance. For example, the loot boxes in Valve’s *Counter-Strike: Global Offensive* display RRMs as animated slot machines spinning with possible rewards. Whereas traditional RRMs—such as collectible card games—accentuate the reward an individual receives, loot boxes instead accentuate the random procedure itself. This emphasis on random procedure transforms the sheer act of triggering the RRM into a form of entertainment. Second, players can trigger the RRMs contained in loot boxes via in-game microtransactions with real-world currency or in-game currency previously purchased with real-world currency. Consequently, loot boxes allow players to purchase entertainment in the form of triggering an RRM.

2. Variation Within Loot Boxes

Each video game has its own take on the loot box system. This Section considers salient variations within the context, integration, eligibility conditions, reward probabilities, and rewards of loot boxes.

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27. Id. at 4.
29. See id.
30. See Nielsen & Grabarczyk, supra note 1, at 4.
33. Id. at 4.
35. See Nielsen & Grabarczyk, supra note 1, at 4; Drummond & Sauer, supra note 5.
36. See Davenport, supra note 28 (illustrating various implementations of loot boxes in video games).
Games generally present loot boxes to players in two contexts: via in-game shops and while playing the game (herein referred to as “gameplay”).  

In-game shops allow players to purchase loot boxes—either with real-world currency, in-game currency, or in-game points—from an in-game storefront. Some games draw the player’s attention to the loot boxes with in-game notifications and occasionally offer limited-time discounts. In the gameplay context, players are awarded either a loot box or an option to purchase a loot box while actively playing the game. Some games make the option to purchase available when players are about to “die” or otherwise lose the game.

b. Integration and Eligibility Conditions

There are two major ways developers integrate loot boxes into video games. Under the free method, loot box eligibility conditions are nonmonetary. This means players can open loot boxes without making micropayments to a game’s developer. On the other hand, under the

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37. See, e.g., Two Dots (Playdots, Inc. 2014) (offering loot boxes both through an in-game storefront and in-game when a player begins a level); see also Vance, supra note 34.


39. See, e.g., FIFA 19, supra note 38 (offering loot boxes for purchase through an in-game storefront); Two Dots, supra note 37 (offering loot boxes for purchase through an in-game storefront); see also FUT Squad Building Challenges, supra note 38; Rory Young, Middle-earth: Shadow of War Loot Boxes Confirmed, Contain Gear, Orcs, and XP Boosts, GAMERANT (Aug. 5, 2017), https://gamerant.com/middle-earth-shadow-of-war-loot-box/ [https://perma.cc/F4ME-8DMZ].


41. See, e.g., Summoners War: Sky Arena, supra note 40 (offering loot boxes for purchase upon beating certain enemies and finishing certain levels); see also Schwiddessen & Karius, supra note 1, at 19.

42. See, e.g., Candy Crush Soda Saga (King 2012) (offering players option to purchase loot boxes with a variety of possible rewards—including extra moves—just before they run out of moves and are forced to forfeit their progress on a particular level).

43. See SZTAINERT, supra note 20, at 1.

44. See id.

45. See id.
paid method, loot boxes utilize monetary eligibility conditions. 
Monetary eligibility conditions require players to pay money—directly via real-world currency or indirectly via in-game currency purchased with real-world currency—to open loot boxes. In some games, monetary eligibility conditions require players to purchase loot boxes themselves; in other games, players earn paid loot boxes through normal gameplay but must purchase virtual keys to satisfy their monetary eligibility conditions.

c. Reward Probabilities

Historically, developers did not publish information related to their games’ random procedures or the odds of winning possible rewards. However, to comply with newly enacted foreign laws and Apple’s App Store policy, some developers recently disclosed their loot box reward probabilities. These disclosures generally convey probabilities categorically—grouping rewards of similar rarity into categories and revealing the odds of winning a reward from each category—to satisfy minimum disclosure requirements. Alternatively, developers could use reward-specific disclosure, revealing the win odds for every possible reward.

46. See id.
47. See id.; Schwiddessen & Karius, supra note 1, at 18.
49. See Wright, supra note 48 (describing Valve’s Team Fortress 2, in which players earn loot boxes through normal gameplay but must purchase virtual keys to open them).
52. See Kuchera, supra note 51 (noting that both Chinese regulation and Apple’s App Store policy require categorical disclosure of reward probabilities); see also Max Thielmeyer, Rocket League Crate Drop Rates Revealed: How Do They Compare?, FORBES (July 25, 2018, 8:56 PM), https://www.forbes.com/sites/maxthielmeyer/2018/07/25/rocket-league-crate-drop-rates-revealed-how-do-they-compare/#4c37c4060156 [https://perma.cc/8RSF-J2PT] (providing examples of categorical reward disclosure for Psyonix’s Rocket League, Blizzard’s Overwatch, and Valve’s Counter-Strike: Global Offensive).
Loot box systems are designed to yield—or "drop"—some rewards more frequently than others. Extremely rare rewards drop significantly less often than common rewards. Rare rewards are designed to induce players to purchase many loot boxes to obtain a desired rare item. Available data indicate that players’ odds of winning high-value items are generally low. The chances of winning semirare items are often lower than 20 percent; the chances of winning ultrarare items are often lower than 1 percent. Many games do not publish reward probabilities.

d. Rewards

Loot boxes always yield some type of reward to the player. Nevertheless, there are three important reward distinctions within loot box rewards. The first distinction concerns reward utility. Pure cosmetic rewards, such as weapon skins or character skins, affect only a game’s appearance. These rewards serve to make the game and player look good and do not affect a game’s actual gameplay. On the other hand, performance rewards, such as new weapons or characters, affect gameplay by giving players an advantage or unlocking new game content. Performance rewards can also change a game’s appearance.

The second distinction involves a reward’s availability. Loot boxes offer immediate rewards. Alternatively, players can typically obtain the same rewards through a process called “grinding.” Grinding...
requires repetitively performing specific tasks for significant amounts of time to achieve the same result as those who invest in loot boxes.  

Although grinding can be a viable alternative to purchasing loot boxes, grinding may not be a realistic option for many players because it requires a substantial time investment.  

The third distinction relates to a reward’s real-world value.  

Traditionally, a loot box reward had value only within its particular game. These standard rewards could not be traded or sold on a marketplace for real-world currency. However, a new trend allows rewards in some games to be “cashed out,” or converted into real-world currency, through trading in online marketplaces. Cash-out reward marketplaces are generally run through third-party websites— websites not run by a game’s developer or publisher. Typically, a game’s terms of use prohibit the trading of in-game rewards outside the game’s platform. Nevertheless, because game developers—as the suppliers of cash-out rewards—benefit indirectly from cash-out reward marketplaces, they may have little incentive to limit or prevent this practice.  

