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PREDATORY MICROTRANSACTION REGULATIONS: AN INTERNATIONAL COMPARISON

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**PREDATORY MICROTRANSACTION
REGULATIONS:
AN INTERNATIONAL COMPARISON**

Matt Hardy

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I. INTRODUCTION

As the popularity of video games increased since their invention, gaming can no longer be considered a niche hobby. Data from the Entertainment Software Association (ESA) estimated that nearly 65% of adults in the United States play video games in some form.¹ Even those who do not own one of the staple gaming consoles like Sony's Playstation or Microsoft's Xbox likely have spent some of their income on smartphone games or other mobile applications. As gaming has become a more fundamental part of the way we entertain ourselves, video game publishers and developers have flourished financially. From 2015 to 2019, the ESA estimates that spending on video game content has increased by 85%.² The growth is undeniable; publishers like 2K Games and Electronic Arts have become titans of the entertainment industry, raking in billions of dollars each year. In fact, the highest grossing media product of all time is currently a video game, *Grand Theft Auto V* (GTA V),³ which has brought in over six billion dollars for 2K Games since its release in 2013.⁴ These financial profits that can be reaped from what previously seemed like a niche industry show why the game publishers and developers have garnered interest from big investors.

The financial success of the industry would naturally lead those who are unfamiliar with the minutiae of the video game market to ask: How do these products make so much money? They look to

¹ Hillary Russ, *U.S. adults are spending big on video games, playing mostly on smartphones*, REUTERS (May 9, 2019, 8:06 AM), <https://www.reuters.com/article/us-usa-videogames/u-s-adults-are-spending-big-on-video-games-playing-mostly-on-smartphones-idUSKCN1SF1DC>.

² *Id.*

³ *Grand Theft Auto V*, ROCKSTAR GAMES, <https://www.rockstargames.com/V/> (last visited Dec. 17, 2020).

⁴ Emmét McGonagle, *'Grand Theft Auto V' Has Grossed More Than Any Movie Ever Made*, ESQUIRE (Nov. 4, 2018), <https://www.esquire.com/uk/latest-news/a19743365/grand-theft-auto-v-has-grossed-more-than-any-movie-ever-made/#:~:text=Grand%20Theft%20Auto%20V's%20world,of%20its%20%24265%20million%20budget>.

games like GTA V and wonder how a media product initially sold for \$60 when released in 2013 is still pulling in hundreds of millions of dollars in revenue in 2020. While the game has been released on new platforms that increased the sales numbers, the key to understanding its success, and the growth of the video game industry as a whole, is the proliferation of microtransaction monetization.

Microtransactions are broadly defined as in-game purchases that give the purchaser access to additional content that was not included in the base product.⁵ The categories of microtransactions are typically divided into in-game currencies, (ii) random chance purchases (also known as “loot boxes”), and (iii) in-game items.⁶ These purchases vary in purpose and scope. The two types of microtransactions that have recently garnered scrutiny in the industry are “pay-to-win” purchases and loot boxes; these microtransactions are the focus of this article.

While at first glance they may appear to be simple optional purchases for customers, these monetization tactics have become increasingly predatory and insidious. Pay-to-win purchases prey upon consumers’ need for the next dopamine hit that video games provide by gating content that normally would be given to the customer upon their initial purchase and instead charging a premium for it. Loot boxes have essentially turned video games into virtual casinos, except there is usually no potential monetary award for success. By tapping into the psychological exploits of their customers, video game companies are manipulating their customers into spending much more money than they would have anticipated upon purchasing or downloading a videogame. Sometimes, these games are free at purchase, but customers end up spending more than they would have if they purchased a game at the standard price of \$60. Moreover, these monetization tactics often target minors.

⁵ MARTIN IVANOV ET AL., *Video Game Monetization Mechanism in Triple A (AAA) Video Games*, IN SIMULATION & GAMING THROUGH TIME AND ACROSS DISCIPLINES 419, 422-24 (Marcin Wardaszko ed. 2019).

⁶ *Id.*

In doing so, these video game publishers and developers create future gambling addicts.⁷

National governments have attempted to solve this problem, but their solutions are reactionary, scattershot, and fail to fully address the harms of predatory microtransactions. In this article, I argue that these governments need to improve and expand the regulatory framework for microtransactions and video game purchases generally, and provide a basic proposal for that framework. Companies like Electronic Arts and 2K Games have exploited their customers with addictive behavioral tendencies, as well as children who have not reached the level of mental development necessary to control and temper their spending. Unless national governments around the world catch on and curb these practices, they may become a permanent part of the industry and even seep into other industries.

In Section II, I explain what these problematic microtransactions are and how they manipulate human behaviors and brain chemistry. In Section III, I address why we should regulate these transactions. In Section IV, I evaluate the current microtransaction regulations for several prominent nations. In Section V, I conclude and offer a proposal for the best method of regulating these predatory microtransactions.

II. PREDATORY MICROTRANSACTIONS: WHAT ARE THEY? HOW DO THEY WORK?

As previously stated, microtransactions generally are defined as in-game purchases that give the purchaser access to additional content that was not included in the base product.⁸ These purchases are not necessarily predatory in nature. Quite the opposite, most of these purchases are simply for cosmetic additions and do not come with any strings attached or mental manipulation. For example, in

⁷ See Daniel L. King & Paul H. Delfabbro, *Predatory monetization schemes in video games (e.g. 'loot boxes') and internet gaming disorder*, 113 *Addiction* 1967, 1967-69 (2018), <https://onlinelibrary.wiley.com/doi/full/10.1111/add.14286>.

⁸ IVANOV ET AL., *supra* note 5, at 422-24.

a game like Fortnite, gamers can purchase additional “character skins”⁹ for a set price. Players pay \$5 and get a character skin they want: a basic transaction. Some argue that they are not predatory at all, and simply provide “flexibility” to the player to purchase the content they want.¹⁰ These, however, are not the microtransactions that have led to calls for regulation. The two main microtransactions that have created concern are pay-to-win mechanics and loot boxes, which I will describe in detail below. It is important to note that these are broad categories and do not encapsulate all predatory microtransactions. However, it is easier to explain them separately, as they capture most of the problematic types of microtransactions. There is also significant overlap, as loot boxes can contain pay-to-win items. These definitions are not static or complete; some scholars separate loot boxes from microtransactions categorically. However, I find it is easier to divide predatory microtransactions along these lines, as these mechanics manipulate consumers in distinct ways. However, both are normally small (micro) in-game purchases/transactions.

A. *PAY-TO-WIN MECHANICS*

Pay-to-win microtransactions have received less regulatory scrutiny than loot boxes, but have been the center of controversy and discussion over the ethics of their use because of games targeting children. As defined in the (ultimately rejected) U.S. Senate bill, the Protecting Children from Abusive Games Act, pay-to-win transactions are microtransactions that “eases a user’s progression through content otherwise available within the game” or “assist a user in accomplishing an achievement within the game.”¹¹ Game designers use these monetization mechanics by tapping into a

⁹ Character skins are a term for virtual items that change the appearance of a player-character. These can be free or purchasable in-game.

