

Testimony of Kurt Eggert

Professor of Law

Chapman University Dale E. Fowler School of Law

Before the

House Energy and Commerce Committee

Subcommittee on Commerce, Manufacturing, and Trade

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“The State of Online Gaming”

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Witness Background Statement

Kurt Eggert is a Professor of Law at Chapman University Dale E. Fowler School of Law in Orange, California, where he teaches gambling law, among other courses, and directs the Alona Cortese Elder Law Center. As a law professor, he has testified before Congressional committees of both the House and Senate on gambling and other consumer protection issues, and formerly was a member of the Federal Reserve Board's Consumer Advisory Council, where he chaired the Subcommittee on Consumer Credit. Professor Eggert has written on gambling law issues and spoken on them in conferences in the United States, Canada and Europe. Before joining the Chapman faculty, Professor Eggert was a staff attorney at Bet Tzedek Legal Services, a non-profit legal services provider, and also an adjunct professor at Loyola Law School in Los Angeles, California. Professor Eggert holds a J.D. from the University of California at Berkeley, and a B.A. from Rice University. While clinical programs at Chapman University School of Law have received Federal grants unrelated to the subject matter of this testimony, Professor Eggert has not personally received any Federal grants nor has he received any compensation in connection with his testimony.

Executive Summary

This testimony concerns consumer protection in Internet gambling. First it examines the central elements of internet gambling consumer protection, namely: (1) Ensuring that gamblers are fully informed of all significant aspects of games that affect their decision whether, when, how, and where to gamble; (2) Preventing poker gamblers, to the extent practicable, from losing to other Internet gamblers using an unfair advantage, such as employing a poker bot or engaging in collusion with other players; and (3) Providing Internet gamblers with useful tools to control their Internet gambling, such as giving them online methods to track their gambling wins and losses, providing them with self-exclusion programs that easily allow them to prevent themselves from gambling, and giving them tools to limit the amount of time, deposits into their accounts, or wagers, on a daily, weekly, monthly, annual, or lifetime basis.

The testimony then discusses the most significant developments of the last two years for consumer protection in Internet gambling, namely the increases in strength and sophistication of poker “bots,” computer software systems that can play poker on the internet, and the legalization and introduction of Internet gambling in three states. The testimony discusses the difficulty in detecting and preventing poker bots in Internet gambling, and the various regulatory methods that could be used, with varying success. While gambling sites and regulators may defend against poker bots with gusto, if Internet poker becomes a large and lucrative target, some enterprise poker bot creators will no doubt find ways to exploit holes in the poker sites defenses.

The testimony also discusses the widely differing consumer protection regimes contained in the initial regulations of the three states that currently offer legal Internet gambling and in a proposed federal bill. Delaware has few regulations that even seem to address consumer protection or

responsible gambling tools of any type. New Jersey provides more tools for gambler protection, but so far seems to fail to offer a crucial consumer protection, information for gamblers about specific hold percentages for its Internet slot machines. Nevada allows only Internet poker and has more robust consumer protection and responsible gaming regulations than Delaware, but it is not clear how its prohibition against poker bots will be enforced. H.R. 2666, a federal Internet poker bill, has the seeds of good consumer protection, but seems to put most of the decision-making regarding that protection in the hands of the state and tribal regulatory agencies, which seem to be given the power to choose to strong or weak consumer protection.

It is clear that we are moving toward multi-state Internet gambling, which will complicate matters regarding consumer protection. Gamblers in strong consumer protection states may find themselves gambling across state lines without the consumer protections they are familiar with. Gamblers may have excluded themselves from Internet gambling in one jurisdiction, only to find themselves tempted by it in another. Gamblers who have set up robust responsible gambling limits in their home states may find themselves enticed to violate those limits merely by gambling across state lines. Any move toward interstate Internet gambling should take these concerns seriously and attempt to provide sufficient consumer protection for U.S. gamblers.

Mr. Chairman, Members of the Committee

Good morning. My name is Kurt Eggert, and I am a Professor of Law at the Chapman University Dale E. Fowler School of Law, in Orange, California, where I teach courses in gambling law and legal remedies and direct the Alona Cortese Elder Law Center. However, the views I express today are my own.

Thank you for inviting me to testify and talk about the issues that arise in the legalization of Internet gambling in general and Internet poker, specifically. I testified before this committee two years ago and submitted lengthy testimony on the subject of consumer protection in Internet gambling.¹ For a more complete discussion of the principles behind consumer protection in the gambling industry, I would refer you back to that previous testimony. In this testimony, I would like to focus on the developments that have occurred since then and what those developments mean for the future of Internet gambling.

As I did in my testimony last time, I would like to discuss consumer protection as applied to the gambling industry. I have spent much of my professional life working life dealing with consumer protection issues in many different industries and areas. I have litigated cases against Health Maintenance Organizations that cheat elderly patients, air conditioning companies that violated consumer protection laws, and scam artists who forged the names of elderly homeowners to steal their homes. I have written extensively about the mortgage markets and their treatment of borrowers, and have testified to Congress, to the Financial Crisis Inquiry Commission and to the California State Legislature on mortgage and consumer protection issues, and was on a board that advised the Federal

¹ Testimony of Kurt Eggert Before the House Energy and Commerce Committee Subcommittee on Commerce, Manufacturing, and Trade At a Hearing Entitled: "Internet Gaming: Is There a Safe Bet?" October 25, 2011, available at: http://democrats.energycommerce.house.gov/sites/default/files/image_uploads/Testimony_CMT_10.25.11_Egget.pdf

Reserve Board regarding consumer finance issues. I have also been researching, writing, and speaking about gambling law issues, including consumer protection in the gambling industry for more than a decade, and have lectured in the United States, Canada, and Europe on gambling issues.²