3. History of Loot Boxes  

Loot boxes are grounded in the tradition of RRMs. The first RRMs were analog and date back as far as the nineteenth century. A few of the many examples of analog RRMs include collectible baseball and football cards, collectible card games, random toy dispensers, and Kinder eggs. Analog RRMs became a popular distribution method because of their ability to increase product sales. Many producers

69. Id.  
70. See id. at 22 (describing the forty-hour grind required to unlock Darth Vader—a particularly strong game character—in Electronic Arts’s Star Wars: Battle Front II for players who did not unlock the character through a paid loot box).  
71. See id. at 19.  
72. See id.  
73. Id.  
74. See id. One consequence of cash-out rewards is the controversial rise of skin gambling. Id. at 20; see supra note 3.  
75. Schwidessen & Karius, supra note 1, at 20.  
76. Id. at 21.  
77. See id.  
78. See Nielsen & Grabarczyk, supra note 1, at 2.  
79. Id. at 3.  
80. Id.; Wright, supra note 48.  
81. Nielsen & Grabarczyk, supra note 1, at 3.
magnified this effect by introducing artificial scarcity into their production models.82

RRMs first appeared in video games as randomized loot drop systems.83 A loot drop system is a method for distributing digital assets to players.84 The application of digital RRM systems to video games provided an inexpensive way for developers to introduce variety, novelty, and replayability into their games.85 RRM loot systems are currently a staple within a variety of video game genres.86

Game developers created the loot box in the mid-2000s by combining the RRM loot system with microtransactions.87 The growth of online video games, the difficulties in preventing illegal downloading of video games, and the market demand for “freemium” gaming88 spurred the development of the loot box as a way to monetize free games.89 ZT Online, produced by Chinese developer Zhengtu in 2007, was the first mainstream game to utilize a free-to-play microtransaction model supported by loot boxes.90 Particularly strong market demand for online free-to-play gaming emerged in Asia because many gamers did not own their own consoles or computers and could not afford the high price of “AAA” Western titles.91 Mobile and social

82. Id.
84. See NIELSEN & GRABARCZYK, supra note 1, at 3; see also Andrews, supra note 83.
85. NIELSEN & GRABARCZYK, supra note 1, at 3.
86. See id. at 3-4.
87. See id. at 4. Microtransactions are a type of in-game transaction in which players can purchase virtual goods via micropayments. Schwiddessen & Karius, supra note 1, at 18.
88. “Freemium”—a combination of “free” and “premium”—gaming is a game monetization model that allows gamers to play a game for free but requires them to pay for certain premium game features and content. Schwiddessen & Karius, supra note 1, at 18. The purchase of premium content is usually through a microtransaction. Id. Freemium games also make money through advertisements. How Do Mobile Games Make Money?, MEDIAKIX (June 18, 2018), http://mediakix.com/2018/06/how-do-mobile-games-make-money/#gs.hqfgq6 [https://perma.cc/92NA-87N9].
89. Andrews, supra note 83; Mei, supra note 11.
90. Loot Box History, GAMERS RIGHTS (Apr. 21, 2018), http://www.gamers-rights.org/2018/04/21/loot-box-history/ [https://perma.cc/7THS-MK5]; see also Andrews, supra note 83; Wright, supra note 48.
media game developers quickly adopted the free-to-play microtransaction model following the success of *ZT Online.*\(^9\) Traditional video game developers also increasingly adopted this model.\(^9\) In 2010, for example, Valve’s *Team Fortress 2* became the first major traditional Western game to incorporate loot boxes.\(^9\) Electronic Arts’s *FIFA* series, as well as a variety of massive multiplayer online games, also adopted loot boxes in the early 2010s.\(^9\) Since 2016, a large number of AAA games have featured loot boxes.\(^9\) Notable titles include *Overwatch, Star Wars Battlefront II, FIFA 17, NBA2K18, Forza Motorsport 7,* and *Middle Earth: Shadow of War.*\(^9\) Loot boxes currently represent a substantial revenue stream for the video game industry.\(^9\)

Loot boxes face increasing public scrutiny in the wake of growing concern and outrage among players, parents, and politicians.\(^9\) Several countries recently took regulatory action on loot boxes, including China, the Netherlands, and Belgium.\(^\) Many other nations are considering action on loot boxes as well.\(^\) For instance, at the 2018 Gambling Regulators European Forum, fifteen European countries announced a joint intention to examine loot boxes and to ensure that they do not violate applicable gambling laws.\(^\) Similarly, the Federal Trade Commission (FTC) announced in late 2018 that it would begin studying loot boxes in the United States.\(^\) In mid-2019, Senator Josh Hawley

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92. See Wright, supra note 48.
93. See Andrews, supra note 83; Burns, supra note 83.
94. Wright, supra note 48.
95. Andrews, supra note 83; Wright, supra note 48.
96. See Drummond & Sauer, supra note 5, at 531.
97. Id.
100. Hafer, supra note 12.
101. Id.
103. Pu, supra note 99.
proposed a bill regulating loot boxes.\textsuperscript{104} Various state legislatures—including those in Hawaii, Washington, and Illinois—are also considering bills to study or regulate loot boxes.\textsuperscript{106} Some industry players are making efforts to self-regulate in hopes of heading off the need for governmental interference.\textsuperscript{106} For example, the Entertainment Software Rating Board (ESRB)\textsuperscript{107} recently introduced a label reading “in-game purchases” to signify that a game allows in-game microtransactions.\textsuperscript{108} However, the ESRB has also stated that it does not consider loot boxes as gambling.\textsuperscript{109} Additionally, Apple adopted a policy in 2017 requiring all games offered through its App Store to categorically disclose reward probabilities of loot boxes to players prior to purchase.\textsuperscript{110} Some developers and publishers even altered or removed loot boxes in response to strong public backlash.\textsuperscript{111} Nevertheless, loot boxes continue to grow and disrupt the video game industry.\textsuperscript{112}

\begin{itemize}
\item \textsuperscript{104} Dave Thier, New Microtransaction/Loot Box Bill Could Devastate Video Game Publishers if It Passes, FORBES (May 8, 2019), https://www.forbes.com/sites/davidthier/2019/05/08/new-microtransactionloot-box-bill-could-devastate-video-game-publishers-if-it-passes/#21201e72676f [https://perma.cc/S9WQ-6T8N].
\item \textsuperscript{105} Lamb, supra note 50.
\item \textsuperscript{108} Bailey, supra note 98. Notably, the “in-game purchases” label does not distinguish games with loot boxes from games with only traditional, non-chance-based microtransactions. See Schwiddessen & Karius, supra note 1, at 29.
\item \textsuperscript{109} See, e.g., Schwiddessen & Karius, supra note 1, at 28.
\item \textsuperscript{111} Wright, supra note 48. For example, Electronic Arts pulled loot boxes from its Star Wars Battle Front II video game in 2017 after an especially strong negative public reaction. Id.
\item \textsuperscript{112} See Drummond & Sauer, supra note 5.
B. Gambling Laws

Gambling in the United States—also known as gaming, though not to be confused with video game usage—is governed by an ambiguous patchwork of state and federal law. State law is the primary source of gambling regulation. Federal law plays a secondary role in shaping the industry by regulating gambling where it affects interstate commerce. This Section examines existing laws affecting online commercial gambling by discussing the legal definition of gambling, the history of gambling, and relevant federal and state online gambling laws.

1. Definition of Gambling

Because gambling is regulated predominately by state law, no uniform legal definition of gambling exists. Each state sets its own statutory definition of gambling and creates its own set of gambling regulations. Nevertheless, most states modeled their gambling definitions after the common law. The federal government also uses a definition that aligns with common-law gambling. Under the

113. *E.g.,* Gaming, BLACK'S LAW DICTIONARY (10th ed. 2014). This Note will use the term “gambling” rather than “gaming” to avoid confusion between gaming (gambling) and gaming (playing video games).