¹⁰ Patrick Sullivan, *Video Game Industry Responds to Regulation of Pay-To-Win Microtransactions and Loot Boxes*, JD SUPRA (Sept. 4, 2019), <https://www.jdsupra.com/legalnews/video-game-industry-responds-to-87298/>.

¹¹ Protecting Children From Abusive Games Act, S. 1629, 116th Cong. (2019).

human behavioral pattern called “loss aversion.”¹² Loss aversion is a concept that simply means humans would “rather enjoy the satisfaction of winning rather than losing.”¹³ This in itself is not predatory; we all want to win more than we lose. What is predatory is the way that game developers use loss aversion to keep players addicted to playing and spending beyond their means. Many games, especially in the mobile game ecosystem, design their monetization around this concept in order to wring more dollars out of players’ wallets, and more specifically, children’s wallets. They do this by influencing the chemical of addiction: dopamine. Video games generally try to increase dopamine levels to encourage a habit of playing, even those without pay-to-win mechanics.¹⁴ Video game producers want players to form some level of addiction to their games: they want players to come back for more or stay invested in their products. However, many believe that these corporations have crossed an ethical line by so precisely designing the monetization of their games through the formation of addictive habits. With the rise of user data collection in the internet age, video game producers have been able to pinpoint when gamers dopamine levels increase or decrease.¹⁵ They know exactly how to keep players interested, and how to keep players addicted to their product: they have essentially become a digital drug dealer.¹⁶

Many pay-to-win mechanics function in a similar fashion. Pay-to-win games usually start free for a trial period¹⁷ or cost very little. If it’s a single player game, they usually start off relatively easy and give the player several rewards for their progress. After a number of hours, the game gets progressively harder; sometimes it becomes

¹² Gabe Duverge, *Insert More Coins: The Psychology Behind Microtransactions*, TOURO UNIVERSITY WORLDWIDE (Feb. 25, 2016), <https://www.tuw.edu/psychology/psychology-behind-microtransactions/>.

¹³ *Id.*

¹⁴ *The Psychology of Freemium*, PsychGuides.com (last visited Dec. 17, 2020), <https://www.psychguides.com/interact/the-psychology-of-freemium/>

¹⁵ *Id.*

¹⁶ *See id.*

¹⁷ *See id.*

nearly impossible to continue to progress without spending hundreds of hours playing. However, the dopamine the game was giving while the rewards were plentiful cease, leaving players with two options: “grinding”¹⁸ or paying for a microtransaction that gives an in-game item and lets them, in one way or another, bypass the boring or difficult part of the game. As players progress, the game starts hitting them with more of these checkpoints where the game slows down, providing more opportunities to spend money. Games are intentionally speeding up and slowing down dopamine neurotransmission in order to keep the player invested and willing to spend more and more money. The success of these monetization practices can be seen through the massive revenues for supposedly “free” mobile games like Candy Crush Saga. In 2013, Candy Crush made \$1.88 billion in revenue despite being free to initially download.¹⁹ In fact, as of October 2020, ninety-nine of the Apple App Store’s one hundred highest grossing apps are all free downloads.²⁰

These practices are particularly insidious and unethical because they often target children. In countries that don’t have strong consumer safeguards, like the United States, it is very easy for a child to link a parent’s credit card to their game account without authentication.²¹ While there are some protections available in European nations, most countries do not require game developers to clearly delineate between in-app cash purchases and standard, in-game virtual currency purchases.²² This is not normally an issue

¹⁸ Grinding is a process by which a player performs basic in-game tasks that are normally mindless, uninteresting and unengaging, in order to reach the more meaningful and exciting portions of the game.

¹⁹ PyschGuides.com, *supra* note 14.

²⁰ *Top Charts: iPhone – US – Games*, Sensor Tower (Oct. 27, 2020), <https://sensortower.com/ios/rankings/top/iphone/us/games/strategy?date=2020-10-27> (last visited Dec. 18, 2020).

²¹ Alena Khonych, *Ethical and legal dimensions of microtransactions in videogames*, METROPOLIA UNIVERSITY OF APPLIED SCIENCES (2019), https://www.theseus.fi/bitstream/handle/10024/262119/Khonych_Alena.pdf?sequence=2.

²² *Id.*

for adults, children often do not have a complete understanding of monetary value and cannot differentiate between spending real-world and virtual currencies.²³

B. LOOT BOXES

Loot boxes are generally defined as an “in-game purchase consisting of a virtual container that awards players with items and modifications based on chance.”²⁴ These loot boxes usually contain cosmetic items that change the appearance of the in-game avatar, weaponry, or their user profile. Games also can offer in-game bonuses and items that would generally be considered pay-to-win mechanics. Most of these mechanics resemble slot machines, except instead of rewards of cash, player get virtual items. The items the game hands out have various rarities and “drop rates.” Drop rates are the odds that a particular item will “drop” to a player. For instance, in the popular first-person shooter *Overwatch*, there are items in loot boxes with four levels of rarity: common, rare, epic, and legendary. According to reports from Chinese disclosure forms, the odds of receiving an epic or legendary item in an *Overwatch* loot box are 18.2% and 7.4% respectively.²⁵ These odds can vary significantly, with some games offering loot boxes with items that drop at a 0.1% rate.

Loot boxes manipulate human psychology using the principle called “variable rate reinforcement.”²⁶ Our dopamine system loves “unpredictable rewards.”²⁷ Dr. Luke Clark, director of the Center for Gambling Research at the University of British Columbia,

²³ *See id.*

²⁴ Margaret Rouse, *Loot box: definition*, TECHTARGET, <https://whatis.techtarget.com/definition/loot-box> (last updated Jan. 2018).

²⁵ Kellen Beck, *How likely you are to get epic and legendary items from ‘Overwatch’ loot boxes*, MASHABLE (May 5, 2017), <https://mashable.com/2017/05/05/overwatch-loot-box-probability/>.

²⁶ Alex Wiltshire, *Behind the addictive psychology and seductive art of loot boxes*, PCGAMER (Sept. 28, 2017), <https://www.pcgamer.com/behind-the-addictive-psychology-and-seductive-art-of-loot-boxes/>.

²⁷ *Id.*

explains that modern video games amplify the effect of the variable rate reinforcement phenomenon and trigger high levels of dopamine release.²⁸ “Dopamine cells,” Dr. Clark says, “are most active when there is maximum uncertainty, and the dopamine system responds more to an uncertain reward than the same reward delivered on a predictable basis.”²⁹ Game developers manipulate brain chemistry through loot box microtransactions by modelling their games in a way that keep players coming back for more. Normally, this is not a problem: games are designed to keep players invested and excited about their game. What makes them so insidious in modern video games is how they are wired into the game itself: they are designed to keep gamers on “knives-edge between feeling hungry and feeling rewarded.”³⁰ It becomes problematic when games effectively become virtual casinos where they parade virtual items in front of their users and target their dopamine receptors to keep players in the compulsion loop: a “habitual, designed chain of activities that will be repeated to gain a neurochemical reward.”³¹ Regulators point to these loot box mechanics as a cause for the rise in gambling addiction, which in turn leads to extreme and habitual overspending by consumers.

III. WHY MICROTRANSACTIONS SHOULD BE REGULATED

There are a number of ways that predatory microtransactions in video games negatively impact the social and economic costs to the consumer public. The criticism generally follows two tracks: video game addiction or gambling addiction. The focus of this paper is about the latter problem, which I believe to be the more significant and dangerous consequence of these manipulative monetization tactics.

