Internet and Wireless Gambling – A Current Profile

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Foreword

Internet and wireless gambling is a dynamic field. The Australasian Gaming Council completed this profile of the area in January 2008 for AGC members and has now added a comprehensive update to reflect activity in recent months.

The paper is current until May 2008 and already there have been further developments forecast. On 28 May 2008 there was notice in the private Members' business of the House of Representatives for an Act to amend the Interactive Gambling Act 2001 (Interactive Gambling Amendment Bill 2008).

The AGC neither supports nor condones internet and wireless gambling. This document simply provides background information. Further updates will be made available when necessary.

Cheryl Vardon CEO AGC 31 May 2008

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Update to: Internet and Wireless Gambling – A Current Profile

The original paper is current to January, 2008. The field of Internet and wireless gambling is very fast paced and dynamic and since this time there have been a number of developments both nationally and internationally. The following provides details of subsequent developments in availability, legislation, and research concerning Internet and wireless gambling from January 2008 until May 2008.

Australia

High Court of Australia rules in favour of Betfair in Western Australia

On March 27th, 2008, the High Court of Australia ruled unanimously in favour of allowing Western Australian residents to legally place bets with licensed online betting exchanges. The landmark case was brought by Betfair, who challenged the validity of Western Australian legislation introduced in 2007 prohibiting local residents from placing bets with telephone and Internet betting exchanges. The High Court ruled that the legislation imposed 'discriminatory and protectionist burdens' on interstate trade, thereby contravening Section 92 of the Australian Constitution, which protects freedom of trade between states. Justice John Heydon ruled that the Western Australian State Government's argument of the legislation being in place to ensure that persons wagering at races contributed to the persons conducting the races was unacceptable. The court stated that Betfair was ready to undertake obligations to ensure that the organisers of races obtain a reward from Betfair as well as from other wagering operators in the State.

The High Court also backed Betfair's challenge against legislation that requires betting operators to obtain approval from the Minister for Racing and Gaming before they can publish Western Australian race fields, ruling the laws invalid. Betfair will now be able to publish race fields between Tasmania, where the company is licensed, and any other state.

Talking to ABC News, Chairman of Perth Racing, Ted Van Heemst, said the decision will allow more betting exchanges into the market, which has the potential to undermine the economic viability of an industry. The Tasmanian Minister for Racing, Michael Aird, commented that the decision paves the way for residents from all States and Territories to wager with Betfair and for Betfair to advertise across the country.

The High Court decision has direct implications for any State or Territory law which restricts or controls inter-State gambling operators from competing with in-State/Territory gambling operators. Laws potentially under question include those regarding requirements for approval or fees to publish or use race fields, prohibitions and restrictions on advertisements, and restrictions on out of State/Territory bet types and product offerings. Laws restricting or prohibiting the location of out of State operator premises and equipment may also be implicated by the decision, particularly given the difficulty regulating telephone or internet space. These changes may also potentially impact the value of licences and gambling tax rates.

Betfair enters into agreements with TOTE and ARU

Following the High Court Decision, in April 2008 Betfair entered into an agency agreement with TOTE Tasmania, which will see the online betting exchange offer Tasmanian racing to its base of more than one million customers. Tasmania is the only jurisdiction in Australia whose licensed wagering companies are allowed to advertise in the UK. Betfair has also entered into a product fee and integrity agreement with the Australian Rugby Union (ARU), which will see ARU receive a share of the revenue generated by Betfair through betting on its rugby matches played in Australia and enable them to have access to betting records to effectively manage the integrity of the sport.

Sky Racing ACTIVE launched in Victoria

Tabcorp has launched Sky Racing ACTIVE, a service that will provide detailed information for all thoroughbred, harness, and greyhound race meetings on which Tabcorp is conducting wagering each day. Subscribers to the television service will receive information on track conditions, detailed form guides, scratchings, approximate dividends, results and final dividends. The company states that Sky Racing ACTIVE includes all necessary and appropriate consumer safeguards; Betting through the service is only available to TAB account holders in Victoria, who must satisfy identification requirements, subscribers can use a PIN code to block access to the Sky Racing channel and there is an additional 4 digit PIN required to access a TAB account. The service also includes responsible gambling messages on screen.

POLi funds transfer service offered to Australian consumers

The Australian online sports betting companies Sports Acumen and Global Sportsbet have included the POLi funds transfer service to enable users to quickly transfer funds from their savings account for online payments without undertaking any registration process.