117. Commercial gambling is gambling in which a person, such as a bookie or the game’s host, receives money by virtue of the fact that the game is played. *See* Randy Ray, 4 United States Gambling Concepts You Should Understand, GAMBLINGSITES.COM: BLOG (Sept. 7, 2015), https://www.gamblingsites.com/blog/gambling-law-concepts-6106/ [https://perma.cc/NE2C-W89H]. On the other hand, social gambling is gambling in which no person makes money except as a player on equal footing with other players in the game. *See id.* Some state regulatory regimes distinguish social gambling from commercial gambling. *Id.*


119. *Id.*


common law, gambling consists of three elements: consideration, prize, and chance. All three elements must be present for the government to regulate an activity as gambling.

\*a. Consideration\*

Consideration requires that players expend something of value on the activity. The consideration necessary for gambling requires more than the consideration for nongambling contracts. In most jurisdictions, the thing of value must be money. Accordingly, free games in which a player invests time and effort, but not money, are usually not gambling. Generally, the use of cash substitutes—such as chips—satisfies the consideration element.

\*b. Prize\*

The prize element requires that the player has the opportunity to win something of value through participation in the activity. Prizes can include money, goods, and—in some jurisdictions—even free replays. Courts, however, typically require noncash prizes to be convertible into cash in order to satisfy the prize element. Nevertheless, the development of popular games such as Candy Crush

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122. *E.g.*, CHAMPION & ROSE, supra note 120; Rose, supra note 114, at 2. Black’s Law Dictionary also subscribes to this definition. Gambling, BLACK’S LAW DICTIONARY (10th ed. 2014).

123. CHAMPION & ROSE, supra note 120. Although legislatures and courts cannot regulate an activity as gambling if it fails to satisfy all three common-law elements, they can still regulate the activity itself. Id.

124. Rose, supra note 114, at 2. A player’s expenditure on things peripheral to the gambling activity, such as time and effort filling out forms or payment of a cover fee to enter a gambling venue, does not constitute consideration. See id.

125. CHAMPION & ROSE, supra note 120, at 12.

126. Id.; Rose, supra note 114, at 2. When free entry allows a player to win something for nothing, the activity is typically considered a no-purchase-necessary sweepstakes, and any winnings are considered a gift. Rose, supra note 114, at 2.

127. CHAMPION & ROSE, supra note 120, at 12.

128. Rose, supra note 114, at 2. Cash substitutes may not be sufficient to satisfy the consideration element of gambling when an individual does not actually pay for the cash substitute. See id. (noting that a legal problem arises when players receive free chips to use in casinos).

129. Id. When players cannot win something of value, the activity is classified as an amusement game rather than gambling. Id.

130. Id.

131. Schwiddessen & Karius, supra note 1, at 28; see also CHAMPION & ROSE, supra note 120, at 11, 15.
illustrates how it is possible for games to be successful even when players cannot convert prizes into cash.132

c. Chance

Chance requires that the outcome of the activity be determined by luck rather than a player’s skill.133 Because many activities involve both luck and skill, the majority of jurisdictions use the dominant factor test in evaluating the chance element.134 Under this test, an activity is considered gambling if the factor most affecting its outcome is chance.135 On the other hand, an activity is not gambling if the dominant factor affecting its outcome is skill.136

2. History of Gambling in the United States

European colonists first imported modern forms of gambling into the United States as popular money-raising devices and leisure activities.137 Gambling remained legal and commonplace throughout the eighteenth and nineteenth centuries.138 Typical forms of gambling during this period included card games, horse races, and lotteries.139

The first major wave of gambling regulation came at the turn of the twentieth century.140 In response to the moral concerns of early twentieth-century reformers, states enacted laws prohibiting lotteries as well as most other forms of gambling.141 The federal government also enacted gambling laws, prohibiting the transportation of lottery paraphernalia in interstate commerce.142 Together, these prohibitions completely banned gambling.143 The restrictions enacted during the first wave of gambling regulation remained in full force until 1931.144
Efforts to loosen gambling restrictions gained traction in the 1930s. In the difficult economic conditions created by the Great Depression, states increasingly viewed gambling as a way to increase government revenue and provide intangible benefits to the economy. During the 1930s, many states relegalized pari-mutuel betting on horse races and dog races. In the 1960s, states began to relegalize state-run lotteries. Subsequently, in the 1970s, states began to relegalize casino gambling. Today, almost all states permit pari-mutuel betting and state-run lotteries, while many states permit casino gambling in either state-regulated commercial casinos or federally regulated tribal casinos. Nevertheless, as a result of the relegalization over the course of the twentieth century, gambling rules vary widely from state to state.

A second wave of federal gambling regulation arose in the 1960s and 1970s in the form of federal anti-racketeering statutes. Unlike the prior wave of regulation, this one was precipitated by organized crime profits from illegal gambling. Congress enacted a variety of statutes to combat this problem, including the Interstate Wire Act of 1961 (the "Wire Act"), which criminalizes the use of telecommunications in illegal gambling.

Congress periodically modified laws regulating gambling since the second wave of regulation. For example, Congress passed the Indian Gaming Regulatory Act of 1988 to regulate gambling in tribal casinos. A few years later, Congress passed the Professional and

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145. See id. at 397, 399.
146. See id.
147. Id. at 399.
148. Id. at 398.
149. Id. at 397. Nevada was the only state to relegalize casino gambling in the 1930s. Id. New Jersey, the second state to relegalize casino gambling, did not do so until 1976. Id.
150. Id. at 397–99; Ciaccio, supra note 114, at 547. "At present, the United States has more forms of legalized gambling than in any time in over 100 years." Hurt, supra note 137, at 401.
151. See id. at 397.
152. CRS Report, supra note 115; Ciaccio, supra note 114, at 531.
153. CRS Report, supra note 115, at 24; Ciaccio, supra note 114, at 531–32.
156. CRS Report, supra note 115, at 1–3.
158. CRS Report, supra note 115.
Amateur Sports Protection Act of 1992 to effectively ban sports betting in all but four states. Most recently, after the advent of the internet, Congress enacted the Unlawful Internet Gambling Enforcement Act of 2006 (UIGEA) to prevent illegal online gambling.

3. Key Federal Gambling Laws

The two most important federal laws regulating online gambling are the Wire Act and UIGEA. UIGEA is the only federal law to specifically address online gambling.

a. Interstate Wire Act of 1961

The Wire Act prohibits sports betting and wagering in interstate and foreign commerce through wire communication. While enacted prior to the advent of the internet, courts generally agree that the Wire Act applies to online gambling. However, prior to 2011, courts were split regarding whether the Wire Act applied solely to sports gambling or to all forms of gambling. In 2011, the Department of Justice reversed its long-held assertion that the Wire Act prohibits all forms of online gambling. Since 2011, courts have widely interpreted the Wire Act to permit online gambling so long as it does not involve sports betting. Online gambling has expanded since the 2011 reversal.
b. Unlawful Internet Gambling Enforcement Act of 2006

UIEGA prohibits gambling-related businesses from accepting payments in connection with unlawful online gambling\(^{171}\) and financial institutions from processing such payments.\(^{172}\) UIEGA applies only to interstate gambling transactions.\(^{173}\) Under UIEGA, unlawful online gambling is any gambling that is unlawful under federal or state law and occurs at least in part over the internet.\(^{174}\) Congress enacted UIEGA to address the inability of traditional law enforcement mechanisms to enforce internet gambling prohibitions.\(^{175}\) UIEGA is intended to facilitate the enforcement of existing gambling laws rather than to alter existing gambling laws.\(^{176}\) As such, UIEGA does not ban or legalize any specific types of gambling.\(^{177}\)

4. State Gambling Laws

States may regulate the gambling that occurs within their borders.\(^{178}\) Since online gambling entails all commercial gambling that occurs over the internet,\(^{179}\) online gambling is subject to the laws of both the state in which the gambler resides and the state that hosts the gambling website.\(^{180}\) Gambling laws vary widely across states.\(^{181}\) States can be divided into roughly four categories with respect to their laws regarding online gambling: (1) states expressly prohibiting all gambling; (2) states expressly prohibiting online gambling; (3) ambiguous states; and (4) states expressly permitting limited, regulated online gambling.