Many consumer protection issues arise in Internet gambling, from privacy issues to theft of gamblers' money held by Internet gambling organizations. With much of the current Internet gambling conducted by small, off-shore websites, gamblers have often fallen victim to fraud and deception. In the last decade, a former poker champion and consultant to a top online poker site made millions by using "God mode" software that allowed him to see the hole cards in other players' hands.³ At about the same time, a different poker site admitted that a poker cheater had "cracked its software" and was able to see opponents' "hole cards," and refunded \$1.6 million to the victims of the cheating.⁴ In another scandal, one of the world's largest online poker sites, was accused of being essentially a Ponzi-scheme, with company executives looting customer accounts, anticipating, no doubt, that further deposits would cover the losses. One of that poker site's founders entered into a plea bargain regarding criminal charges involving that poker site.⁵ Later, that same poker site was acquired by another online poker site, which agreed to pay more than \$500 million in part to repay former U.S.-based customers.⁶

² See Kurt Eggert, Truth in Gaming: Toward Consumer Protection in the Gambling Industry, 63 Maryland Law Review 217 (2004), available at SSRN: <http://ssrn.com/abstract=901306>, for a general discussion of consumer protection in the gambling industry, and Kurt Eggert, Lashed to the Mast and Crying for Help. 36 Loyola of Los Angeles Law Review 693 (2003), available at SSRN: <http://ssrn.com/abstract=905062>, discussing autonomy effects of self-exclusion programs for casinos.

³ Justin Peters, The Online Poker Cheating Scandal That Keeps Going and Going, Slate.com, May 29, 2013, available at http://www.slate.com/blogs/crime/2013/05/29/ultimatepoker_and_ultimatebet_the_online_poker_scandal_that_never_ends.html.

⁴ Gilbert M. Gaul, Cheating Scandals Raise New Questions about Honesty, Security of Internet Gambling, Washington Post, November 30, 2008, available at: http://articles.washingtonpost.com/2008-11-30/news/36886192_1_internet-poker-online-poker-absolute poker

⁵ Simon Bowers, Ray Bitar, Full Tilt Poker Founder, Strikes Deal with US Prosecutors, The Guardian, April 9, 2013, available at: <http://www.theguardian.com/uk/2013/apr/09/ray-bitar-full-tilt-poker-pleads-guilty>

⁶ Larry Neumeister, PokerStars, Full Tilt Poker Reach Settlement With Government to Repay Players, Huffington Post, July 31, 2012, available at: http://www.huffingtonpost.com/2012/07/31/pokerstars-full-tilt-poker_n_1724253.html

These scandals point to the need for strict government regulation of Internet gambling and demonstrate the problem of leaving American poker players to play only in poorly-regulated online gambling sites located in foreign countries. Scandals like these, as well as the quest for profits, have spurred the call for legalizing online gambling in the United States. Advocates for legalizing online gambling argue that US citizens will gamble online whatever the legal regime, and it is better to have them gamble at websites hosted by well-funded American casinos subject to federal and/or state regulation that designed to prevent the cheating or mistreatment of gamblers.

While privacy and the protection of players' deposited funds are important consumer protection concerns, this testimony will focus on three salient consumer protection issues in the gambling world. This testimony will analyze how well the three states with up-and-running Internet gambling have addressed these concerns and whether the federal poker bill proposed by Congressman Barton would improve consumer protection for Internet poker players. The consumer protection goals this testimony focuses on are: (1) Ensuring that gamblers are fully informed of all significant aspects of games that affect their decision whether, when, how, and where to gamble; (2) Preventing poker gamblers, to the extent practicable, from losing to other Internet gamblers using an unfair advantage, such as employing a poker bot or engaging in collusion with other players; and (3) Providing Internet gamblers with useful tools to control their Internet gambling, such as giving them online methods to track their gambling wins and losses, providing them with self-exclusions programs that easily allow them to prevent themselves from gambling, and giving them responsible gambling tools to limit the amount of time, deposits into their accounts, or wagers, on a daily, weekly, monthly, annual, or lifetime basis.

While these concerns exist in bricks and mortar gambling establishments, they are especially problematic in Internet gambling. Internet gambling puts a casino in the home computers, laptops, or tablets in most Americans' houses and even in the smart phones in their pockets. With Internet gambling on smart phones, gamblers typically only seconds away from being able to gamble, whether

they are in the city park or their church parking lot. With this greater access should come better tools for consumers to control their gambling, to understand the cost of their gambling and to make better decisions regarding their gambling.

Consumer Protection by Informing Gamblers: The Case of the Hold Percentage

In any commercial gambling operation, gamblers should be fully informed about every aspect of the game that significantly affects their decision where, when, how and whether to play. For example, one of the most important aspects of slot machine play for gamblers is the hold percentage, the amount on average that slot machines keep of players' bets, returning the rest to players in winnings. Slot machine hold percentages can vary tremendously, from 1% to over 20%, depending on the rules of the jurisdiction. Because the hold percentage is the true average cost of the slot machines, with the rest of the wager returned, on average, to gamblers, it should in all cases be disclosed to gamblers at all times, both when they are shopping for which slot machine to play and while they are playing.⁷ In today's casinos, two slots machines could be sitting side by side, one essentially charging five times as much as the other, without the consumer being able to determine the difference in prices.

Disclosing the hold percentage is important in any form of slot machine, whether Internet or physical, but it is especially pertinent in Internet gambling. While gamblers may favor one casino over another based on the amenities of the casinos, their ambiance, the friendliness of the staff, and their proximity, Internet casinos lack all of these aspects, by and large. And so, for the Internet gambler, the one crucial element of slots gambling is the slot machine itself, which includes the look and theme of the machine, its hit percentage (how often the machine returns some winnings) and its hold percentage (its

⁷ For a more complete discussion of the hold percentage as the true cost of slot machines and the importance of disclosure, see Kurt Eggert, Truth in Gaming: Toward Consumer Protection in the Gambling Industry, 63 Maryland Law Review 217 (2004), available at SSRN: <http://ssrn.com/abstract=901306>.

true cost, given that slot machines return the majority of the amount wagered back to the gambler on average). Gamblers can easily determine the look and theme of the slot machine and, during a relatively brief amount of time, can gain a rough idea of the hit percentage of a slot machine. However, it is difficult for slot players to determine the hold percentage of a slot machine while playing it. A slot machine that seems very tight (with a high hold percentage) may just have a very low hit percentage and give the occasional high payout. A slot machine that seems loose may have a high hit percentage but have few large payouts to give, and so holds a much higher percentage of wagers.⁸ Casinos can decrease the hold percentage of a slot machine by increasing the size of big payouts.⁹ Given that the hold percentage of slot machines is one of the most important aspects of slot play, slot gamblers should always be informed about the hold percentages of any machine they play, and an Internet gambling regulatory regime should be judged by how well it mandates the provision of this information for gamblers, both while they are shopping and while they are playing.