Gaming revenues

Sportingbet plc has reported a 20% increase in net gaming revenues and reported that Australian net gaming revenues climbed to £4.7 million.

Australia's International All Sports Limited has seen an 11% drop in half year operating revenues to AUD\$23 million on the poor performance of its Canbet.com venture, however, the company's core business IASbet.com, performed strongly with revenues climbing by 28% to \$17.9 million. Issues with Canbet's software functionality, inexperience in product risk management and an immature client database are reported to have combined with implementation costs in European markets to result in a heavy investment, substantially impacting revenues. Performance in 2008 is said to have improved, which will be enhanced by the launch of a Chinese website in March.

Centrebet International Limited has reported tax profits of AUD\$5.9 million for the six months ended December 31st 2007. Total revenues in the period decreased by 2% to AUD\$31.3 million due to a drop in wagering revenues of 13% to AUD\$22.6 million. Gaming revenues showed strong growth of 49% to AUD\$8.4 million and now account for 27% of total revenues. Online casino revenues increased 76% on last year to AUD\$5.9 million, and online poker climbed 9% to AUD\$2.5 million, following improved marketing initiatives and cross selling of products. Con Kafataris, Managing Director, reported that mobile phone wagering on sport and racing is expected to broaden its operational targets. Centrebet launched SportOdds, a new website in the New South Wales market

before the commencement of the National Rugby League and Australian Football League seasons. National expansion is still subject to regulatory approval.

Australia's Lasseters Corporation reported a loss of AUD\$1.9 million for the first half of its financial year ending 31st December 2007. The company said this was largely due to the passing of the Unlawful Internet Gambling Enforcement Act in the US which has forced Lasseters' out of the US market and increased marketing and operational costs in its online sportsbook.

New Zealand

Online lottery sales

In March, 2008 the New Zealand Government announced a decision to allow online sales of Lotto, Powerball, Strike, Big Wednesday, and Keno ticket sales. This decision has met with opposition from the Green Party and the Problem Gambling Foundation. Critics of online gambling in New Zealand have cited the effects of problem gambling in the community, and believe that the decision to allow internet gambling will cause further problems because of the ease with which credit cards can be used to purchase tickets online.

Internal Affairs Minister Rick Barker stated that online sales will allow better collection of information and spending habits to protect New Zealanders. Players who register online will be limited to one account and will have to set their own personal weekly and monthly spending limits, as well as abiding by a general mandatory spending limit of \$150 on Lotto tickets per week or \$300 per month. NZ Lotteries will monitor players who regularly spend their maximum allowance and will contact them to offer support and provide information on problem gambling. NZ Lotteries and the New Zealand Racing Board are exempt from the 2003 Gambling Act which banned foreign gaming sites, on the basis that New Zealanders would be offered a safe alternative to online games and that any benefits from internet gambling would remain in New Zealand.

United States

On April 2, 2008, the House of Representatives Subcommittee on Domestic and International Monetary Policy (DIMP) held a hearing 'Proposed UIGEA Regulations: Burden Without Benefit?' to examine the regulations issued in 2007 by the Federal Reserve and Treasury on the UIGEA, which received more than 200 comment letters. The DIMP Subcommittee heard unanimous expert testimony from the US Treasury, Federal Reserve, The American Bankers Association, Financial Services Roundtable, Wells Fargo & Co., and the Credit Union National Association, all of whom opposed the proposed rules as unenforceable.

Following this hearing, on April 11, 2008, US House Financial Services Committee chairman Barney Frank and senior Financial Services Committee member Ron Paul announced the introduction of legislation to prohibit the federal government from issuing regulations called for in the Unlawful Internet Gambling Enforcement Act (UIGEA) of 2006. The legislation, H.R. 5767, will forbid the secretary of the Treasury and the board of governors of the Federal Reserve System from proposing, prescribing, or implementing any regulation that requires the financial services industry to identify and block internet gambling transactions.

Rep. Frank stated that the UIGEA places a significant burden on the payments system and financial institutions and forces financial institutions to act as law enforcement officers. Rep. Paul said that the ban on Internet gambling also infringes upon the freedom of Americans to do with their money as they see fit and the freedom from government interference with the Internet. Furthermore, the UIGEA fails to define the term 'unlawful internet gambling' leaving it to each financial institution to interpret conflicting state and federal laws, court decisions and inconsistent Department of Justice interpretation, when determining whether to process a transaction. At the hearing the regulators admitted that there are substantial problems in implementing the UIGEA.