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ Joseph Kim, *What is the Compulsion Loop?*, GAMEANALYTICS (Apr. 2, 2014), <https://gameanalytics.com/blog/the-compulsion-loop-explained.html>.

Gambling is generally understood to be a vice that should be regulated. While some may disagree with the degree to which it is regulated and how regulations should be implemented, the scientific consensus is that it must be regulated in order to prevent gambling addiction and the resulting consequences. The Mayo Clinic refers to gambling disorders as “compulsive gambling,” defined as “the uncontrollable urge to keep gambling despite the toll it takes on [a player’s] life.”³² The toll it takes can be extreme and destructive. Those who deal with severe gambling addictions can “deplete [their] savings, accumulate debt, or even resort to theft or fraud” to feed their addiction.³³ The harms of compulsive gambling go beyond affecting the financial status of the addict. Severe gambling can “affect a person’s health, causing sleep problems, anxiety, stress, depression, unexplained anger, thoughts of suicide, and suicide attempts.”³⁴ Tragically, as an addict becomes more addicted to gambling, they can also “alienate friends and loved ones,”³⁵ which can only further exacerbate their addictive tendencies, since no one can reach out to help them. This form of addiction is also somewhat widespread: the National Center for Responsible Gaming estimates that about 1% of the U.S. adult population has a severe gambling problem, and 6 to 9% among young people in the U.S.³⁶

Most national governments, including the U.S. government, have directly addressed problem-gambling through extensive regulation. The Securities and Exchange Commission, for example, requires constant disclosure by casinos and other business entities

³² *Compulsive gambling*, MAYO CLINIC, <https://www.mayoclinic.org/diseases-conditions/compulsive-gambling/symptoms-causes/syc-20355178> (last visited Dec. 18, 2020).

³³ *Id.*

³⁴ *Gambling Addiction*, JOHNS HOPKINS MEDICINE, <https://www.hopkinsallchildrens.org/patients-families/health-library/healthdocnew/gambling-addiction> (last visited Dec. 18, 2020).

³⁵ *Id.*

³⁶ *Gambling Disorder Fact Sheet*, NATIONAL CENTER FOR RESPONSIBLE GAMING, https://www.icrg.org/sites/default/files/oec/pdfs/ncrg_fact_sheet_gambling_disorders.pdf (last visited Dec. 18, 2020).

with gambling practices.³⁷ Further, to even qualify as an organization that can conduct gambling activities (like poker, slots, lotteries, etc.), businesses must pass rigorous licensing requirements.³⁸ Among the many restrictions under federal and state law, casinos cannot offer certain types of credit to customers that could prevent overspending and compounding debt problems.³⁹ Additionally, there are heavy restrictions on who they can advertise to and how they can advertise their services.⁴⁰ With these regulations, gambling companies must act in ways that meet high ethical standards or be found criminally liable for their actions. While these regulations aren't entirely designed with morality and ethics involved, they go a long way to keep casinos, lotteries, and other gambling purveyors from acting in ways that could hurt the general public.

However, as is the problem with many attempts to regulate vices, new challenges arise as technology advances and the economies change. Regulations that previously worked well may not cover new societal problems or evolutions of old societal ills. For example, the Food and Drug Administration had to update many of their regulations to cope with the recent rise of electronic cigarettes and vaping.⁴¹ Companies selling these products managed to skirt the rules, consequently creating a new wave of tobacco

³⁷ See *Gaming Regulatory Overview*, SECURITIES AND EXCHANGE COMMISSION, <https://www.sec.gov/Archives/edgar/data/858339/000119312512115625/d268435dex993.htm> (last visited Dec. 18, 2020).

³⁸ *Id.*

³⁹ *Responsible Gaming: Regulations & Statutes*, AMERICAN GAMING ASSOCIATION (Sept. 17, 2019), <https://www.americangaming.org/resources/responsible-gaming-regulations-statutes-2/>.

⁴⁰ *Id.*

⁴¹ *The Facts on the FDA's New Tobacco Rule*, FOOD AND DRUG ADMINISTRATION (Jun. 16, 2016), <https://www.fda.gov/consumers/consumer-updates/facts-fdas-new-tobacco-rule>.

addicts that these regulations were designed to prevent.⁴² Sometimes these regulatory fixes come too slowly or don't come at all, defeating the entire purpose of the regulations.

This is why predatory microtransaction should be taken seriously and action should be taken swiftly by national governments to curb their implementation in video games. Just as e-cigarettes managed to subvert tobacco laws, video game companies are exploiting the novelty of modern video games to subvert gambling laws. The general public understands what typically constitutes gambling: card games like poker and blackjack, lottery tickets and scratch-offs, sports betting, etc. All of these recognizable practices that constitute gambling are heavily regulated. Microtransactions, on the other hand, are less well-known and a relatively new phenomenon. While gaming itself has become less of a niche hobby in recent years, the intricacies of the gaming industry remain a mystery to most of the public. If someone on the street is asked what a microtransaction is and how it relates to video games, they likely will answer with a shrug. And yet, as I've stated above, these gaming publishers and developers have exploited human behavior in the same ways that casinos do, sucking more and more money out of their consumers without regulation.⁴³ Traditional gambling games and modern video games similarly "operate on game mechanics that include 'variable reinforcement schedules in order to reward and prolong play, and use exciting and stimulating sound and light effects.'"⁴⁴ Some video games even explicitly include virtual casino games, like recent entries in the NBA 2K series.⁴⁵

⁴² See *id.*

⁴³ See Cam Adair, *Video Games and Gambling: An Introduction to Loot Boxes, Microtransactions, and In-App Purchases*, GAME QUITTERS (Aug. 24, 2018), <https://gamequitters.com/video-games-and-gambling-an-introduction-to-loot-boxes-microtransactions-and-in-app-purchases/>.

⁴⁴ *Id.*

⁴⁵ Alice O'Connor, *NBA 2K20's loot box-y MyTeam mode even has faux gambling machines*, ROCK PAPER SHOTGUN (Aug. 29, 2019), <https://www.rockpapershotgun.com/2019/08/29/nba-2k20s-loot-box-y-myteam-mode-even-has-faux-gambling-machines/>.

The consequences of addiction to microtransaction purchases like loot boxes have been well-documented. For example, one gamer spent over \$150,000 on the “free-to-play” mobile game *Transformers: Earth Wars*.⁴⁶ Another spent \$62,000 on *Runescape*, where gamers can pay up to \$99.99 at a time to take “spins” of a wheel to obtain in game items and currency.⁴⁷ These are some of the higher profile examples of out-of-control spending among the thousands of other gamers who have shelled out more money than they reasonably should have on video games. The impact of microtransactions is clear: they take games that are ostensibly supposed to be “free” and create addicts who keep coming back to spend their hard-earned money on virtual items. Modern free-to-play video games and casinos are becoming less and less distinguishable; yet these video games might be worse because there typically isn’t an opportunity to convert winning in-game into real-world currency.