Poker Bots and What to Do About Them

For Internet poker, the average wins or losses of a player are not determined by the hold percentage of the casino, but rather by the strength or weakness of the players they play against. Casinos that provide poker make their money through a “rake,” the casino’s portion of the amount bet. While the rake is typically a greater percentage and so more of a factor in low stakes Internet games than in high stakes games,¹⁰ the biggest determinant of players’ wins and losses, besides their luck in the cards, is their skill, with the worst players losing money much faster than the best players are

⁸ Anthony F. Lucas & A. K. Singh, Estimating the Ability of Gamblers to Detect Differences in the Payback Percentages of Reel Slot Machines: A Closer Look at the Slot Player Experience, *UNLV Gaming Research & Review Journal*, 15:1, 17-36(2011).

⁹ Steve Bourie, Slot Machines, in *American Casino Guide* 32 (Steve Bourie ed., 2011).

¹⁰ Phillip Newall, *The Intelligent Poker Player*, 357 (2011).

making it.¹¹ Skill is a crucial part of the game, and players work hard to increase their poker knowledge, their ability to gauge the probable cards of their opponents, and their ability to read “tells” of opponents.¹²

Playing against more skillful players is not only an inevitable part of poker, it is also useful to help players improve their game. However, “inevitable” and “useful” change to “predatory” when a gambler is not playing against a more skillful player, but rather is unwittingly playing against a much stronger poker “bot,” a computer program designed to play poker. The first poker bots were not a great threat to reasonably skilled poker players. However, one of the most dramatic changes in the last few years in Internet gambling has been the rapid advances made in Artificial Intelligence as applied to poker. Poker is an intriguing subject to Artificial Intelligence researchers, as it presents challenges different and more difficult than games such as chess where there is no luck and each player has complete information as to the state of the game. “Incomplete information games such as Poker became a field of interest for the AI [Artificial Intelligence] research community over the last decade. This game presents unique challenges when compared to other strategy games like chess or checkers. In the latter, players are always aware of the full state of the game. On the other hand, Poker’s game state includes hidden information, since each player can only see his/her cards and the community cards, making Poker a game which is much more difficult to analyze. Poker is also a stochastic game, i.e., it comprises the element of chance.”¹³ The speed of development of poker bots can be seen in how

¹¹ Nate Silver, *The Signal and the Noise*, 317 (2012).

¹² A “tell” is a physical action or attribute that gives some indication to opponents of a player’s hand. It can be something as simple as how he or she throws chips into the pot. See David Sklansky and Mason Malmuth, *Hold’Em Poker for Advanced Players*, 208 (1999).

¹³ Teófilo, et. al., *Computing Card Probabilities in Texas Hold’Em*, CISTI 2013 at 988, available at: http://paginas.fe.up.pt/~niadr/PUBLICATIONS/2013/TeofiloReisLopesCardoso_ComputingCardProbabilitiesInTexasHoldem.pdf

poker bots competing in poker bot competitions are improving from one year to the next at a statistically significant rate.¹⁴

That bots can extract significant winnings against human players can be seen in the recent detection of bots in Swedish Internet poker, where Svenska Spel, the state gambling operator and only allowed operator of Internet poker in Sweden, is reportedly seeking the return of 10,000,000 Swedish Krona, or about \$1.5 million, from suspected poker bot operators.¹⁵ The use of bots was first reported by a player, and the bots had allegedly operated for over six months.¹⁶

The rate of improvement in poker bots seems to have sped dramatically in recent years with the use of neural networks in the creation of poker bots. Neural networks, modeled after the complex interconnectedness of the human brain, are complex computer algorithms that develop gaming strategies by performing a mind-numbing set of calculations that replicate the actions of a poker game. In effect, neural networks can play billions, if not trillions, of games of poker and learn what strategies work and what do not through a massive set of trial and error. Rather than merely import strategies created by human players, neural networks can develop their own strategies and test them in endless games with themselves.

How effective neural networks can be at poker can be seen in the example of a new casino machine called Texas Hold 'Em Heads Up Poker, which was designed by a Norwegian engineer named Fredrik Dahl, who had previously designed backgammon playing software used by some of the top players in the world.¹⁷ Dahl set up competing neural networks, taught them the basic rules of poker,

¹⁴ Philip Newall, *The Intelligent Poker Player*, 222 (2011).

¹⁵ Radio Sweden, Investigation widens into poker "bot" cheating, August 24, 2013, available at: <http://sverigesradio.se/sida/artikel.aspx?programid=2054&artikel=5626175>

¹⁶ Nick Jones, Over \$500,000 Repaid to Victims of Bot Ring on Svenska Spel, *Pokerfuse*, June 20, 2013, available at: <http://pokerfuse.com/news/poker-room-news/over-500000-repaid-to-victims-of-bot-ring-on-svenska-spel/>

¹⁷ For a discussion of Dahl's Texas Hold'Em poker bot, upon which this description is based, see: Michael Kaplan, *The Steely Headless King of Texas Hold'Em*, *The New York Times*, September 5, 2013, available at: <http://www.nytimes.com/2013/09/08/magazine/poker-computer.html>

and then watched them compete with each other, learning with each round of competition how to improve. He noted that the computers learned how to engage in sophisticated bluffing methods and were better after playing five billions hands than they were after two billion hands. Using these neural networks, Dahl has created a poker bot so powerful that it reportedly can beat all but a handful of the best players in the world at the limit version of Texas Hold'Em. In fact, the poker bot plays so well, that it appears that before it is used in a casino, it is being "dumbed down" so that it will play the same against strong players as against weak ones and therefore not excessively exploit weaker players, and so that it will not always make the best move. The game employs multiple neural networks, to increase its unpredictability, and uses different networks with greater expertise in certain situations.