Europe

In March 2008 the European Commission launched an investigation into the persecution of European online gambling providers by the United States in response to a complaint by the Remote Gambling Association (RGA). The European online gaming industry argues that the US should not be allowed to enforce gambling laws retroactively and selectively against foreign suppliers, for services offered at the time when the US had WTO commitments permitting online gambling. They are claiming that the US have violated Articles 16 (market access) and 17 (national treatment) of the legally binding General Agreement on Trade in Services (GATS) commitments to allow non-discriminatory access to its gambling market.

The Commission will now undertake a detailed examination of the factual and legal issues raised by the industry in the next three to five months, and present its findings in an investigation report which could lead to the launch of WTO proceedings against the US.

Empirical Research

Population trends in Internet sports gambling

LaPlante, Schumann, LaBrie, & Shaffer (2008) completed the first longitudinal analysis of online gambling participation and activity among a population of newly subscribed Internet bettors. Their analysis indicated that gamblers adapted to the new subscription services rapidly, as evidenced by quickly developing declines in population participation, number of bets and size of stakes. However, this pattern of behaviour was not uniform across the population. Among subgroups of heavily involved bettors, adaptation was generally slower or not apparent with high levels of betting maintained from the days immediately following subscription. This was particularly evident for live-action betting and the authors concluded that, while the findings challenge assumptions that Internet gambling will stimulate excessive patterns of gambling at a general population level, these heavily involved individuals and the effect of live-action play requires close scrutiny and ongoing examination.

LaPlante, D., Schumann, A., LaBrie, R., & Shaffer, H. (2008) Population trends in Internet sports gambling. *Computers in Human Behavior*. Available online 24 March, 2008.

Introduction

The beginning of public and commercial use of the Internet in the early and mid 1990s introduced the possibility of online gambling which first occurred in 1995 (Romney, 1995). Rapid expansion followed with yearly increases in the number of online gambling sites, types of gambling available and jurisdictions granting licences to allow internet gambling. Revenues similarity increased from approximately US\$2.2 billion in 2000 to US\$15.2 billion in 2006 (Christian Capitol Advisors, 2005; 2007). In January 2008 there were 2,132 Internet gambling web sites owned by 477 companies from 49 different jurisdictions as listed at www.online.casinocity.com.The majority of these companies are privately owned and the online sites consist of 786 online casinos, 517 poker rooms, 408 sports and racebooks, 289 online bingos, 53 skill game sites, 43 lottery sites, 21 betting exchanges, and 15 backgammon sites (Casino City, 2008). Sports and horse race betting, online casinos and poker rooms are estimated to account for 95% of the total market share and estimates suggest that the United States and Asia Pacific region are the largest markets, followed by Europe (RSeConsulting, 2006).

1. Types of Wireless Gambling

1.1. Online Casinos

Online casinos enable gamblers to play and wager on casino games through the Internet. Online casinos may be web-based where users play casino games without downloading software to the local computer (e.g. using Java, Flash or Shockwave plugins) or download-based, in which players are required to download the software client in order to play and wager on the casino game offered. Download-based online casinos generally run faster, although the initial download and installation of the software takes time and there is the risk of the program containing malware. Online casinos generally offer odds and payback percentages that are comparable to land-based casinos with appropriately programmed random number generators used to ensure that the numbers, cards or dice appear randomly. A typical selection of gambling games offered at an online casino might include baccarat, blackjack, craps, roulette, slot games and poker.

Many online casinos offer signup bonuses to new players, which usually require a minimum amount of wagering before allowing a cash-out, although some bonuses require no deposit to claim them including bonus credits/money, free spins on particular games and play for a predetermined period of time with a set amount of dollars. Players must open an account with the casino, which is generally done with a credit or debit card or through money or bank wire transfers.

According to a large scale survey of Internet gamblers, the typical Internet casino player was likely to be female (54.8%), aged between 46-55 (29.5%), play 2-3 times per week (37%), play for between 1-2 hours per session (26.5%) and wager between \$30-\$60 per session (18.1%) (eCOGRA, 2007). The same survey revealed that the most important things that people wanted from Internet casino websites were good bonuses, variety of games, deposit methods and a solid reputation.