\(^{173}\) See 31 U.S.C. § 5362(10)(B)(i) (asserting that “unlawful Internet gambling” does not include purely intrastate gambling).


\(^{176}\) See 31 U.S.C. § 5361(b) (asserting that UIEGA should not be construed so as to alter, limit, or extend existing federal and state gambling regulations and asserting that UIEGA should not be construed so as to preempt state law prohibiting gambling).

\(^{177}\) CRS Report, supra note 115, at 3.


\(^{179}\) See CHAMPION & ROSE, supra note 120, at 43 (describing internet gambling as gambling that is adapted to the internet).

\(^{180}\) See Hurt, supra note 137, at 415.

\(^{181}\) See O’Day, supra note 23, at 367.
A small minority of states maintain a blanket ban on all forms of commercial gambling. In these states, online gambling is implicitly prohibited because it is a form of gambling. States falling within this category include Utah and Hawaii.

A handful of states enacted laws expressly prohibiting online gambling. These states do so despite allowing at least some forms of traditional gambling. States falling within this category include Oregon, Washington, Montana, South Dakota, Illinois, Indiana, and Louisiana.

The vast majority of states fall into the ambiguous category of state law. These states allow at least some forms of regulated gambling but do not have laws that specifically address online gambling. In many of these states, even though penalties and enforcement odds are low, online gambling is likely illegal. Many states in this category are considering adopting laws to expressly address the online gambling issue.

Four states—New Jersey, Nevada, Pennsylvania, and Delaware—and the US Virgin Islands expressly adopted laws permitting limited regulated online gambling. Numerous other states are considering legislation to legalize limited regulated online gambling.

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184. See Hawaii Gambling, supra note 183; Utah Gambling, supra note 183.

185. CRS Report, supra note 115, at 21.

186. See USA State Casinos, supra note 182.


188. USA State Casinos, supra note 182.

189. Brandon James, Is It Legal to Gamble Online in the USA?, WIZARD ODDS, https://wizardoddss.com/the-legality-of-online-gambling-us/ [https://perma.cc/9C6L-LGZU] (last updated Nov. 2, 2018); Ray, supra note 117 (asserting that the fact that a state does not have a specific internet gambling law does not mean that internet gambling is legal in that state).

190. James, supra note 189.

191. CRS Report, supra note 115, at 21–22; Ciaccio, supra note 114, at 548.

192. CRS Report, supra note 115, at 21.

193. CRS Report, supra note 115, at 21–22 (noting that "bills to authorize online gambling have been debated, but not adopted, by [various] state legislatures," including those in New York, California, and Michigan).
II. Analysis

This Part analyzes whether loot boxes constitute a form of gambling under US law. Although some loot boxes arguably are gambling, many loot boxes are not.\textsuperscript{194} Nonetheless, states and the federal government can still choose to regulate loot boxes specifically.\textsuperscript{195} This Part also analyzes the arguments in favor of and against enacting specific regulation on loot boxes. Lastly, this Part considers the approaches of several foreign countries to the loot box controversy.

\textbf{A. Some Loot Boxes Satisfy the Common-Law Definition of Gambling}

Few jurisdictions have considered loot boxes in the gambling context.\textsuperscript{196} However, the fairly precise definition of gambling at common law and the limited available case law is informative on whether loot boxes are gambling.\textsuperscript{197} Common-law gambling requires three elements: consideration, prize, and chance.\textsuperscript{198} Many loot boxes do not satisfy the consideration and prize elements.\textsuperscript{199} Loot boxes are potentially gambling only when they utilize monetary eligibility conditions and yield rewards such as cash-out digital assets, additional free loot boxes, or in-game currency.\textsuperscript{200} Without these two features, loot boxes plainly fail the common-law definition of gambling.\textsuperscript{201} Furthermore, the decision of at least one court casts doubt on whether loot boxes can ever satisfy the chance element.\textsuperscript{202} Ultimately, gambling regulation applies at best to only some loot boxes.\textsuperscript{203} Moreover, even when a gambling regulation is arguably applicable, it is unlikely that states will actually enforce their gambling regulations on loot boxes.\textsuperscript{204}

\begin{itemize}
  \item \textsuperscript{194} See Schwiddessen & Karius, \textit{supra} note 1, at 28.
  \item \textsuperscript{195} See CHAMPION & ROSE, \textit{supra} note 120.
  \item \textsuperscript{196} Secondary sources considering this topic discuss only a handful of cases. See Schwiddessen & Karius, \textit{supra} note 1, at 32-38. These cases discuss loot box mechanisms. \textit{Id.} at 32. The case law does not actually use the term “loot box.” A Westlaw search of “loot box” returns no case results.
  \item \textsuperscript{197} See Schwiddessen & Karius, \textit{supra} note 1, at 32.
  \item \textsuperscript{198} E.g., CHAMPION & ROSE, \textit{supra} note 121; Rose, \textit{supra} note 115, at 2.
  \item \textsuperscript{199} See Schwiddessen & Karius, \textit{supra} note 1, at 33-34.
  \item \textsuperscript{200} See CHAMPION & ROSE, \textit{supra} note 120, at 12; Rose, \textit{supra} note 114, at 2; Schwiddessen & Karius, \textit{supra} note 1, at 33-35.
  \item \textsuperscript{201} See CHAMPION & ROSE, \textit{supra} note 120, at 12; Rose, \textit{supra} note 114, at 2; Schwiddessen & Karius, \textit{supra} note 1, at 33-35.
  \item \textsuperscript{202} See Schwiddessen & Karius, \textit{supra} note 1, at 33.
  \item \textsuperscript{203} See \textit{id.} at 28.
  \item \textsuperscript{204} See \textit{id.}
\end{itemize}
1. Consideration

Consideration in the gambling context requires that a player spend something of value—generally money or some cash substitute—in order to play the game.\textsuperscript{205} Loot boxes employing monetary eligibility conditions may satisfy the consideration prong because players purchase them—directly or indirectly—through micropayments with real-world currency.\textsuperscript{206} Direct monetary eligibility conditions most clearly satisfy the consideration element, as real-world currency is indisputably a thing of value.\textsuperscript{207} Conversely, indirect monetary eligibility conditions are a murkier form of consideration, but they may also satisfy the consideration element because in-game currency can be used to purchase additional loot boxes.\textsuperscript{208} Loot boxes with nonmonetary eligibility conditions—such as spending a certain amount of time in a game or unlocking a certain achievement—do not satisfy the consideration prong because the player is never required to expend real-world currency.\textsuperscript{209}