While Dahl's poker bot plays limit Texas Hold'Em, which is a simpler form of poker for computer programmers than No Limit Hold'Em, others are working to create neural networks that can outplay humans at No Limit Texas Hold'Em. One company claims to have already done just that. According to a poker news website, "Snowie Games, famed for its leading backgammon product, recently unveiled its first software product under the new PokerSnowie brand. Poker Coach promises to teach players 'perfect' game-theoretical No Limit Hold'em using a proprietary neural network system that Snowie claims gives the best NL strategy advice in the world."¹⁸ Like Dahl's poker bot, the PokerSnowie system was built using neural networks that taught themselves how to play. PokerSnowie's creators claim that it can play a broad range of games,¹⁹ and that it is based on trillions of hands of poker that the neural networks have played.²⁰

¹⁸ Nick Jones, Review: Poker Snowie Promises "Perfect Gameplay" Training With New GTO-Based Learning Software, Pokerfuse Independent Online Poker News, October 1, 2013, available at: <http://pokerfuse.com/features/reviews/review-poker-snowie-promises-perfect-gameplay-training-with-new-gto-based-learning-software-01-10/>

¹⁹ "PokerSnowie is artificial intelligence-based software for no-limit Hold'em Poker. It has learned to play no-limit, from heads-up games to full ring games (10 players), and knows how to play from short stacks all the way up to very deep stacks (400 big blinds)." <http://www.pokersnowie.com/about/technology-training.html>

²⁰ <http://www.pokersnowie.com/about/weaknesses.html>

Like many commercial enterprises, the poker bots created by Dahl and by PokerSnowie may turn out to be more hype than substance. Only time and human testing will demonstrate whether these neural networks can keep up with or beat the best human players. However, given the short amount of time that poker bots have been available, the improvement in poker bots has been astonishing, and it seems only a matter of time before computers will be able to outplay humans at most forms of poker.

Given the improvement in poker bots, human players will increasingly turn to poker bots for instruction on how to improve their play. Just as the best backgammon and chess players use computer programs to gain a deeper understanding of the game, so too will humans turn to computers to learn better poker. PokerSnowie and a competitor, Neo Poker, bill themselves as systems whereby players can improve their games by practicing against a poker bot and also by having their play critiqued by the poker bot.²¹ Philip Newall's 2011 book, *The Intelligent Poker Player*, contains an entire chapter devoted to the lessons that human players can learn from bots, and the bots available today appear far stronger than the ones he examined in writing his book.²²

Given the likelihood that poker bots will overtake human players in the near future, to the extent they have not done so already, how to deal with bots in Internet poker is a significant consumer protection issue. One possibility is to make the use of bots a crime, and attempt to use the power of prosecution to deter the use of bots. However, prosecuting poker bot operators appears at first glance to be a difficult enterprise. Unless police can somehow seize the computers with incriminating software itself, evidence of the use of bots may be merely circumstantial. Prosecutors may be able to point only to patterns of play by various players, which may not convince a jury to convict the players of using bots if humans could exhibit the same patterns of play.

²¹ For an Internet review of Neo Poker, see <http://www.pokerlistings.com/neo-bot-poker-the-next-step-in-artificial-poker-intelligence>.

²² Philip Newall, *The Intelligent Poker Player*, 221 (2011).

Another possibility to protect consumers is for a regulator to order poker sites to detect bots, and sanction poker sites that fail to do so. In 2011, Senator Alfonse D’Amato, Chairman of the Poker Players Alliance, in a supplemental memorandum to this committee, laid out the major methods of detecting bots, all of which seem to be methods that a skilled bot-maker could regularly defeat.²³ The first level of defense is monitoring the movement of the mouse and hence the cursor on the screen, to see if they appear human or computer-driven. However, it would be easy for a bot creator to capture tens of thousands of human cursor movements, and instruct the bot to mimic that behavior. The second method identified is “introducing subtle changes to the player’s screen,” with the assumption that human players will not be bothered by these changes whereas poker bot software is “typically matched to the pixel-specific graphics of a particular poker operator’s software” to allow the bot to recognize cards. The D’Amato Memorandum also discusses the use of a CAPTCHA challenge, whereby the player must recognize distorted letters and type them in, a task supposedly easy for humans and difficult for computers. Computers, however, are impressive at pattern recognition, and should be able to recognize cards even if the colors change slightly. The basic CAPTCHA systems can also be defeated by computer analysis.²⁴

The D’Amato Memorandum also argues that poker sites “constantly monitor the marketplace to see what bot programs are being sold.” Then, the poker site’s software that allows players access to the poker site checks players’ computer for any of the publicly available poker bots. This should provide some protection, except to the extent that poker bot runners develop their own “private-label” bots, modify bots purchased publicly, or run the bots somehow outside the detection of the poker site.

²³ Sen. Al D’Amato, Committee Follow Up Memo from Alfonse D’Amato – PPA, November 7, 2011, available at: <http://www.scribd.com/doc/72737574/Committee-Follow-Up-Memo-from-Alfonse-D-Amato-PPA-11-07-2011>

²⁴ See, for example, Lorenzi, et. al., Attacking Image Based CAPTCHAs Using Image Recognition Techniques, Lecture Notes in Computer Science, Vol. 7671, pp. 327 (2012).

The D’Amato Memorandum also argues that poker bots, like poker players, “develop recognizable patterns of play – folding, checking, or raising a particular percentage of the time in a particular situation,” and that bot operators seek to maximize their profits by “running the same bot as multiple players at multiple tables on a particular site.” This similarity in player “fingerprints,” their patterns of play, would demonstrate to the site that the multiple players are merely bots run by one person or bot ring. However, poker bots created by neural networks would likely be much harder to trace using this method. The neural networks bot deployed by Fredrik Dahl deploys multiple neural networks, trading them in and out at random intervals or when one neural network might be better. Such a multiple neural-networks bot would not have a static fingerprint, as it would be changing its style of play depending on which neural network was in charge.