1.2. Online Bingo

Online bingo is similar to online casino games with sites using random number generators to drawn virtual balls. Many sites offer several bingo games with different features, types of games and costs of play. Bingo sites also commonly feature a chat application which encourages players to chat with each other, creating a friendly and communal atmosphere and functioning as an effective retention tool. A survey commissioned by St Minver, the operator of Europe's largest poker network and the world's biggest bingo network, showed that online bingo was most popular in the U.S., Japan and the U.K.

1.3. Online Poker

Although the first Internet poker room (www.planetpoker.com) went online in 1998, in 2003 online poker experienced a major expansion in popularity following the widespread following of televised poker in the United States and recognition of online poker players as celebrities. This resulted in an increase in revenue generated by online poker from US\$365 million in 2003 to approximately US\$2.4 billion in 2006 (Christiansen Capital Advisors, 2005). Figures released at the beginning of 2008 suggest that the popularity of online poker shows no signs of weakening. According to the online poker tracking site, PokerScout, January 7th 2008 represented a new industry-wide peak player record, exceeding the previous record of 95,000 concurrent real-money players.

Online poker rooms allow players to play for low stakes (as low as 1c) and often offer poker freerolls (where there is no entry fee), attracting beginners. The major poker sites offer various features and incentives to entice new players including bonuses based on the number of hands played and tournaments by which the winners gain entry to real-life poker tournaments. Online poker rooms may also offer online poker schools that teach the basics and significantly speed up the learning curve for novices. Many online poker rooms also provide free money play so that players may practice these skills in various poker games and limits without the risk of losing real money, and generally offer the hand history of played hands for analysis and discussion. However, it has been noted that, relative to money sites, practice sites have an over-inflated pay-out rate (Griffiths & Parke, 2004; Sevigny, Cloutier, Pelletier, & Ladouceur, 2005).

There are substantial differences between online poker gaming and conventional inperson gaming. One obvious difference is that players cannot see each other resulting in players using different means to predict player behaviour including betting patterns, reaction time, speed of play etc. As online poker is not delayed by shuffling and dealing cards the rate of play is much faster than in a physical casino and, depending on the site, a player might play several tables simultaneously. To prevent collusion between players online poker room security employees can look at the hand history of the cards previously played by any player on the site to examine patterns of behaviour and also check players' IP addresses in order to prevent players at the same physical location from playing on the same tables. Many online poker sites are certified by bodies such as the Kahnawake Gaming Commission and other major auditing firms like Price Waterhouse Coopers to review the fairness of the random number generator, shuffle, and payout for some sites. A survey of Internet poker players found that the typical player was male (73.8%), aged between 26-35 (26.9%) play 2-3 times per week (26.8%), have played for 2 to 3 years (23.6%), play for between 1 to 2 hours per session (33.3%), play one (24.1%) or two (24.0%) tables at a time, and play at minimum stake levels of \$0.5 to \$2.00 (61.2%) (eCOGRA, 2007).

1.4. Online Lotteries

Online lotteries were one of the primary forms of Internet gambling with the first case of money being wagered over the Internet being the purchase of lottery tickets from the International Lottery in Liechtenstein for a manual drawing in 1995 (Romney, 1995). Online lottery sites allow gamblers to play out-of-state or international lotteries online through the purchase of tickets through the Internet. These sites also offer the results for international lotteries. As with other forms of Internet gambling, online lottery sites are often offshore and unregulated meaning that there is no guarantee that online services are actually purchasing tickets or will pay any winnings and there are few options for recourse over player dissatisfaction. Furthermore, lottery scams have become increasingly prevalent with emails being spammed to individuals informing them that they have won a lottery prize and inviting them to reply with their contact details to claim the winnings in an attempt to steal people's identity and money.

1.5. Sports Betting and Pools

Online sports' betting allows individuals to wager on the outcome of a diverse variety of sports and contests through the Internet. Increasing sophistication and options of wagers allow gamblers to bet on almost any aspect of a contest from who will win, who scores first, overall combined scores, etc. Surveys of online sportsbook gamblers in Australia and Europe have found that the majority of customers are male (85-92%) (Labrie, LaPlante, Nelson, Schumann, & Shaffer, 2007; Woolley, 2003). Woolley (2003) found that the most common age group was 35-54, and the average age of European sports bettors was 31 (SD = 10) (Labrie et al., 2007).