Current case law supports the conclusion that loot boxes may be gambling when they have monetary eligibility conditions.\textsuperscript{210} For example, in \textit{Soto v. Sky Union, LLC}, the court determined that the consideration prong with respect to a gambling activity in a video game is satisfied when players use in-game currency, purchased with real-world currency, to open loot boxes.\textsuperscript{211} In reaching its decision, the court reasoned that a contrary holding would ignore the plain language of California’s gambling statute requiring consideration through “the insertion of money or coins” physically or “by any means.”\textsuperscript{212} The court also noted that it would be illogical to include games operated by insertion of physical tokens in gambling but exclude games operated by purchase of virtual in-game currency from gambling.\textsuperscript{213} Notably, the statute at issue in this case defined consideration by reference to money rather than to a “thing of value.”\textsuperscript{214}

\begin{footnotes}
\item[205] CHAMPION \& ROSE, supra note 120, at 12; Rose, supra note 114, at 2.
\item[206] See CHAMPION \& ROSE, supra note 120, at 12; Rose, supra note 114, at 2.
\item[207] See CHAMPION \& ROSE, supra note 120, at 12; Rose, supra note 114, at 2.
\item[208] See Schwiedessen \& Karius, supra note 1, at 34-35 (contending that additional loot boxes are things of value); see also infra notes 227-29 and accompanying text.
\item[209] See CHAMPION \& ROSE, supra note 120, at 12; Rose, supra note 114, at 2.
\item[211] See id.
\item[212] See id.
\item[213] See id. at 879.
\item[214] Id. at 878. This case might have come out differently if the statute at issue had defined consideration by reference to a “thing of value.” In the court’s discussion of the prize element, it held that rewards were not things of value if they could not be cashed out. See id. at 880.
\end{footnotes}
2. Prize

The prize element of gambling requires that a player has an opportunity to win a thing of value.\textsuperscript{215} Things of value generally include real-world currency, free replays, and nonmonetary prizes that can be cashed out for real-world currency.\textsuperscript{216}

Loot boxes utilizing cash-out rewards may satisfy the prize prong because they yield rewards players can convert into real-world currency.\textsuperscript{217} However, some courts are skeptical of cash-out transactions that violate a game’s terms of service.\textsuperscript{218} For example, in \textit{Kater v. Churchill Downs Inc.}, the court determined that a cash-out reward could not constitute a thing of value based on a prohibited use of the reward.\textsuperscript{219} The court rejected the plaintiff’s argument that rewards cashed out in a secondary market—in violation of a game’s terms of use—constituted a prize.\textsuperscript{220} Since the terms of use in many games explicitly state that in-game digital assets have no real-world value and cannot be traded on secondary markets, the court’s approach in \textit{Kater} prevents a significant portion of loot boxes from qualifying as gambling.\textsuperscript{221} Other courts have left open the possibility that players’ ability to cash out rewards on a secondary market, perhaps even in violation of a game’s terms of service, might satisfy the prize requirement.\textsuperscript{222}

Loot boxes yielding additional free loot boxes or in-game currency that can be used to purchase additional loot boxes may also satisfy the prize element.\textsuperscript{223} For instance, the court in \textit{Kater} found that rewards are things of value when they “extend the privilege of playing a game without charge.”\textsuperscript{224} However, in \textit{Soto}, the court there noted the fact that the loot box rewards in the game at issue improved gameplay rather than extended gameplay as one of many reasons for finding the prize element lacking.\textsuperscript{225}

Loot boxes with standard rewards—excluding the rewards of additional free loot boxes and in-game currency discussed above—do

\textsuperscript{215} Rose, supra note 114, at 2.
\textsuperscript{216} See CHAMPION & ROSE, supra note 120, at 11, 15; Rose, supra note 114, at 2.
\textsuperscript{217} See Schwiddessen & Karius, supra note 1, at 33.
\textsuperscript{218} Id. at 36.
\textsuperscript{219} Kater v. Churchill Downs Inc., 886 F.3d 784, 788 n.2 (9th Cir. 2018).
\textsuperscript{220} Id.
\textsuperscript{221} See Schwiddessen & Karius, supra note 1, at 21, 36.
\textsuperscript{222} See id. at 35–36.
\textsuperscript{223} Id. at 34.
\textsuperscript{224} Kater, 886 F.3d at 787 (quoting Bullseye Distrib., LLC v. State Gambling Comm’n, 110 P.3d 1162, 1166 (Wash. Ct. App. 2005)).
not satisfy the prize element because the player cannot covert these rewards into real-world currency. For example, in Soto, the court specifically emphasized the way the game at issue was designed to prevent players from cashing out rewards as a primary reason for finding the prize element unsatisfied. Furthermore, the relevant cash-out unit is the individual reward, not the entire game account. In Soto, the court highlighted that standard rewards did not constitute prizes merely because players could sell their entire game accounts on a secondary market.

3. Chance

Chance in the gambling context requires that the outcome of a game be determined by chance rather than skill. Since loot boxes by definition yield rewards on a random basis, all loot boxes theoretically satisfy the chance element. However, the approach taken in Mason v. Machine Zone, Inc. questions whether loot boxes can ever satisfy the chance element. In Mason, the court held that loot boxes within a game of skill—despite satisfying all three common-law gambling elements themselves—were not gambling. The court determined that it could not evaluate particular aspects of a video game in isolation. Instead, the court elected to view the entire game as a whole. Because the game at issue was predominately a game of skill—loot boxes were merely one optional aspect of the game—it could not constitute gambling. Other courts could easily apply the Mason approach to virtually any loot box, preventing loot boxes from satisfying the common-law elements of gambling, since most loot boxes are individual

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226. See Schwiddessen & Karius, supra note 1, at 33.
227. Soto, 159 F. Supp. 3d at 880.
228. See Schwiddessen & Karius, supra note 1, at 35.
229. Soto, 159 F. Supp. 3d at 880.
231. See Nielsen & Grabarczyk, supra note 1, at 2; Rose, supra note 114, at 2. In Soto, which involved a loot box within a strategy game, the defendant did not argue that its loot boxes were not games of chance and the court did not consider the chance element. See Soto, 159 F. Supp. 3d at 878. In Kater, because the game itself was a compilation of many individual games of chance, the defendants did not contest the chance element and the court did not consider it. See Kater v. Churchill Downs Inc., 886 F.3d 784, 788 (9th Cir. 2018).
234. Id. at 463.
235. Id.
236. Id. at 464.
chance-based functions within games predominately determined by skill.237

B. Evaluation of Arguments Concerning Loot Box Regulation

Setting aside the legal definition of gambling, there are many policy arguments regarding the specific regulation of loot boxes. This Section considers arguments for and against regulating loot boxes.