If neural networks do prove to be effective in creating poker bots that can outplay human players, then for poker sites to prevent players from constantly losing to poker bots, poker sites need to be effective in detecting poker bots, stopping them from playing, seizing any ill-gotten gains, and possibly turning poker bot operators over to the authorities for prosecution. One great problem with consumer protection and poker bots, however, is that it is almost impossible for gamblers to know if poker sites are successfully controlling poker bots. Poker sites are loath to discuss the methods they use to detect poker bots for an obvious reason: If poker sites publish their methods of detecting bots, such publication will give poker bot creators a roadmap on how to circumvent the poker site’s protections. Poker sites have other motivations against educating consumers about their efforts to detect bots. If poker sites are not able to detect bots, such inability would likely deter some gamblers from playing on the site. If poker sites report that they have detected a significant number of bots on their site, gamblers might worry that the site is infested with bots and so not play. As a result, according to the conversations of gamblers that appear on such poker discussion sites as 2+2, poker sites often seem opaque on the poker bot issue, not telling gamblers what they are doing to prevent bots, how many

bots they have found, or what they have done when they found them.²⁵ It may difficult for poker players to trust the promises of poker sites that they are detecting bots, when poker players have little but those promises to rely on.

One solution to poker bots would be to give human players warning when they are playing against a significantly better player, which might be a poker bot, by using a rating system for poker players like the one that exists in the chess world. This would provide protection against high-skill poker bots because players could see the skill level of their opponents before they play against them. When I proposed this rating system the last time I testified to this committee, I faced opposition from numerous members of the poker-playing community, who argued that the ability to judge the skill level of opponents is itself an important skill in poker playing, and rating players would remove or reduce this aspect of the game. Perhaps a more important element to skilled players is that providing ratings to players might frighten away the “fish,” inexperienced or otherwise inept players who are the provide much of the money flowing into Internet poker. According to Nate Silver, himself a former part-time professional poker player, “Poker abides by a ‘trickle up’ theory of wealth: the bottom 10 percent of players are losing money quickly enough to support a relatively large middle class of break-even players.”²⁶ In other words, scare away the fish, and the rest of the players have much more trouble winning or even breaking even. Those who would draft poker regulation must decide whether the threat of poker bots is severe enough to justify instituting a rating system, whether a rating system would itself harm the “ecology” of Internet poker, and whether educating inexperienced or inept players is worth the effect it might have on more experienced players and the income of poker sites. Normally, consumer protection attempts to prevent inexperienced or inept consumers from being

²⁵ TwoPlusTwo.com bills itself as “the world’s largest poker strategy resource online and in print,” and hosts numerous threads of conversations regarding poker at: <http://www.twoplustwo.com/>

²⁶ Nate Silver, *The Signal and the Noise*, 317 (2012),

taken, and it would be an unusual consumer protection regime that worked to ensure that inexperienced and inept gamblers did not realize their limitations.

Providing Internet Gamblers With Tools to Control Their Gambling: Self-Exclusion and Self-Imposed Responsible Gambling Limits

Another important area of consumer protection in Internet gambling is mandating that Internet gambling sites provide their customers with straightforward, practical, and easily-understood and implemented methods to control their gambling and prevent themselves from engaging in excessive gambling. A central principle of consumer protection is consumer sovereignty, the idea that consumers should be in charge of their own purchasing decisions and be empowered to make the best decisions practicable.²⁷ One element of giving players control over their own gambling is to allow them to self-exclude themselves from Internet gambling, to decide that they are worse off if they are free to gamble, and so choose to make themselves unable to gamble, even if later they choose to gamble.²⁸ Another, parallel method is to allow players to set limits on the amount of time spent, in deposits into their gambling accounts, or in amounts wagered in gambling, and set up a system that imposes those self-selected limits on gamblers even if later they should choose to gamble more.

While there is much scientific study needed to determine their exact effect on problem gambling, the initial evidence is that such programs are useful in allowing gamblers to control their gambling. Even if these programs do not prevent problem gambling, therefore, they are useful

²⁷ See, Joel Waldfogel, Does Consumer Irrationality Trump Consumer Sovereignty?, 87 Rev. Econ. & Stat. 691, 691 (2005), suggesting that while consumer rationality and sovereignty occupy central roles in economic theory, empirical evidence demonstrates the limits of consumer rationality, and that actual behavior “is constrained by bounded rationality, bounded willpower, and bounded self-interest”.

²⁸ For the philosophical implications of choosing to restrict oneself, and a discussion of that issue in the context of gambling, see: and Kurt Eggert, Lashed to the Mast and Crying for Help. 36 Loyola of Los Angeles Law Review 693 (2003), available at SSRN: <http://ssrn.com/abstract=905062>, discussing autonomy effects of self-exclusion programs for casinos.

consumer protection tools in that they give consumers the power to control their purchases and to make good shopping decisions. One analysis of self-imposed gambling limits concluded that: “Once the limit had been imposed, self-limiters markedly reduced both their gaming frequency as well as the amount wagered. In addition, self-limitation prompted a considerable share of gamers to restrict themselves to one form of gaming (e.g. classic sports betting) or to stop playing altogether.”²⁹ Given this usefulness, all gambling regulation should mandate the gamblers have access to self-exclusion programs and to responsible gambling control tools that allow them easily to set limits on the amount of time they spend gambling, the amount they deposit in their accounts, the amount, if any, of credit they receive to gamble, and the amount they wager, with the limits set in increments of daily, weekly, monthly, annually, or lifetime.