1.5.1. Betting Exchanges

Betting exchanges are sites that create a marketplace for bettors where potential wagers are posted on certain events (with accompanying odds and stake size) which individuals may accept (Williams & Wood, 2007). Although these wagers primarily focus on sporting and racing events, they also include wagers ranging from the outcome of politics and events on reality television, to behaviour of popular celebrities. For example, one of the largest betting exchanges Betfair has launched Tradefare, a financial exchange that enables customers to trade on their own prices, speculate on diverse markets and bet on financial spreads and Betfair also allows customers to speculate on climate indices developed to track the extent (or otherwise) of global warming.

1.6. Skill Gaming Sites

Skill game sites offer a wide variety of games including work games, puzzles, strategy games (e.g. mahjong, chess), sports (e.g. billiards, golf, racing), cards, arcade, trivia and

video games (Williams & Wood, 2007). Skill games differ from casino games, bingo or poker because they are not considered "games of chance" as the outcome of a game centres on the player's skill and/or knowledge of a certain contest of subject. As such, these sites are considered legal in the U.S. and other jurisdictions that ban Internet gambling. These sites typically offer tournaments whereby a player pays a fee to enter and the winner collects a prize in addition to single-player and per-game wagers.

1.7. Mobile Gambling

Mobile gambling refers to gambling done on a remote wirelessly connected device. Early versions of mobile gambling services involved subscribers receiving SMS text alerts for lottery results or horse racing odds, which was followed by the launch of the Hong Kong Jockey Club's SMS-based betting services in 2000, allowing gamblers to use their headsets to bet on horse races. The emergence of sophisticated handsets and advanced mobile data services now allows users to download Java-based gambling applications over higher-speed wireless networks and use video capabilities. Estimates on the size of the mobile betting market vary widely. Informa Telecoms & Media predict worldwide mobile gambling revenues to grow from \$1.2 billion in 2005 to \$7.6 billion in 2010, divided amongst the principal categories of sports and spread betting, mobile lotteries and scratch-cards, and casino and skill games. Figures from Juniper Research indicate that global mobile betting will reach \$19.3 billion by 2009 and be dominated by mobile lotteries.

Although Europe is currently the largest market for mobile gambling, Asia is predicted to be a key region based on estimates of strong growth, particularly of mobile lotteries that don't require 3G capabilities to succeed (Juniper Research, 2006). These predictions are based on the strong culture of lottery in this region and predicted growth in subscriber numbers in Asia, which may primarily come from the lower usage end of the market including low stake lottery players. However, the capacity for mobile gambling growth is linked to regulatory climates. This is clearly demonstrated in Europe where mobile gambling is gaining popularity at rapid rates in the presences of more relaxed legislation. In the U.K. remote gambling via the Internet, interactive television and mobile phones is permitted, but operators must obtain a licence before offering remote gambling services. Elsewhere in Europe, state gambling organisations and mobile operators have actively launched mobile lotteries enabling mobile ticket purchases and electronic 'scratch cards'. Casino games are also offered and mobile sports betting is popular in Europe with many service providers, including 3UK, Vodafone and Orange, offering users the capabilities to place bets through SMS or WAP while watching live racing on their phones.

Currently over 100,000 mobile users in Hong Kong buy lottery tickets or bet on football matches or horse racing using mobile phones. However, in other jurisdictions in the Asia-Pacific region, mobile gambling is still a new phenomenon, working through cultural and regulatory barriers. Some locally licensed gambling operators are finding ways around the ambiguities or restrictions of current legislation by offering games of chance where no actual money is involved. For example, Two Way TV, which provides interactive TV and mobile applications and technology in Australia and Asia, offers playfor-fun games to users for a download fee. Similarly, the demand for using mobile phones for gambling-related activities can be satisfied in countries where mobile gambling is prohibited without real betting. In Singapore, mobile operator M1 offers

notifications of lottery results, soccer odds and match results on a pay per request or monthly subscription fee and in China certain providers offer users SMS-based alerts of various lotteries.