1. Arguments Supporting Regulation

Arguments in favor of loot box regulation are generally premised on their similarity to gambling and their use in games played by children.238

a. Similarities to Gambling

Loot boxes and gambling share many of the same addictive features.239 For example, both gambling games and loot boxes rely heavily on variable-rate reinforcement schedules.240 A variable-rate reinforcement schedule is a form of operant conditioning in which a response—such as spending money to play a game—is reinforced by a reward after an unpredictable number of responses.241 The variable schedule quickly results in a high and steady response rate.242 In the gambling and loot box context, low win probabilities for highly desirable rewards encourage players to purchase an indeterminate number of game plays or loot boxes to obtain such rewards.243 Less desirable rewards with higher win probabilities help maintain player interest and disguise losses with small regular wins.244 This game design encourages players to purchase gambling games and loot boxes in hopes of obtaining desirable rewards.245 Other addictive features among loot boxes and gambling games can include the illusion of control—a

237. Schwiddessen & Karius, supra note 1, at 33.
238. See, e.g., Drummond & Sauer, supra note 5, at 530, 532.
239. See, e.g., SZTAINERT, supra note 20, at 2–3.
240. Id. at 3; Drummond & Sauer, supra note 5, at 530; Daniel L. King & Paul H. Delfabbro, Predatory Monetization Schemes in Video Games (E.g., 'Loot Boxes') and Internet Gaming Disorder, 113 ADDICTION 1967, 1967 (2018).
242. Id.
243. King & Delfabbro, supra note 240.
244. SZTAINERT, supra note 20, at 3.
245. Id.; Drummond & Sauer, supra note 5, at 530; King & Delfabbro, supra note 240.
phenomenon in which a player’s initiation of a random process leads the player to believe the player controls the random process—and near misses, which reinforce behavior by showing a player what they could have won.\textsuperscript{246}

Players in the loot box and gambling context are also both subject to similar cognitive effects.\textsuperscript{247} For instance, the gambler’s fallacy—the false belief that the probability of winning increases as the length of an ongoing string of losses increases—aligns with both loot boxes and gambling.\textsuperscript{248} Additionally, both loot boxes and gambling are designed to appeal to “whales”—a small, but particularly vulnerable, portion of the population from which the game host will derive the bulk of its revenue.\textsuperscript{249}

Furthermore, recent studies specifically link loot boxes to “problem gambling.”\textsuperscript{250} One study found that an individual’s classification as a problem gambler accounted for approximately 38 percent of the variance in how much the individual spent on loot boxes.\textsuperscript{251} The study also found the correlation between problem gambling and loot boxes to be even stronger than the relationships observed between problem gambling and factors such as alcohol abuse, drug use, and depression.\textsuperscript{252} This correlation remains regardless of whether loot boxes are legally defined as gambling.\textsuperscript{253}

Finally, paid loot boxes are practically gambling.\textsuperscript{254} The three elements of loot box RRRMs align perfectly with the three elements of common-law gambling: monetary eligibility conditions are functionally consideration, random procedures are functionally chance, and rewards are functionally prizes.\textsuperscript{255} As previously discussed,\textsuperscript{256} many paid loot boxes only fail the consideration and prize elements of gambling because in-game currency and digital assets that cannot be cashed out

\textsuperscript{246} SZTAINERT, supra note 20, at 3.
\textsuperscript{247} Id.; Drummond & Sauer, supra note 5, at 532.
\textsuperscript{248} SZTAINERT, supra note 20, at 3.
\textsuperscript{249} Id.
\textsuperscript{250} See, e.g., Zendle & Cairns, supra note 2, at 9. “Problem gambling” is a pattern of excessive and involuntary gambling so extreme that it causes disturbances in a person’s personal or professional life. See id. at 2.
\textsuperscript{251} Id. The study noted it remains unclear whether loot boxes actually cause problem gambling or merely provide an outlet for those who are already problem gamblers. Id.
\textsuperscript{252} Id.
\textsuperscript{253} Id. at 10.
\textsuperscript{255} Id.
\textsuperscript{256} See supra Sections II.A.1–2.
for real-world currency do not qualify as things of value. However, the narrow definition of “things of value” ignores reality.\textsuperscript{257} Loot box rewards confer competitive advantages and—by virtue of their rarity—status on players.\textsuperscript{258} These qualities make rewards things of value to video game players.\textsuperscript{259} Additionally, as previously noted,\textsuperscript{260} all loot boxes possibly fail the chance element of gambling only because they are games of chance within larger games of skill. This ignores the reality that loot boxes are self-contained, optional additions to video games.\textsuperscript{261} Standing alone, loot boxes are games of chance because their outcome is determined by chance.\textsuperscript{262} Considering substance over form, paid loot boxes are functionally gambling regardless of whether they satisfy the legal definition of gambling.\textsuperscript{263}

\textit{b. Presence in Games Played by Children}

Loot boxes are particularly problematic because they are utilized in games commonly played by children.\textsuperscript{264} Children exposed to gambling are the most at risk for developing problematic gambling behaviors.\textsuperscript{265} Furthermore, children are more vulnerable than adults to gambling mechanisms and behaviors learned from these mechanisms due to weaker impulse control.\textsuperscript{266} For these reasons, some commentators suggest that video game age-rating agencies increase their recommended minimum age for games involving loot boxes.\textsuperscript{267}

\begin{itemize}
\item[\textsuperscript{257}] See Drummond & Sauer, supra note 5, at 532.
\item[\textsuperscript{258}] See id.
\item[\textsuperscript{259}] See id.
\item[\textsuperscript{260}] See supra Section II.A.3.
\item[\textsuperscript{261}] See Brian Fung, \textit{U.S. Consumer Watchdog to Investigate Video Game Loot Boxes}, \textit{WASH. POST} (Nov. 28, 2018), https://www.washingtonpost.com/technology/2018/11/28/us-consumer-watchdog-investigate-video-game-loot-boxes/?utm_term=.bf4629dd1ee0 [https://perma.cc/PMH2-QDBY] (noting that developers claim to use loot boxes to enhance gameplay with additional, optional content to players). For example, developers often retroactively introduce loot boxes to complete, previously released games. See id.
\item[\textsuperscript{262}] See Rose, supra note 114, at 2.
\item[\textsuperscript{263}] See Thakor-Rankin, supra note 254.
\item[\textsuperscript{264}] See Drummond & Sauer, supra note 5, at 531 (examining twenty-two video games containing loot boxes, with age ratings ranging from “E” (appropriate for players of any age) to “17+” (appropriate for players of seventeen and older)).
\item[\textsuperscript{265}] Id. at 532.
\item[\textsuperscript{266}] Id. at 530.
\item[\textsuperscript{267}] Id. at 532.
\end{itemize}
2. Arguments Against Regulation

There are four major arguments against the specific regulation of loot boxes. First, as noted by some industry players such as the ESRB, there is a fundamental dissimilarity between loot boxes and gambling.\(^{268}\) Whereas gambling results in either a win or a loss, loot boxes provide a guaranteed return.\(^{269}\) A loot box always yields some type of reward, even if it is not necessarily the reward the player hoped to receive.\(^{270}\) As such, the ESRB and others argue that it is more appropriate to analogize loot boxes to collectible cards—which are not regulated—than to gambling.\(^{271}\)

Second, regulation may not be necessary, at least in the most egregious cases, to bring about change.\(^{272}\) For example, in 2017, Electronic Arts removed loot boxes from *Star Wars: Battlefront II* in response to an underwhelming launch and strong public criticism.\(^{273}\) Proponents of this view argue that because players can police developers with their wallets, there is no need for regulatory intervention.\(^{274}\)

Third, loot box regulation, at least at the state level, presents feasibility problems.\(^{275}\) State regulation of video games would apply a patchwork of disparate laws to developers producing games for national audiences.\(^{276}\) Although developers can remove individual game elements in particular releases, the need to interpret and comply with a nonuniform patchwork of laws would potentially stifle game creativity and innovation.\(^{277}\) This is especially true for smaller developers who do...
not have the revenues to hire expensive legal counsel to fight lawsuits in states all over the country.\footnote{278}

Finally, loot box regulation would likely have a negative effect on video game profitability and the availability of freemium gaming.\footnote{279} Many developers heavily rely on loot boxes for revenue.\footnote{280} Many freemium games depend on in-game purchases—such as loot boxes—to recoup development costs and generate revenue.\footnote{281} Loot box regulation could force developers to shift their existing business models in order to maintain current levels of profitability.\footnote{282}

C. Current International Approaches to the Loot Box Problem

Countries around the world have taken varying approaches to loot box regulation.\footnote{283} This Section considers the approaches taken in China, Belgium, the Netherlands, and the United Kingdom.