Changes in the Internet Gambling Landscape: Internet Gambling Goes “Live”

The most significant recent development in Internet gambling in the United States is the legalization and introduction of Internet gambling in three states, so far. For years, the U.S. Department of Justice had interpreted the Wire Act to reach beyond its ostensible subject, sporting events, and ban other forms of Internet gambling. In December, 2011, the DoJ’s Office of Legal Counsel released an opinion that forms of gambling that do not involve a sporting event are not barred by the Wire Act, which essentially freed Internet gambling from most federal restriction. As a result, states realized that they could move forward with intrastate gambling. While many states are taking steps toward legalizing some form of intrastate gambling, those who have actually succeeded in starting Internet gambling are

²⁹ Bwin.party digital entertainment: Outcome of a Paradigm Shift – New Ways for the Scientific Analysis of Online Gaming: Implications for Addiction Research and Responsible Gaming, 15 (2013), reporting on results of studies in cooperation with The Division of Addiction of Harvard Medical School, available at: <http://www.bwinparty.com/AboutUs/missionAndStrategy/~media/2355C94A54954A8CA098BBD2F02C3859.ashx> See also Nelson, et. al., Real Limits in the Virtual World: Self-Limiting Behavior of Internet Gamblers, J. Gambling Studies 24:463 (2008), finding that self-limiting programs “appear to be promising options for Internet gamblers at-risk for gambling problems.”

Nevada, which by regulation only permits poker online, Delaware, which allows poker, slots and table games, and New Jersey, which allows a broad array of forms of Internet gambling.

On a parallel track, on July 11, 2013, Congressman Barton introduced a new bill, the “Internet Poker Freedom Act of 2013,” that would set up a system of licensing Internet poker across the nation, subject to the assent of states and Indian tribes.³⁰ At issue, then, is which direction the legalization of Internet gambling should proceed, through state by state legalization and regulation, or by a federal approach. To decide that question, it is instructive to examine the various sets of regulations, Nevada’s, Delaware’s, New Jersey’s, and the proposed federal regulation in H.R. 2666, to determine how well each accomplishes the goal of consumer protection. The next section of this testimony will examine each set of published regulations and see what consumer protection or lack thereof is imbedded in each.

Nevada’s Internet Poker Regulations:

Nevada so far has allowed only Internet poker, and so the only house advantage that need be disclosed is the house rake from poker games.³¹ Nevada has in place rules regarding poker bots, and requires operators of Interactive gaming, including online gaming, to “maintain, implement and comply with” standards set by the chairman of the state gaming control board, including among the minimum standards controls “Reasonably ensuring that interactive gaming is engaged in between human individuals only” and “Reasonably ensuring that interactive gaming is conducted fairly and honestly, including the prevention of collusion between authorized players.”³² It is not clear from the regulations what “reasonably ensuring” means in the context of poker bots and collusion. If sites discover that they are powerless to prevent poker bots from playing, is doing nothing “reasonable”? If some poker bots

³⁰ H.R.2666 - 113th Congress (2013-2014): Internet Poker Freedom Act of 2013. Hereinafter H.R. 2666.

³¹ Nevada’s Internet gaming regulations are located in Regulation 5A, available at <http://gaming.nv.gov/modules/showdocument.aspx?documentid=2942>. The following citations are to Regulation 5A.

³² 5A.070, sec.6-7.

win millions, but not enough to cause players to cease playing, and further detection would cost poker sites millions is failing to spend the further millions “reasonably ensuring”? The regulations also require operators to promote “responsible interactive gaming and preventing individuals who have self-excluded from engaging in interactive gaming.”³³ The regulations also require operators to give players “Clear and concise explanation of all fees” and “The rules of play of a game. . .”³⁴

The Nevada regulations also appear to provide for both self-exclusion and tools of self-limitation, requiring that operators ensure that players have the ability “through their gaming account, to select responsible gambling options,” including (a) loss limits for a specific time; (b) deposit limits for a set time; (c) limits on dollar amounts for tournament entries in a set time; (d) poker buy in limits for a set time, outside of tournament play; (e) time limits on the total amount of play time during a specified time period; and (f) “Time based exclusion from gambling settings.”³⁵ Nevada’s self-exclusion from online gambling appears of minimal duration, though, in that operators cannot reopen a self-excluded gambler’s account “until a reasonable amount of time of not less than 30 days has passed since the individual self-excluded.”³⁶ In short, Nevada seems to mandate useful self-control tools for gamblers, but with a poor self-exclusion system. While Nevada requires poker sites to “reasonably ensure” that poker bots are not used, it is less than clear what that mandate will mean in practice.

³³ The regulations go on to note that “Such internal controls shall include provisions for substantial compliance with Regulation 5.170,” so apparently only substantial compliance is necessary. 5A.070.9.

³⁴ 5A.119.100, 1-2.

³⁵ 5A.120.13

³⁶ 5A.130.1(d).

Delaware's Internet Gambling Regulations

Delaware has a self-exclusion system that appears to be the opposite of Nevada's.³⁷ While Delaware's self-exclusion program provides for long-lasting exclusion, it seems designed to shame gamblers who seek its protection and be as difficult as possible to engage in. A Delaware gambler can self-exclude for a period of one year, five years, or seek a lifetime self-exclusion.³⁸ To self-exclude, a Delaware gambler must present him or herself to the State Lottery Office, present identification, have his or her photo taken, state that they are seeking self-exclusion because they are problem gamblers, and certify the truth of that statement.³⁹ To remove himself or herself from the self-exclusion list, even after the term of self-exclusion, the excluded person has to deliver a request for removal, apparently by hand, to the lottery office. One wonders why someone has to admit to being a problem-gambler in order to self-exclude, an admission that could haunt the gambler in subsequent divorce, child-custody or other litigation. And why is presenting oneself in an office to have one's photo taken necessary for self-exclusion in Internet gambling? In short, Delaware seems determined to make the self-exclusion process as onerous and shaming as possible.

Other than self-exclusion, Delaware's Internet gambling regulations are virtually silent on many of the issues at the heart of consumer protection in Internet gambling. There seems to be no requirement that gambling providers give gamblers the information gamblers need to make informed gambling decisions. There is no expressed requirement that providers reveal the hold percentages of Internet slot machines. There appear to be no regulations governing the use or abolition of poker bots. There appears to be no system of providing gamblers tools for responsible gambling limitations on gambling amounts, time spent gambling, short term gambling time outs, or poker tournaments, such as

³⁷ Delaware's regulations governing Internet gambling are included in the Delaware State Lottery Office Internet Lottery Rules and Regulations, effective September 10, 2013, and are available at:

<http://www.delottery.com/pdf/InternetlotteryRules.pdf>

³⁸ Delaware State Lottery Office Internet Lottery Rules and Regulations 13.14.2

³⁹ 13.11-13.14.

appear in the Nevada regulations. Most regulation seems left in the hands of the Internet gambling provider.