1.8. Interactive Television

Gambling through interactive television can take multiple forms including directly gambling on sporting events such a horse racing and football using a television remote control, using a remote control to place bets on casino games such as blackjack and poker, and phoning a premium-rate telephone line to place a bet or participate in a skill-game such as puzzles, word games and trivia questions. Gambling on TV has achieved success in the U.K. largely though Sky's push into the digital TV market and a favourable legislative environment. Currently there are over 30 TV stations offering either sports betting or fixed odds betting in the U.K. Interactive quiz shows are also shown in Australian and in the U.K. commonly in late-night time slots while Premiere Win in Germany and Gemstar in the USA are introducing i-TV into these countries. Merrill Lynch predicted that the global remote gambling industry will be worth £125 billion by 2015, with i-TV accounting for 50% of this revenue (Griffiths, 2007).

2. Prevalence and Player Demographics

Estimates suggest between 14 and 23 million people currently gamble online, with 28-35% (4 million) of these being U.S. citizens, 49% (7 million) from Asia-Pacific regions, and 23% (3.3 million) from Europe (of which the U.K. accounts for one-third) (American Gaming Association, 2006; RSeConsulting, 2006). The prevalence of online gambling in the general population appears to be relatively low, but increasing. International prevalence estimates since 2000 indicate that 1.3% to 6.5% of individuals gambling online (Williams & Wood, 2007). Undifferentiated samples of both U.S. and worldwide online gamblers have found that the majority of Internet gamblers are male (American Gaming Association, 2006; Wood & Williams, 2007).

Online gambling also appears to be more prevalent amongst youth. Recent studies in North America found that 6% of high school students in New York State and 9% of high school students in Montreal reported having gambled for money on the Internet in the past year, with over half of those surveyed reporting play on practice sites (McBride, 2006; Rainone & Gallati, 2007). Similarly high rates of online gambling have been found amongst university and college students (Brown, 2006; Griffiths & Barnes, 2007; Helstron, Bryan, & Hutcchinson, 2007; McBride, 2006). In undifferentiated samples of online gamblers the average age of individuals is found to be mid 30s (America Gaming Association, 2006; Wood & Williams, 2007).

The socioeconomic status of online gamblers appears to be higher than average, as indicated by studies showing online sports and horse race bettors having a higher socioeconomic status than the Australian average (Woolley, 2003) and 41% of U.S. online gamblers earning more than US\$75,000 a year (America Gaming Association, 2006). A sizeable percentage of online gamblers also belong to professional or managerial occupations, have completed at least some tertiary education and use the Internet for other activities including conducting business and purchasing transactions

over the Internet (America Gaming Association, 2006; Wood & Williams, 2007; Woolley, 2003).

3. Online Play Behaviour

There is a paucity of research on the actual gambling behaviour of Internet gamblers or empirical investigations of the differences, similarities and interactions between venue and Internet gambling. An Australian survey of Internet gamblers found approximately half of these individuals reported placed online bets at least once weekly (Woolley, 2003). A similar level of online gambling play was found in a European sample of online sportsbook bettors in which the median betting behaviour was to place 2.5 − 2.8 bets of €4 every fourth day (Labrie et al., 2007). In a sample of North American Internet gamblers the average time spent gambling online each week was five hours, although 4.1% reported gambling online in excess of 20 hours per week (Wood & Williams, 2007). Similar results were found by eCOGRA (2007) with participants reporting playing on average 2-3 times per week for 1-2 hours per session.

The majority of online gamblers appear to gamble from a computer within their own home (86.6%) and only 4.3% report gambling online primarily from their workplace (Wood & Williams, 2007). However, 16.3% of this sample reported they occasionally gambled online from their workplace (Wood & Williams, 2007). Similar patterns of play were found by eCOGRA (2007) with 90% of online gamblers surveyed reported playing primarily at home, with the most popular time of day being in the evening (72%) followed by late night (53%). The most popular forms of online gambling amongst this sample were slot machines (40.9%), cards (mostly blackjack; 33.3%), keno/bingo (14.4%), sports betting (6.2%) and dice (2.7%). Similar results were found by the American Gaming Association (2006) where respondents indicated the casino games they most often played online were blackjack (78%), video poker (65%), slot machines (60%), roulette (37%), craps (29%), pai gow poker (24%) and baccarat (18%). Texas Hold'em was the most popular type of poker game.