The lack of regulation of microtransactions is even more concerning because many of them are targeted towards children. These monetization tactics allow “children to pay real money for game boosters and tips.”⁴⁸ They also allow minor gamers to win “fake money or other prizes that can be traded for an opportunity at winning more, replicating a real-life gambling opportunity.”⁴⁹ In the U.S., most states require players to be twenty-one years old to

⁴⁶ Alex Walker, *Someone Spent Over \$150,000 In Microtransactions on a Transformers Game*, KOTAKU (Oct. 14, 2019), https://kotaku.com/someone-spent-over-150-000-in-microtransactions-on-a-t-1839040151?utm_source=Kotaku_Facebook&utm_campaign=Socialflow_Kotaku_Facebook&utm_medium=Socialflow.

⁴⁷ Cecilia D’Anastasio, *Player Spends \$62,000 In Runescape, Reigniting Community Anger Around Microtransactions*, KOTAKU (Sept. 18, 2019), <https://kotaku.com/player-spends-62-000-in-runescape-reigniting-communit-1838227818>.

⁴⁸ *The Dangers of Youth Gambling Addiction*, KNOW THE ODDS, https://knowtheodds.org/wp-content/uploads/2013/05/NYCPG_ebook_YouthGambling_052114.pdf.

⁴⁹ *Id.*

gamble.⁵⁰ These age restrictions are created because children and teenagers have not fully developed their brains; they are not able to properly balance emotion and logic.⁵¹ Not only are kids more likely “to act impulsively and take risks,” but they also often continue their addictions into adulthood.⁵² Thus, when gaming companies implement their predatory microtransactions in ways that target minors, they are taking advantage of the most vulnerable among us and potentially giving them lifelong addiction problems. These attempts to entice younger players can also have financial consequences for unaware parents: earlier this year, a six-year-old child spent over \$16,000 on the mobile game Sonic Forces.⁵³ His mother was completely unaware of the purchases until they received the bill from Apple and she has been unable to receive a refund for her son’s purchases.⁵⁴

Gambling regulation is necessary to prevent the social ills that come with gambling addiction. However, government regulations have mostly been unable to keep up with the times. If we want to truly curb gambling addiction, regulators need to consider predatory microtransactions as equivalent to traditional forms of gambling. When the general public thinks about gambling, they do not usually consider the standard PlayStation, Xbox, or Nintendo game, but they should: awareness of the problem of in-game microtransactions could go a long way to mobilizing regulators to take action.

⁵⁰ *How Old Do You Have to Be to Gamble?*, POKER NEWS (Aug. 30, 2019), <https://www.pokernews.com/casino/gambling-age-regulations.htm>.

⁵¹ *The Dangers of Youth Gambling Addiction*, *supra* note 48.

⁵² *Id.*

⁵³ Doree Lewak, *This 6-year-old racked up \$16K on mom’s credit card playing video games*, NEW YORK POST (Dec. 12, 2020), <https://nypost.com/2020/12/12/this-6-year-old-racked-up-over-16k-on-his-moms-credit-card/>.

⁵⁴ *Id.*

IV. INTERNATIONAL APPROACHES TO MICROTRANSACTION REGULATIONS

Countries have taken drastically different approaches to regulate predatory microtransactions. While most have focused on loot boxes, they have not done so with varying degrees of harshness and scope. There are a number of countries that have directly responded to predatory microtransactions, however I will be focusing on countries that have had the most noteworthy regulations or impact on the video game market itself. These countries are the United States, the Netherlands, Belgium, Japan, and China.

A. UNITED STATES

While the United States government has done very little substantive regulation of the video game industry and microtransactions in particular, it is important to understand what has been done so far. The United States population is estimated to spend nearly \$36 billion on video games in 2020, trailing only China in overall game revenues.⁵⁵ The United States is also home to many of the corporations that implement predatory microtransactions in their popular games like Electronic Arts, Activision-Blizzard, and 2K Games, meaning the United States government could have significant influence over these corporate monetization practices.

Alas, there has been little to no regulation of these monetization tactics in federal or state government. There appeared to be traction in 2019 when Senator Josh Hawley (R-MO) introduced bipartisan legislation S. 1629: the Protecting Children from Abusive Games Act (PCABA).⁵⁶ This legislation was designed to prevent the use of pay-to-win mechanics and loot box purchases in “minor-oriented games,” or any game produced in which the publisher has

⁵⁵ *Top 10 Countries/Markets by Game Revenues*, NEWZOO, <https://newzoo.com/insights/rankings/top-10-countries-by-game-revenues/> (last visited Dec. 17, 2020).

⁵⁶ Protecting Children From Abusive Games Act, S. 1629, 116th Cong. (2019).

“constructive knowledge” that their players are minors.⁵⁷ The general goal was to prevent minors from being exposed to these monetization practices, but the legislation also had other regulatory aspects. For one, pay-to-win mechanics and loot boxes would be considered “unfair or deceptive acts or practices” for purposes of the Federal Trade Commission Act.⁵⁸ Congress also required the FTC to begin studying the use of these types of microtransactions and how it affects “compulsive purchasing behavior,” providing Congress with regular reports on their findings.⁵⁹ Unfortunately, this bill has not been passed and remains tabled. Given the economic and public health crises U.S. Congress is currently dealing with, I doubt they have much interest in weighing the problematic nature of video game monetization.

However, this legislation is quite significant when compared to regulations passed in other countries. If this bill had passed, it could have been one of the most powerful pieces of legislation in curbing the use of predatory microtransactions. While most countries have focused almost entirely on the use of loot boxes in their regulatory laws, the PCABA specifically calls for regulation of pay-to-win mechanics. The focus of the bill is to protect children, but it also would define the use of these types of microtransactions as potentially unfair or deceptive.⁶⁰ This change could have potentially opened the door to further regulation. The FTC was to be given the power to investigate how these transactions affect consumer behavior. If the FTC found that these transactions also were manipulating consumer habits in adults, it is possible that Congress would have expanded the reach of this initial legislation.

⁵⁷ Patrick Sullivan, *United States: Video Game Industry Responds To Regulation Of Pay-To-Win Microtransactions and Loot Boxes*, MONDAQ (Aug. 26, 2019), <https://www.mondaq.com/unitedstates/gaming/839790/video-game-industry-responds-to-regulation-of-pay-to-win-microtransactions-and-loot-boxes>.

⁵⁸ S. 1629, *supra* note 56.

⁵⁹ *Id.*

⁶⁰ *Id.*

Hopefully, there will be a return to this tabled legislation in the future.

This attempt at legislation, however may have led to some form of self-regulation within the industry. When controversy over predatory microtransactions reached a fever pitch in 2019, the Entertainment Software Association⁶¹ promised to create required disclosures for all of their member-developers with regard to loot boxes and related transactions.⁶² Specifically, they plan to require their developers to “disclose information on the relative rarity or probability of obtaining randomized virtual items.”⁶³ This would be a good step towards creating transparency with consumers, allowing them to make a more informed decision about the actual value of the loot boxes. However, they claimed the details of these required disclosures would be released in 2020, and it does not appear they have made good on their promise.