1. China

Mainland China completely bans gambling.\footnote{284} As such, video games are heavily regulated in China to ensure that they do not include gambling or other similar mechanisms.\footnote{285} Since 2017, China has required all loot boxes included in games released in mainland borders to satisfy the following four requirements: (1) games cannot allow players to purchase loot boxes with real money or virtual currency; (2) games must make all rewards available through loot boxes obtainable through non-loot box means; (3) game publishers must disclose information regarding the names, functions, and probabilities of loot box rewards in a timely manner; and (4) game publishers must publicly disclose player results from loot boxes and keep records of such results for at least ninety days.\footnote{286}
China employs one of the most extensive loot box regulatory schemes in the world. Nevertheless, some describe China’s approach as a middle ground because it mitigates many of the parallels between loot boxes and gambling without completely banning loot boxes. China’s approach allows loot boxes to retain their essential characteristics, including eligibility conditions, random procedures, and rewards. However, it limits the types of eligibility conditions and rewards developers offer. Developers must utilize nonmonetary eligibility conditions—such as game achievements or time spent—and cannot create compulsion loops through loot box–only rewards. These limits protect players by safeguarding their financial and mental well-being. Additionally, China’s disclosure requirements provide the transparency necessary for players to make informed decisions without affecting loot boxes themselves.

Despite its many benefits, China’s regulatory scheme suffers from significant flaws. For example, game developers can circumvent efforts to ban paid loot boxes by offering loot boxes as free gifts with nonrandomized in-game purchases. Additionally, the disclosure laws permit categorical disclosure rather than mandating reward-specific disclosure—obscuring the odds of winning specific items through loot boxes.

2. The United Kingdom

The United Kingdom allows regulated gambling. Although the United Kingdom has no statute specifically addressing loot boxes, the country’s Gambling Commission (the “Commission”) recently issued two guidance documents applicable to loot boxes. On one hand, the

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287. See id. (noting that loot boxes are heavily regulated in China); Hafer, supra note 12 (comparing loot box laws in various countries).
288. See Tang, supra note 284.
289. See id.
290. See id.
291. See id.
292. See id.
293. See id.
294. See Hafer, supra note 12.
297. See Schwiddeessen & Karius, supra note 1, at 23.
guidance makes clear that loot boxes utilizing standard rewards are not
gambling in the United Kingdom.\textsuperscript{298} On the other hand, the guidance is
ambiguous with respect to loot boxes yielding cash-out rewards.\textsuperscript{299} The
guidance states that rewards that players can readily convert outside a
video game into real-world currency are gambling because the rewards
derive value from their current market price.\textsuperscript{300} However, the guidance
fails to clarify: (1) the definition of “outside a video game,” (2) the
Commission’s stance on rewards converted within a video game, (3) the
meaning of “readily converted,” and (4) the effect of developer efforts to
restrict cash-out transactions.\textsuperscript{301} These uncertainties make evaluating
the status of loot boxes in the United Kingdom difficult.\textsuperscript{302} Statements
and interviews by stakeholders in the Commission indicate that the
guidance primarily targeted “skin gambling” and that the Commission
is unlikely to engage in any enforcement action relating to loot boxes.\textsuperscript{303}

3. The Netherlands and Belgium

In April of 2018, regulatory officials in the Netherlands and
Belgium issued legal opinions that some—not all—loot boxes violated
their respective gambling laws.\textsuperscript{304} Neither country has a statute or
regulation on its books specific to loot boxes.\textsuperscript{305}

Regulators in the Netherlands ruled that games with cash-out
loot box rewards violate the country’s gambling laws.\textsuperscript{306} Furthermore,
due to the similarities between loot boxes and gambling, regulators
requested that games modify loot boxes with addiction-sensitive
elements—including almost-winning effects, certain visual features,
and the ability of players to open many loot boxes in immediate
succession.\textsuperscript{307} Dutch officials also requested that game developers
implement measures to exclude or protect vulnerable players.\textsuperscript{308}

\begin{itemize}
  \item 298. \textit{See id.} at 25.
  \item 299. \textit{See id.}
  \item 300. \textit{See id.} at 25–27.
  \item 301. \textit{Id.}
  \item 302. \textit{See id.} at 25.
  \item 303. \textit{See id.} at 24.
  \item 304. \textit{Hafer, supra} note 12.
  \item 305. \textit{Id.}
  \item 306. \textit{See Wesley Yin-Poole, The Netherlands Declares Some Loot Boxes Are Gambling, EUROGAMER} (Apr. 19, 2018), https://www.eurogamer.net/articles/2018-04-19-the-netherlands-declares-some-loot-boxes-are-gambling [https://perma.cc/YKX6-9TK5]. The ruling applies both to games that offer a marketplace to cash out rewards and games for which an independent third-party marketplace exists. \textit{Id.}
  \item 307. \textit{Id.}
  \item 308. \textit{Id.}
\end{itemize}
Numerous developers modified Dutch loot boxes in response to the April ruling.\textsuperscript{309} No enforcement actions have been initiated as of mid-2019.\textsuperscript{310} Regulators in Belgium ruled that loot boxes that are available for purchase with real-world currency violate the country’s gambling laws.\textsuperscript{311} As in China, loot boxes with nonmonetary eligibility conditions remain permissible.\textsuperscript{312} Although numerous developers modified their games in Belgium in response to the April ruling, Electronic Arts nevertheless refused to modify its games.\textsuperscript{313} Belgian officials are in the early stages of filing an enforcement proceeding against Electronic Arts.\textsuperscript{314}

III. SOLUTION

As previously discussed,\textsuperscript{315} states probably could regulate at least some loot boxes under their existing gambling laws. However, the limitations of current laws,\textsuperscript{316} the continued pervasiveness of loot boxes,\textsuperscript{317} and the lack of legal activity related to loot boxes\textsuperscript{318} indicate that current US gambling laws inadequately address the loot box problem. The United States should regulate loot boxes, even those not legally defined as gambling under the common law, because of their similarities to gambling and their placement in games played by children.\textsuperscript{319} To address the loot box problem, the ESRB should implement rules requiring mandatory disclosure and labeling for video games containing loot boxes. Alternatively, if the ESRB fails to take action, the federal government should enact the necessary regulation.

\textsuperscript{309} Id.
\textsuperscript{310} Id.
\textsuperscript{312} See id.
\textsuperscript{314} Id.
\textsuperscript{315} See supra Section II.A.
\textsuperscript{316} See supra Section II.A.
\textsuperscript{317} See supra note 2 and accompanying text; see also Hafer, supra note 12; Thier, supra note 104.
\textsuperscript{318} See CHAMPION & ROSE, supra note 120; Rose, supra note 114, at 2.
\textsuperscript{319} See supra Section II.B.1.
A. Impractical State-Level Solutions

The most comprehensive solution to the loot box problem is for states to close the current gaps in their existing gambling laws. Regardless of their legal status, loot boxes are practically gambling.\textsuperscript{320} Loot boxes functionally satisfy all three elements of common-law gambling and rely on the same addictive features as gambling;\textsuperscript{321} they are a classic case of the law struggling to keep pace with creative technological developments.\textsuperscript{322} A precise, inflexible definition of gambling should not allow loot boxes to escape regulation necessary to protect video game players—a class of individuals that includes a large number of children.\textsuperscript{323} Loot boxes also have a statistically significant and alarming relationship with problem gambling.\textsuperscript{324} Effective updates to current gambling laws could include (1) specific loot box–related amendments; (2) a broadened definition of “things of value” to recognize that in-game currency and digital assets have real-world monetary value; or (3) a carve out to the dominant factor test allowing courts to consider compartmentalized, self-contained minigames separately from their larger game frameworks. These updates would place significantly more loot boxes within the reach of gambling regulation.