New Jersey's Internet Gambling Regulations

New Jersey has also legalized and issued regulations for a broad array of Internet gambling.⁴⁰ New Jersey requires casino licensees to provide a method whereby the gambler can limit the amount of money they can deposit in their account and the length of time they have to wait to gamble after they reach that deposit limit, as well as methods of suspending gambling “for any number of hours or days.”⁴¹ New Jersey’s regulations provide that, to self-exclude for life, the Internet self-excluder must deliver a completed request for self-exclusion in person. Otherwise, a person may seek Internet self-exclusion through his or her own Internet gaming account.⁴² Internet self-exclusion can be for one year, five years, or lifetime.⁴³ As in Delaware, the gambler has to state that he or she is seeking self-exclusion because of being a problem Internet gambler, and certify the accuracy of that statement.⁴⁴

The Internet manager is required to notify the Division upon detecting any person engaged in cheating or collusion.⁴⁵ Providers are also required to inform patrons of their right to “set responsible gaming limits and to self-exclude” and to suspend their accounts for no less than 72 hours.⁴⁶ Internet gamblers are to be given, on demand, “detailed account activity” of their last six months wagering, and,

⁴⁰ New Jersey law governing Internet gambling law is contain in Article 6C, available at: <http://www.nj.gov/casinos/actreg/act/docs/cca-article06C.pdf>, and the regulations are contained in N.J.A.C. 13:69O available at <http://www.nj.gov/oag/ge/docs/Regulations/CHAPTER69O.pdf> and its self-exclusion program in N.J.A.C. 13:69G, available at: <http://www.nj.gov/oag/ge/chapter69G.html>

⁴¹ Article 6C, Sec. 5:12-95.25(b).

⁴² 13:69G-2.2(c)

⁴³ 13.69G-2.2(d)2.

⁴⁴ 13.69G-2.2(d)5.

⁴⁵ 13.690-1.2(i)1.

⁴⁶ 13.690-1.2(l)9-10

upon player request, a summary statement for the last year, including deposits, withdrawals, wins or losses, beginning and end balances, and the a history of any self-imposed responsible gaming limits.⁴⁷ When a patron has lifetime deposits that exceed \$2,500, they are barred from further Internet wagering until they acknowledge that they have met that limit, that they can establish gaming limits or close their account and can call a (800) number for gambling addiction help.⁴⁸ Patrons can suspend their accounts for a period not less than 72 hours.⁴⁹ Internet gambling systems must be capable of allowing their patrons to set responsible gambling limits, such as daily, weekly, and monthly deposit and spend limits, and daily time limits on gambling.⁵⁰ Before a patron plays on any Internet system, the provider must make available “All charges imposed on patrons, such as fees, rake, and vigorish.”⁵¹ The self-limitation tools appear to be fairly robust, if they are enforced, and the self-exclusion program can be done on the Internet, though it still involves the admission that one is a problem gambler.

Players are “Prohibited from utilizing automated computerized software or other equivalent mechanism, such as a ‘bot,’ to engage in play.”⁵² In practice, this will likely mean that players caught using poker bots will be treated with the same harsh results as players caught cheating at cards in actual casinos, to the extent that they can be caught. The rules could be clearer, though, on the responsibility of the gaming providers to ensure that players are not using bots or engaging in collusion. The gaming provider is all required to give gamblers a complete explanation of all fees and charges imposed on them related to gaming.⁵³

The Proposed Federal Response: H.R. 2666

⁴⁷ 13.690-1.3(i)

⁴⁸ 13.690-1.4(s)

⁴⁹ 13.690-1.4(j)1

⁵⁰ 13.690-1.4(n)

⁵¹ 13.690.1.5(j)

⁵² 13.690-1.2(l)3.v

⁵³ 13.690-1.2(l)4

In response to the developments in Internet gambling, Congressman Barton has introduced H.R. 2666, which would legalize Internet poker on a federal basis and provide for a mechanism of regulating it, working with states and tribes.⁵⁴ H.R. 2666 is based on giving a large amount of regulatory power to “Qualified Regulatory Authorities” (“QRAs), that are either state regulatory agencies, “designated regulatory authorities of a federally recognized Indian tribe authorized to game” or the Office of Internet Poker Oversight.⁵⁵ Each “poker facility” must demonstrate to the appropriate QRA that the facility maintains “appropriate safeguards and mechanisms, in accordance with standards established by the qualified regulatory authority, including appropriate safeguards and mechanism to . . . ensure, to a reasonable degree of certainty, that Internet poker games are fair and honest, and to prevent, to a reasonable degree of certainty, cheating, including collusion, and use of cheating devices, including use of software programs (sometimes referred to as “bots”) that make bets or wagers according to algorithms.”⁵⁶

While H.R. 2666 has the seed of many good ideas on how to provide consumer protection to gamblers, it leaves much of the implementation of those ideas in the hands of the QRAs that will actually oversee licensees, which may leave gamblers unprotected when gambling on Internet sites in jurisdictions where consumer protection for gamblers is not favored or enforced. H.R. 2666 requires each QRA to establish “requirements for the development of a gambling addiction, responsible gaming, and self exclusion program that each licensee . . . shall implement as a condition of licensure.”⁵⁷ Each QRA can determine the manner of placement on self-exclusion lists.⁵⁸ While the Secretary “shall make the master list [of self-excluded patrons from all jurisdictions] available to all QRAs and licensees, it is not clear that QRAs or licensees have to follow the self-exclusions from other jurisdictions. It is important to

⁵⁴ The text of H.R. 2666 is available at: <http://beta.congress.gov/bill/113th/house-bill/2666/text>

⁵⁵ H.R. 2666, Sec. 101 (15)

⁵⁶ H.R. 2666, Sec. 104(d)(9).