Another attempt at self-regulation has come from the Entertainment Software Rating Board (ESRB). The ESRB is a self-described “non-profit, self-regulatory body for the video game industry,” meant to help consumers make “informed choices” about the games they play.⁶⁴ While they are primarily known for creating the rating system that determines age suitability for video games (E for everyone, T for Teen, M for Mature, etc.), they have recently added warning labels for games that include in-game microtransaction purchases.⁶⁵ More specifically, if there are loot

⁶¹ The Entertainment Software Association (ESA) is a video game trade association based in the United States. Its membership includes many of the most prominent developers around the world.

⁶² *Video Game Industry Commitments to Further Inform Consumer Purchases*, ENTERTAINMENT SOFTWARE ASSOCIATION, <https://www.theesa.com/perspectives/video-game-industry-commitments-to-further-inform-consumer-purchases/> (last visited Dec. 17, 2020).

⁶³ *Id.*

⁶⁴ *About ESRB*, ENTERTAINMENT SOFTWARE RATING BOARD, <https://www.esrb.org/about/> (last visited Dec. 17, 2020).

⁶⁵ Andy Chalk, *ESRB adds a new warning label for loot boxes*, PCGAMER (Apr. 13, 2020), <https://www.pcgamer.com/esrb-adds-a-new-warning-label-for-loot-boxes/>.

boxes, the label will also include a parenthetical “includes random items.”⁶⁶ While this is a step in the right direction, I doubt most players or parents of minor players will be looking closely enough at the label to make a purchasing decision based on these warnings. These self-regulatory measures seem to be more of an attempt to make government regulators believe that their industry can police itself. Given the increasing use of these predatory monetization practices over the past decade, despite severe criticism and backlash from consumers and the media, I do not believe what the ESRB done so far indicates that the industry is capable of policing itself.

B. THE NETHERLANDS

The Dutch government has had more success than the United States in implementing regulation of predatory microtransactions; however, the scope of these regulations is slight. Like most countries, they have specifically targeted loot boxes in their attempts at regulation.

In 2018, the Netherlands Gaming Authority (NGA) released the results of a study regarding loot boxes, and handed down a series of rulings regarding the legality of certain loot boxes in video games.⁶⁷ In fact, rather than changing the laws or adding regulations, the NGA simply applied current gambling laws to certain loot box microtransactions. In their ruling the NGA specified the difference between legal and illegal loot boxes. They ruled that when the random content in a loot box *is not transferable*, it is considered gaming, and therefore legal.⁶⁸ If the content of a loot box *is transferable*, then it is considered gambling and therefore illegal under Dutch law.⁶⁹ Games that were not found in compliance

⁶⁶ *Id.*

⁶⁷ *Loot boxes & Netherlands Gaming Authority's findings*, DUTCH GAMES ASSOCIATION, <https://dutchgamesassociation.nl/news/loot-boxes-netherlands-gaming-authoritys-findings/> (last visited Dec. 17, 2020).

⁶⁸ *Id.*

⁶⁹ *Id.*

within two months of the ruling would be illegal to sell in the Netherlands.⁷⁰

This is a relatively limited regulation when looking at the entirety of loot box microtransactions. Most content that comes from loot boxes in video games is not transferrable: gamers cannot trade the contents received for real world dollars.⁷¹ A basic example of this are the loot boxes in the popular first-person shooter *Overwatch*.⁷² With the purchase of a standard loot box in *Overwatch*, players receive five items of varying rarity, and are added to the personal archive of skins, emotes, and other cosmetic additions. These items cannot be sent to other accounts: they are permanently associated with the purchaser's account. There is a small subset of games that allow purchases to be transferred between accounts, which is what the Netherlands government targeted with their 2018 ruling. A popular game where items are transferrable is EA Sports FIFA series.⁷³ In *Ultimate Team* game mode, players purchase loot boxes with both real world and in-game currencies that include soccer player "cards" with varying stats and rarity.⁷⁴ These player cards are used to form a team that can compete in online tournaments. While players cannot sell these cards for real world currency in-game, they can purchase them with in-game currency, which can easily be obtained by spending real world currency. While these games do not directly let the player trade content for cash and vice versa, but players are indirectly allowed to do so. This can create a dangerous cycle of impulse

⁷⁰ *Id.*

⁷¹ See Joel Hruska, *The Netherlands Declares Some Loot Boxes Illegal, Warns Developers to Modify Them*, *ExtremeTech* (Apr. 23, 2018), <https://www.extremetech.com/extreme/267994-the-netherlands-declares-some-loot-boxes-illegal-warns-developers-to-modify-them>.

⁷² See generally *OVERWATCH*, <https://playoverwatch.com/en-us/> (last visited Dec. 17, 2020).

⁷³ See generally *EA SPORTS FIFA*, <https://www.ea.com/games/fifa> (last visited Dec. 17, 2020).

⁷⁴ See *FIFA 21 Ultimate Team*, *ELECTRONIC ARTS*, <https://www.ea.com/games/fifa/ultimate-team/fut-app> (last visited Dec. 17, 2020).

spending. Most loot boxes in the FIFA series do not give even a chance of a top-tier player card. New players may spend significant money before they recognize the futility of their purchases. They will play in online tournaments and get crushed by players who have spent significantly more than them on these cards. Losing these games creates the loss aversion behavior discussed in Section II, encouraging players to get that next hit of dopamine by buying the players that will make their team successful. Players will then look to the in-game trading markets and find the specific card they want in order to improve their team. While they can only buy it with in-game currency, they can obtain that currency easily by spending real cash. Players have spent hundreds to thousands of dollars on these cards in FIFA and other game series, especially in sports games like Madden NFL⁷⁵ and NBA 2K.⁷⁶

C. BELGIUM

The Belgian government, much like the Dutch government, did not create new regulations to enforce restrictions on predatory microtransactions. Instead of proposing new regulations, as the United States has attempted, they expanded the scope of the Gaming Act of 7 May 1999.⁷⁷ In 2018, after the Belgian Gaming Commission completed its report on loot boxes,⁷⁸ they determined that loot boxes, as traditionally understood, constituted a form of

⁷⁵ See generally EA SPORTS MADDEN NFL 21, <https://www.ea.com/games/madden-nfl> (last visited Dec. 17, 2020).

⁷⁶ See generally NBA 2K21, <https://www.nba2k.com/> (last visited Dec. 17, 2020).

⁷⁷ See [Act on games of chance, betting, gaming establishments and the protection for players] of May 7, 1999, https://www.gamingcommission.be/opencms/opencms/jhksweb_en/law/law/ (last visited Dec. 17, 2020).