However, the most comprehensive solution to the loot box problem is not necessarily the most practical solution. This Note analyzes loot boxes under what is generally the law everywhere, but specifically the law nowhere. As previously noted,\textsuperscript{325} gambling is governed by state law, which varies considerably across different states. Loot box solutions at the state level create substantial uniformity issues.\textsuperscript{326} A varied patchwork of state laws affecting loot boxes could make compliance difficult for game publishers and enforcement challenging for state officials.\textsuperscript{327} Compliance could require game publishers to produce multiple US versions of their games and ensure that each version is only played where it is legal. Similarly, enforcement could require state law enforcement to monitor video game sales and player game activity to ensure all video games played in its jurisdiction are legal. State-level loot box solutions are impractical due to the

\begin{itemize}
  \item \textsuperscript{320}See supra Section II.B.1.a.
  \item \textsuperscript{321}See supra Section II.B.1.a.
  \item \textsuperscript{322}Griffiths, supra note 268, at 3.
  \item \textsuperscript{323}See id.
  \item \textsuperscript{324}See supra Section II.B.1.a.
  \item \textsuperscript{325}See supra Section I.B.4.
  \item \textsuperscript{326}See supra Section II.B.2.
  \item \textsuperscript{327}See supra Section II.B.2.
\end{itemize}
burdens they would place on video game publishers and law enforcement.\textsuperscript{328}

\textbf{B. The Entertainment Software Ratings Board Solution}

The most practical solution to the loot box problem is for the ESRB to enact a regulatory scheme requiring age restrictions, mandatory labeling, and reward-specific disclosure for all loot boxes. As the ESRB’s rules apply at a national level, this solution avoids the uniformity issues present in a state-level solution.\textsuperscript{329} Furthermore, this solution protects consumers by enabling players and parents to make informed choices.\textsuperscript{330} Mandatory labeling on game packaging and marketing would warn consumers when a game contains an addictive gambling device. Reward-specific disclosure for all loot boxes would provide consumers with complete information when making the choice to partake in loot boxes. This solution also protects young children by keeping a gambling mechanism out of their hands.\textsuperscript{331} Finally, this solution would be relatively inexpensive for both the ESRB and game developers. The ESRB, with its substantial history of regulating video games in the United States, already has processes in place to verify and publish information about video game content.\textsuperscript{332} The addition of two requirements to the ESRB’s preexisting regulatory scheme is unlikely to substantially increase its costs. Game developers are also already accustomed to complying with ESRB regulation,\textsuperscript{333} and, as game creators, they likely have on hand any information that would be required by mandatory disclosures. Thus, it would be relatively easy for game developers to comply with new ESRB loot box requirements. An ESRB solution strikes an optimal balance between protecting consumers from dangerous and addictive activities, preserving consumers’ personal autonomy, and ensuring feasibility and cost effectiveness.

\textsuperscript{328} See supra Section II.B.2.

\textsuperscript{329} See supra Section II.B.2 (discussing the difficulties posed by a nonuniform patchwork of state laws).

\textsuperscript{330} See Tang, supra note 284 and accompanying text (noting mandatory disclosure provides the transparency required for players to make informed decisions about video games). Notably, helping parents and players make informed choices about video games is the essential mission of the ESRB. See About ESRB, supra note 107.

\textsuperscript{331} See supra Sections II.B.1.a–b.

\textsuperscript{332} See Thier, supra note 104.

The largest obstacle to an ESRB solution is the ESRB itself. As previously discussed, the ESRB staunchly holds its position that loot boxes are not gambling. The ESRB has also resisted any action on loot boxes outside of its general microtransaction warning. Self-regulatory solutions are only viable when an industry is willing to self-regulate. Public outrage and negative media coverage have not yet spurred self-regulation. It is possible the increasingly serious threat of federal regulation in the face of industry inaction will cause the ESRB to change its stance in the future.

C. The Alternative Federal Solution

If the ESRB refuses to act on loot boxes, the alternative solution is federal regulation. An effective federal solution would create age restrictions and labeling and disclosure requirements analogous to an ESRB solution. Similar to an ESRB solution, a federal regulatory solution also avoids the uniformity issues of a state-level solution. Likewise, a federal solution protects consumers by facilitating informed choices by players and parents.

However, there are two serious drawbacks to a federal solution: enactment and enforcement costs. Passing a federal law of any type is likely to be difficult in the current political climate. Nevertheless, difficult political hurdles might be avoided by enactment through a regulatory body such as the FTC, which is presently studying loot boxes for possible regulation. Enforcement cost, however, is a

334. See supra Section II.B.2.
336. See Garcia, supra note 12 (arguing the government will step in to regulate in the ESRB’s traditional regulatory space if the ESRB does not act on loot boxes soon).
337. See Schwiddessen & Karius, supra note 1 and accompanying text (discussing the recent public reaction to and media coverage of loot boxes).
338. See Garcia, supra note 12 (arguing the ESRB must act to avoid federal regulation).
339. See id. (noting federal regulation is the alternative to ESRB action).
340. See supra Section III.B. The recent Senate loot box proposal emphasizes the need for age restrictions on loot boxes due to consumer protection concerns. See Thier, supra note 104.
341. See supra Section II.B.2 (discussing the difficulties posed by a nonuniform patchwork of state laws).
342. See Tang, supra note 284 and accompanying text (noting mandatory disclosure provides the transparency required for players to make informed decisions about video games); Hafer, supra note 12.
343. See Lamb, supra note 50.
344. See Pu, supra note 99.
more difficult challenge to overcome. Although monitoring whether publishers complied with the mandatory loot box disclosures would likely be relatively inexpensive, verifying the accuracy of such disclosures would be significantly more difficult. The federal government lacks the existing structure and expertise of the ESRB to evaluate and monitor the large number of video games circulating in the United States. Nevertheless, a federal disclosure regime is both necessary and appropriate if the ESRB refuses to take action on the loot box problem.

IV. CONCLUSION

As this Note’s extensive inquiry into loot boxes and US gambling law demonstrates, most loot boxes fall outside the regulatory reach of current gambling laws. Key barriers to inclusion are the narrow definition of “things of value” and the dominant factor test’s failure to recognize self-contained minigames within larger game frameworks.

As such, the United States should enact national-level loot box regulation requiring mandatory labeling and reward-specific disclosure. Although an ESRB solution is preferable, a federal solution is also a reasonably feasible and effective option. Loot boxes touch on important public issues concerning addiction, child welfare, informed decision-making, and gambling. The law must react to this strong and growing trend in the video game industry to ensure that players have the information to protect themselves and make informed choices.

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345. See Garcia, supra note 12 (highlighting the drawbacks of having judges and politicians who are not well versed in the video game world regulating the video game industry).
346. See supra Section II.A.
347. See supra Section II.B.1.

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