⁵⁷ H.R. 2666, Sec. 106(a).

⁵⁸ H.R. 2666, Sec 106(c), (1)(C)(i)

note, however, that each QRA establishes its own requirements for responsible gaming, giving the individual QRAs great leeway in developing strong or weak responsible gambling programs.

H.R. 2666 also provides that each QRA shall require licensees to “make continuously available individualized responsible gaming options that any customer may choose, including allowing customers to self-limit their deposit, time and bet amounts, as well as self-limit their access to the issuance of credit, check cashing, or direct mail marketing by the licensee, in each case as and to the extent that the qualified regulatory authority may consider appropriate.”⁵⁹ The words “in each case as and to the extent that the [QRA] may consider appropriate” puts great power in the hands of the QRA to create robust self-limitation tools for gamblers, or, alternatively weak or even non-existent ones. In other words, if the QRA deems responsible gaming tools to be unnecessary or inappropriate, the QRA appears to be free not to force licensees to provide those options.

The consumer protection mandated by H.R. 2666 is subject to change and improvement as there is the requirement to “ensure that the qualified regulatory authority adopt any practices that the Secretary recommends to protect consumers, taking into account the National Council on Problem Gambling Internet Responsible Gambling Standards.”⁶⁰ To aid in the study of problem and other gambling issues, H.R. 2666 requires making available to the public, and presumably scientific researchers, “datasets on player behavior from customer tracking data collected or generated by loyalty programs, player tracking software, online gambling transactions, or any other information system. . . . The data shall retain information on player characteristics including gender, age and region of residence, player behavior including frequency of play, length of play, speed of play, denomination of play,

⁵⁹ H.R. 2666, Sec. 106(b)(3)

⁶⁰ H.R. 2666, Sec. 106(b)(6)

amounts wagered and, if applicable, number of lines or hands played and characteristics of games played.”⁶¹

H.R. 2666 bans the use of credit cards on Internet poker wagers, discouraging gamblers from playing poker on credit.⁶² And H.R. 2666 specifically bans poker bots, stating that there are to be no “cheating devices,” which includes any mechanical device or software for use in obtaining an advantage “where such advantage is prohibited or otherwise violates the rules of play established by the licensee.”⁶³ “BOTS.—A software program that makes bets or wagers according to an algorithm shall constitute a type of cheating device under this subsection.”⁶⁴ H.R. 2666 enforces this ban by allowing a court to enter a permanent injunction against a violator barring them from betting again,⁶⁵ but more importantly, provides for criminal penalties of a fine or imprisonment, or both, for such violation.⁶⁶ While H.R. 2666 has many elements of consumer protection in poker regulation, it leaves much of the implementation of those elements in the hands of the QRAs.

The National Development of Internet Gambling

There currently are two models for the development of national internet gambling. One is a state by state system, where each state determines whether to engage in Internet gambling, establishes its rules and consumer protection for its state, and then perhaps enters into compacts with other states to allow gamblers from that state to bet. The alternative model is have federal Internet regulation, perhaps with a strong core of regulations and a strong central regulator, or perhaps leaving much of the regulation to the states and tribes. One great hazard of the state by state with interstate compacts method is that it

⁶¹ H.R. 2666, Sec. 106(g)

⁶² H.R. 2666, Sec. 107(b)

⁶³ H.R. 2666, Sec. 110(a)(2)

⁶⁴ H.R. 2666, Sec. 110(b)(2)

⁶⁵ H.R. 2666, Sec. 110(c)

⁶⁶ H.R. 2666, Sec. 110(d)

make it more difficult for consumers to protect themselves or to understand what consumer protections are in place if they gamble on out-of-state sites. Imagine that a strong consumer protection state enters into a compact with a weak consumer protection state. If the strong consumer protection state's citizens gamble on a gambling site in the weak consumer protection state, they may find themselves victimized by the challenges and problems that consumer protection is supposed to prevent. If Nevada has a compact with Delaware and a Nevada citizen wants to self-exclude from any Internet casinos available to him or her, does that citizen have to fly to Delaware and visit the Delaware gambling authority's office to do so? If a Nevada gambler sets up effective safe gambling limits, but then Nevada compacts with Delaware, which seems to have no limits, the Nevada gambler may find himself or herself bereft of the very gambling control tools that Nevada promised.

A federal Internet gambling law and regulation could avoid that problem by mandating national consumer protection measures for gamblers nationwide, allowing gamblers to self-exclude on the Internet from all Internet gambling nationwide, provide national responsible gambling tools that are available to all gamblers and are enforced in all Internet casinos in the nation, have a national system for the detection and prevention of poker bots, and require Internet casinos around the country to provide sufficient information for gamblers to make informed decisions regarding where, when, how and how much to wager, including providing the hold percentages for all slot machines both while gamblers are shopping and while they are gambling. H.R. 2666 falls short of that goal, however, in that it leaves much of the regulatory decision-making to the state and tribal QRAs. While H.R. 2666 aspires to greater consumer protection, it should be strengthened to ensure it will provide more consumer protection than state by state compacts.

Conclusion

In any design of Internet gambling regulation, it is important to keep consumer protection issues at the forefront, as gambling is by its nature an industry designed to cater to consumers. Consumer protection requires, among other things, that gamblers be given sufficient information to make informed decisions about their gambling options, both while they are shopping and deciding where to gamble and during the actual gambling process itself. They need to be protected, to the extent practicable, from unwittingly losing poker games to poker bots, unless there are methods to allow them to avoid poker bots with much stronger games than theirs. And Internet gamblers need to be provided self-exclusion and responsible gambling tools that allow them to control their gambling and avoid excessive gambling. The three states that have introduced Internet gambling have widely varying consumer protection regimes, and no doubt as other states legalize Internet gambling, some will provide more and some less consumer protection. Such uneven levels of consumer protection is harmful to gamblers once they can cross state lines on the Internet. One way to solve this problem would be to have strong central federal regulation.