⁷⁸ Federal Public Service for Justice Gaming Commission [of Belgium], *Research Report on Loot Boxes* (Apr. 2018), https://www.gamingcommission.be/opencms/export/sites/default/jhksweb_nl/documents/onderzoeksrapport-loot-boxen-Engels-publicatie.pdf.

illegal gambling.⁷⁹ In doing so, the Belgian government took the rulings from the Netherlands a step further by banning all loot boxes purchased for real money.⁸⁰

This expansion of the Gaming act constitutes one of the most definitive crack downs on predatory microtransactions. While it doesn't address pay-to-win mechanics specifically, there were no half measures in determining the legality of real money loot box purchases. In fact, the Belgian Gaming Commission laid out specific fines and criminal liability for gaming companies that violate their regulations.⁸¹ The Belgian government released a statement on April 25, 2018, stating that companies that fail to remove the microtransactions specified as illegal could be fined up to €800,000 and up to five years in prison.⁸² Moreover, these fines and punishments can be doubled when there are minors involved.⁸³

They also took a much more expansive approach to what kind of loot boxes were banned. Essentially, all loot boxes were banned if they could be purchased for real world currency. This includes microtransactions like the ones sold in Activision-Blizzard's *Overwatch*, which were deemed acceptable in the Netherlands. Under Belgian regulations, it does not matter if the items in the loot box are purely cosmetic and not tradable; if they can be purchasable using cash, the entire game would be banned until found in compliance with these regulations. The Belgian minister of justice, Koen Geens, stated that it did not matter if there was no "financial

⁷⁹ Tom Gerken, *Video game loot boxes declared illegal under Belgium gambling laws*, BBC NEWS (Apr. 26, 2018), <https://www.bbc.com/news/technology-43906306>.

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² Press Release, *Loot boxen in drie videogames in strijd met kansspelwetgeving [Loot boxes in three video games in violation of gambling laws]* KOEN GEENS: FEDERAAL VOKSVERTEGENWOORDIGER (Apr. 25, 2018), <https://www.koengeens.be/news/2018/04/25/loot-boxen-in-drie-videogames-in-strijd-met-kansspelwetgeving>.

⁸³ Gerken, *supra* note 79.

incentive to buying loot boxes.”⁸⁴ Geens continued, saying that even if players do not win money as a result of purchasing these boxes, they are “still a game of chance.”⁸⁵ The reasoning for this broad rejection of loot box monetization practices is based on the government’s fear of exacerbating gambling addiction, particularly for children.⁸⁶ “It is often children who come into contact with such systems and we cannot allow that,” Geens said.⁸⁷ While their stated goal was to protect children, their legislation went a step further in completely banning these monetization practices from games sold in Belgium.

The Belgian government’s swift regulatory action was taken very seriously by the industry. While companies like 2K Games disagreed with the ruling and began lobbying for a reconsideration of these regulations,⁸⁸ they generally complied with these requirements. 2K Games removed the ability to purchase card packs from their popular NBA 2K series with real-world currency; players could only attain these card packs through in-game progress.⁸⁹ Activision-Blizzard followed suit with their popular titles *Overwatch* and *Heroes of the Storm*,⁹⁰ the latter game being particularly interesting as the games monetized almost entirely by loot boxes. *Heroes of the Storm*⁹¹ is a “free” game, and disabling

⁸⁴ Keza MacDonald, *Belgium is right to class video game loot boxes as child gambling*, THE GUARDIAN (Apr. 26, 2018, 8:16 AM EDT), <https://www.theguardian.com/games/2018/apr/26/belgium-is-right-to-legislate-against-video-game-loot-boxes>.

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ Haru Nicol, *2K Games Asks Fans to Contact Belgian Government About Loot Boxes*, GAMEREVOLUTION (Sept. 4, 2018), <https://www.gamerevolution.com/news/426475-2k-games-asks-fans-to-contact-belgian-government-about-loot-boxes>.

⁸⁹ *Id.*

⁹⁰ Dustin Bailey, *Blizzard kills loot boxes for Overwatch and HotS in Belgium*, PCGAMESN (Aug. 27, 2018), <https://www.pcgamesn.com/overwatch/overwatch-belgium-loot-boxes>.

⁹¹ See generally HEROES OF THE STORM, <https://heroesofthestorm.com/en-us/> (last visited Dec. 17, 2020).

the loot box features made it impossible for Activision-Blizzard to profit from it.

The gaming industry's reaction to Belgium's regulations has been varied. Most of the large game publishers, including Electronic Arts, Ubisoft, and Activision-Blizzard, did not increase prices on their standard \$60 video games after the regulatory crackdown.⁹² This raises some serious questions. It is clear from industry financial data that microtransactions have increased profitability of video games by a significant margin. If banning these monetization practices in a relatively large market like Belgium didn't cause major game publishers to react by raising prices, what are they doing to make up the loss in revenue? No multi-billion-dollar business is going to simply cut their losses and accept these regulations without making up the difference elsewhere. How have they changed their business model, and how are they planning on operating in countries like Belgium going forward? Could there be an increased focus on developing games that are cheaper to produce? Are these games companies hoping that their customers will push back against microtransaction regulations, or are they simply going to focus marketing and sales efforts on countries with more relaxed regulations? All of these questions remain unanswered at this time, as there have been no overt changes to the business models of larger video games companies.

There has, however, been one significant outlier among the larger games developers and producers: Nintendo, a flagship Japanese company in the gaming industry, reacted quite differently to Belgian regulations. Upon the Belgian Minister of Justice's approval of the Belgian Gaming Commission's recommendations, Nintendo removed two of their free mobile games, Animal

⁹² It should be noted that, since the release of the new generation of video game consoles in November 2020, most of the flagship video game publishers plan to raise the price of a standard video game to \$70 USD. This price increase is expected to hit all markets, regardless of the strength of national microtransaction regulation in each individual country.

Crossing: Pocket Camp⁹³ and Fire Emblem Heroes,⁹⁴ from Belgian mobile app stores.⁹⁵ In a statement from the company's official website, Nintendo said "due to the current unclear situation in Belgium regarding certain in-game revenue models, we have decided to end the service" of these two games.⁹⁶ While this action surprised some in the industry, as most of the leading video game publishers decided to comply with Belgian law, it is not particularly surprising when examining the revenue models for these games. While Animal Crossing, Pocket Camp and Fire Emblem Heroes have made over \$150 million⁹⁷ and over \$500 million,⁹⁸ respectively, these games are free downloads and monetized entirely by microtransactions, most of which would be banned by Belgian regulation. It appears that Nintendo decided to play hard ball with the Belgian government; they decided that, one way or another, the costs of complying with Belgian law outweighed the benefits of selling in the region. They could have made this decision for a number of reasons. For one, it is possible that their sales in Belgium were not strong enough to justify compliance. They could have reworked their monetization strategy in order to continue to make

⁹³ See generally ANIMAL CROSSING: POCKET CAMP, <https://ac-pocketcamp.com/en-US> (last visited Dec. 17, 2020).

⁹⁴ See generally FIRE EMBLEM: HEROES, <https://fire-emblem-heroes.com/en/> (last visited Dec. 17, 2020).

⁹⁵ Tom Ivan, *Nintendo shutting down selected mobile games in Belgium*, VIDEO GAMES CHRONICLES (May 21, 2019), <https://www.videogameschronicle.com/news/nintendo-shutting-down-selected-mobile-games-in-belgium/>.

⁹⁶ *Belangrijke informatie voor gebruikers in België* [Important information for users in Belgium], NINTENDO OF EUROPE (May 21, 2019), <https://www.nintendo.be/nl/Nieuws/2019/mei/Belangrijke-informatie-voor-gebruikers-in-Belgie-1561911.html>.

⁹⁷ Matthew Forde, *Animal Crossing: Pocket Camp clears \$150 million in lifetime revenue*, POCKETGAMER (May 6, 2020), <https://www.pocketgamer.biz/asia/news/73298/animal-crossing-pocket-camp-150-million-usd-lifetime-revenue/>.

⁹⁸ Matthew Forde, *Fire Emblem Heroes has grossed over \$500 million in two years*, POCKETGAMER (Feb. 13, 2020), <https://www.pocketgamer.biz/asia/news/70015/fire-emblem-heroes-has-grossed-over-500-million-in-two-years/>.

money in Belgium, but they chose not to. Another possible reason is a fear of the precedent compliance would set. Nintendo is not the only company concerned with the movement to ban loot boxes and similar microtransactions. As previously stated, these companies have become absurdly profitable because of these monetization tactics. If they set the precedent that these features can be turned off and the game can remain profitable, other countries may follow suit and chip away at their predatory monetization practices.

D. JAPAN

The Japanese government was one of the first to recognize the potential dangers of predatory monetization in video games. Not only that, the notorious “Gacha machines” in Japan may have been the precursor to what eventually became digital loot boxes.⁹⁹ To understand how and why the Japanese government began regulating loot box-like microtransactions, one has to look at the history of these mechanics in Japan and the influence of “gacha.”

The advent of Japanese Gacha machines came long before similar monetization strategies in video games. Gacha machines are vending machines that give out capsules with randomized toys inside them.¹⁰⁰ These machines were the physical equivalent to a digital loot box: the player pays up and gets a random toy with varying degrees of rarity. In 2011, this type of monetization naturally made its way into mobile games.¹⁰¹ It had instant success. The first game to utilize this type of monetization, *Puzzle & Dragons*,¹⁰² netted over \$1 billion.¹⁰³ This “free” game and its successors implemented loot boxes that gave out prizes that were

⁹⁹ Vic Hood, *What the UK can learn from the Far East’s battle with loot boxes*, EUROGAMER (last updated Oct. 23, 2017), <https://www.eurogamer.net/articles/2017-10-19-what-the-uk-can-learn-from-the-far-east-s-battle-with-loot-boxes>.

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² See generally PUZZLE & DRAGONS, <https://www.puzzleanddragons.us/> (last visited Dec. 17, 2020).

¹⁰³ Hood, *supra* note 99.

not just cosmetic additions but were integral to winning the game.¹⁰⁴ Japanese regulators soon recognized that this type of microtransaction was the equivalent of gambling.¹⁰⁵

In 2012, Japan's Consumer Affairs Agency (CAA) determined that "complete gacha" mechanics in video games were illegal.¹⁰⁶ Like many European nations who have regulated loot boxes, they did so by enforcing regulations that had already been implemented. However, Japan's attempt at regulation was quite limited, and there has been no additional follow through or attempts to further regulate microtransactions. The reason why their regulation was so limited was because the ban was only on "complete gacha" games.¹⁰⁷ Complete gacha games are ones where players need to acquire a set of random items in order to get a rarer item, often in order to progress further in the game.¹⁰⁸ Essentially, it is a more extreme version of loot boxes discussed above where players need items from several loot boxes to get a rare item. The Japanese regulators saw these mechanics as a bridge too far, as there were customers paying excessive amounts in order to acquire virtual items.

While these regulations seem minimal compared to the ones later enforced in Belgium, this had a significant effect on Japanese gaming companies. After it was reported in the news that the CAA would be cracking down on these types of mechanics, the stock price in several of Japan's most prominent gaming companies dropped significantly.¹⁰⁹ The drop in value of these companies exemplified how profitable these monetization practices are. Without them,

¹⁰⁴ LaPetiteJort, *Gacha System*, GIANT BOMB, <https://www.giantbomb.com/gacha-system/3015-8997/#:~:text=The%20gacha%20system%20is%20a,games%20ever%20released%20in%20Japan> (last updated Mar. 5, 2020).

¹⁰⁵ Hood, *supra* note 99.

¹⁰⁶ Steve Peterson, *Gree, DeNA Stocks Plunge as Japanese Government Cracks Down*, GAMESINDUSTRY.BIZ (May 7, 2012), <https://www.gamesindustry.biz/articles/2012-05-07-gree-dena-stocks-plunge-as-japanese-government-cracks-down>.

¹⁰⁷ *See id.*

¹⁰⁸ *Id.*

¹⁰⁹ *See id.*

video game companies lose a significant amount of revenue. This led to an attempt to self-regulate in the industry to prevent further regulation from the Japanese government.¹¹⁰ Two of the biggest video game developers in Japan, GREE and DeNA, formed a trade association known as the Japan Social Game Association.¹¹¹ They provided guidelines for transparency with regard to microtransactions, like providing “probability ratios” for items in gacha games and loot boxes.¹¹² However, this organization ultimately was unsuccessful in conducting any proper self-policing in the industry and eventually dissolved in 2015.¹¹³ Even though this attempt did not succeed, it made clear that the industry has been taking the threats of regulation from governing authorities seriously.

E. CHINA

China has taken a more comprehensive approach than other nations in attempting to curb video game addiction and gambling addiction that result from microtransactions. For example, instead of simply outright banning loot boxes and gacha mechanics, they have provided strict rules for what makes them either illegal gambling or legal gaming mechanics. In China, gambling is prohibited, but the Chinese regulators can decide what constitutes “gambling.”¹¹⁴ Chinese authorities have immense power over corporations that do business within their state, and so there has been little to no backlash against the regulations they have begun to impose in recent years.

¹¹⁰ Hood, *supra* note 99.

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ Tracey Tang, *China: A Middle-Ground Approach: How China Regulates Loot Boxes and Gambling Features in Online Games*, MONDAQ (May 16, 2018), <https://www.mondaq.com/china/gaming/672860/a-middle-ground-approach-how-china-regulates-loot-boxes-and-gambling-features-in-online-games>.

The Chinese Ministry of Culture began cracking down on predatory microtransactions in 2017.¹¹⁵ In May of 2017, the Ministry of Culture declared that (i) loot boxes that could be purchased directly with real or in-game currencies are banned, (ii) the items contained in loot boxes must be attainable in-game, and (iii) all companies who use loot box monetization in their games must disclose information¹¹⁶ about all items within the pool of items in the loot box ecosystem, along with the drop rates of each item with a loot box purchase.¹¹⁷ Chinese authorities also ruled that these companies could not use loot boxes in a way that created a “compulsion loop.”¹¹⁸ This rule means that these items must be acquirable outside of the loot box mechanics themselves, so players do not get addicted to the loot box gambling-like mechanics. While these are very strict regulations, the Chinese government did not entirely ban loot boxes from their country. They understood that loot boxes can “[increase] fun, engagement and monetization of online games,” but also wanted to avoid game developers turning their games into virtual casinos.¹¹⁹ So, while a player could not purchase a loot box directly, they could be gifted to players to reward progress.¹²⁰

China’s crack down on microtransactions and video game addiction in general did not stop there. In November 2019, the Chinese government implemented new regulations that limited the amount of time minors could play video game in a given day and the amount they could spend on microtransactions as a whole.¹²¹

¹¹⁵ *Id.*

¹¹⁶ Some of the information revealed in these disclosures was staggering: a number of game developers were selling loot boxes with items where there was a .1% chance of acquiring them.

¹¹⁷ Tang, *supra* note 114.

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ Javier C. Hernández & Albee Zhang, *90 Minutes a Day, Until 10 P.M.: China Sets Rules for Young Gamers*, NEW YORK TIMES (last updated Nov. 8, 2019), <https://www.nytimes.com/2019/11/06/business/china-video-game-ban-young.html>.

According to the regulations stated by China's National Press and Publication Administration, users under eighteen years old are not allowed to play video games between ten p.m. and eight a.m., and they cannot "play more than 90 minutes on weekdays and three hours on weekends or holidays."¹²² While that part of the 2019 regulations is not directly related to microtransactions, the Chinese authorities also limited the amount of money that minor-aged users could spend on microtransactions.¹²³ Depending on a user's age, they could spend between \$28 to \$57 maximum per month on skins and other in-game items.¹²⁴

The Chinese approach to regulation is unique; they are not simply trying to address concerns about their citizens overspending as a result of their addiction. The regulation targets addiction itself; even if these loot boxes could not be purchased with real money, the monetization tactic was not approved if it manipulates consumers into becoming addicted to their products. China takes a rather authoritarian approach to addiction generally and has begun to focus on youth video game addiction in recent years.

However, there have been attempts by prominent companies to skirt Chinese regulations. Activision-Blizzard managed to get around China's loot box restrictions through patently deceptive means. Their flagship title, *Overwatch*, which was highly popular in China, initially removed their loot boxes to comply with the Chinese regulations.¹²⁵ Activision-Blizzard later reintroduced them, but the method of acquiring them had changed. Instead of directly purchasing loot boxes, players can purchase in-game currency; as a "gift" for the purchase of that currency, players get a set number of loot boxes.¹²⁶ Surprisingly, there are no reports of

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ Alex Ziebart, *Overwatch China changes loot box purchases to dodge gambling laws*, BLIZZARD WATCH (Jun. 6, 2017), <https://blizzardwatch.com/2017/06/06/new-way-buy-overwatch-loot-boxes-china/>.

¹²⁶ *Id.*

Chinese authorities cracking down on this process. This could indicate that they believe loot boxes are only a part of their grand plan to curtail video game addiction.

V. CONCLUSION AND REGULATORY PROPOSAL

As this article makes clear, there are a number of ways to approach the issue of predatory microtransactions. Some governments have limited the scope of what constitutes illegal or manipulative purchases, and most are focused on the harm it causes children. That being said, I do not believe any country has managed to create a comprehensive regulatory framework to combat the more insidious and predatory microtransactions, especially pay-to-win microtransactions.

If I were to choose one of the above countries' regulatory models to build upon, I would pick Belgium's. Their law is bold enough to require companies to substantially change their games, and has been unafraid of backlash from the industry or a potential loss of tax revenue from banning the sale of immensely popular games. I also find that the threat of criminal liability for noncompliance against the officer in charge of corporations like Electronic Arts provide a strong deterrent for implementing these mechanics. While companies as large as 2K Interactive can handle massive fines, I doubt their officers are willing to go to jail over loot boxes. So far, the larger game publishers have not raised their game prices in Belgium as a result of the ban of loot boxes, and only one has completely removed their games from their market. It appears that, as of 2020, video game companies have not tried to circumvent the rules in Belgium in order to reinsert loot boxes of some form into their games.

However, I do not believe even Belgium goes far enough to eliminate the problem they intend to solve. The Belgian authorities claim they are attempting to stop games from becoming virtual casinos and insidiously prey on those who normally would not participate in gambling, yet they've ignored pay-to-win mechanics in microtransactions—exclusively focusing on loot boxes. I believe this shows Belgian authorities either don't fully understand the issue of predatory microtransactions, or they are simply unwilling to "go to the mat" on these issues with the gaming industry.

Another problem with the Belgian model of regulation is that it may not be effective in our global economy. Unless other countries follow suit and adopt similar regulations, game companies could simply freeze out the industry like Nintendo did. Consumers want to play these games and will likely demand their government relax their regulations if sought-after games become banned in their home country. As long as national governments of countries that purchase large numbers of video games, like the United States, fail to regulate microtransactions in any meaningful sense, other national governments may not have long-term bargaining power to keep these companies from implementing these manipulative monetization practices. It also, inadvertently, could hurt the economy of countries like Belgium. If companies like Electronic Arts decide to stop selling FIFA games in Belgium, it is likely that their citizens who are desperate to play will simply buy the game from another country. While it would likely barely dent a large economy, the loss of video game sales for retail businesses in Belgium could be impactful.

I do acknowledge that not all of these microtransactions are manipulative or insidious. Many microtransactions are simply standard purchases: players see a character skin or other cosmetic item they want, and can purchase it directly for a small fee. This does not use manipulative monetization tactics to keep player invested spending. Also, many microtransactions are purely cosmetic and do not affect gameplay itself. However, these uncontroversial microtransactions are often used as a cover for video game companies to claim that *their* microtransactions are not manipulative. These companies point to games that have been viewed to have “fair” microtransaction mechanics to muddy the waters and make regulating them a more difficult task.

My proposal to solve the issue of predatory microtransactions would begin by giving each country’s gaming commission the power to, on a case-by-case basis, analyze whether a game’s microtransaction mechanics are misleading, manipulative, or alter gameplay significantly. If a country’s gaming commission already has similar regulations for traditional gambling, like the Belgian gaming commission, then the current regulations can expand the scope of their regulation to explicitly include modern video game monetization practices. If a country doesn’t have a gaming

commission, they should model one on the laws similar to the Netherlands or Belgium.

Game developers and publishers would be unable to sell their games in a country until the gaming commission has approved of their use of microtransactions. This stands in contrast to the often rigid regulations that other countries have implemented that strictly allow or disallow certain microtransactions. My proposal for giving more agency power to gaming commissions is purposefully vague. The reason why I would not create any bright line rules is to prevent games companies from attempting to side-step regulations. As discussed, even in an authoritarian state like China, games companies have managed to circumvent the law and defeat its intended purpose by indirectly allowing loot box purchases as “gifts.”¹²⁷ Electronic Arts has also attempted to circumvent regulation by claiming their loot boxes are not actually loot boxes: they are “surprise mechanics.” These corporations will clearly attempt any possible means to bypass regulation, as these predatory monetization tactics have been incredibly profitable. While this process inevitably may slow down the speed at which games will be brought to the market, the social benefits of curbing these practices outweigh the potential financial cost to gaming companies. And, over time, the evaluation and approval process for games will become streamlined as the gaming commission becomes more familiar with how these companies implement microtransaction mechanics.

In my proposal, the gaming commission would be required to submit a public report detailing why a particular game was found compliant or noncompliant. By releasing public reports, over time these games developers and publishers will know what constitutes manipulative, misleading, or gameplay altering microtransactions, and adjust their games accordingly. By allowing the gaming commission to continuously review what constitutes a predatory microtransaction, it will prevent companies from adapting to regulations.

¹²⁷ *Id.*

In summary, while there is clearly no one-size-fits-all approach to regulating predatory microtransactions, what has been done so far simply is not enough. Gambling addictions continue to rise, consumers continue to overspend on these entertainment products, and profits from these insidious monetization practices continue to soar. Unless national governments take a stand and take video game microtransactions seriously, game companies will continue to push boundaries until there may be no significant difference between a real-life casino and a standard video game.