There is also little research describing online gambling behaviour in terms of monetary expenditure. The eCOGRA report (2007) found Internet casino players on average wager between \$30 - \$60 per session (18% of the sample) while online poker players most commonly play minimum stake levels of \$0.50 to \$2.00 (61% of the sample). Amongst a sample of 40,499 online sports bettors who opened an account with a European sportsbook site over an eight month period the typical pattern of gambling behaviour incurred a loss of 29% of the amount wagered (Labrie et al., 2007). While the majority of individual made bets of moderate proportions (less than €5) the top 2-3% of bettors wagered approximately €10,000 during the eight month period. An analysis of the top 1% of the sample based on amount wagered found that these individuals had lower percent losses than the rest of the sample suggesting that successful betting leads to continued betting and conversely, losing discourages ongoing gambling.

4. Motivation for Internet Gambling

Internet gambling has features that clearly differentiate it from land-based gambling resulting in different motivations and reasons cited for online gambling amongst players. The most obvious attribute of Internet gambling is the greater convenience, comfort and

ease of access, cited as the primary reason for gambling online in multiple studies (American Gaming Association, 2006; Griffiths & Barnes, 2007; Wood, Williams & Lawton, 2007). Following this consensus, participants in each sample cited different reasons for gambling online. Amongst a small sample of British university online gamblers other reasons given were flexibility of use, 24 hour availability, peer and familial influences, large variety of gambling choices, advertising, anonymity, and demo games (Griffith & Barnes, 2007). In the American Gaming Association (2006) study participants reported gambling online as it was fun, exciting and entertaining, offered the opportunity to win money, and for anonymity and privacy. Youth (aged 12-24) described gambling online to relieve boredom and for excitement (McBride, 2006). Other desirable features of online gambling reported include an aversion to the atmosphere and clientele of land-based venues, a preference for the pace and nature of online game-play and the potential for higher wins and lower overall expenditures when gambling online (Wood et al., 2007). The ability to pretend to be the opposite sex has also been cited as a significant advantage, with women pretending to be males to be taken more seriously and for a greater sense of security, and males pretending to be females for supposed tactical advantages (Griffiths, 2003; 2006).

The diverse range of reasons given for online gambling demonstrates the diversity of this group. Currently the information available on the characteristics of Internet gamblers is limited and further research is required before more a more conclusive understanding for the causes and reasons for internet gambling, and how this compares to individual's land-based gambling, can be reached. It is possible that Internet gambling sites offer consumers a range of distinct features that are unavailable in land-based venues and Internet gambling may be used by a different population than land-based gambling. At this time it is not possible to determine whether Internet and land-based gambling are in direct competition with one another, or whether each opportunity serves a distinct market.

5. Current Legislation and Online Gambling Availability

North America

The Unlawful Internet Gambling Enforcement Act (UIGEA) of 2006 restricts U.S. banks and credit card companies from processing transactions for any Internet gambling sites. It is also illegal for Internet gambling providers to accept money transfers from potential U.S. online gamblers. This law is in addition to multiple state and federal laws already making Internet gambling illegal in most of the U.S. However, there are exemptions to the UIGEA including between-state horse race betting, and other types of within-state online gambling, as long as the individual state does not prohibit it. It is also unclear whether this legislation applied to 'skill games'. There are currently 23 online gaming sites based in the U.S. The exceptions to the UIGEA were seen by the World Trade Organisation (WTO) as unfair trade protection practices resulting in the WTO imposing US\$21 million in annual trade sanctions for Antigua and Barbuda in December 2007, however the U.S. has requested delays in the implementation of these sanctions and representatives from the jurisdictions are negotiating a resolution.

Canadian federal law has been interpreted by provincial governments as allowing them to legally operate an Internet gambling website as long as the patronage is restricted to residents within that province. Thus, provincially-owned gambling operators provide

online sports betting and horse race wagering, online lotteries, and online sale of land-based lottery tickets. Certain Aboriginal groups have enacted their own gambling legislation. For example the Kahnawake Gaming Commission currently hosts more Internet gambling sites than any other jurisdiction in the world (Williams & Wood, 2007). The Attorney General of Canada and Quebec have stated the Kahnawake operations are illegal; however, this has not been tested in court.

Asia Pacific Region

Online gambling in Australia is regulated by the Interactive Gambling Act (2001) passed by the Federal Government on June 28th, 2001 making it an offence to provide an interactive gambling services to a customer physically present in Australia, but it is not an offence for Australian residents to play poker or casino games online. Furthermore, individual Australian states have the ability to formulate their own policies and legislation. Online and mobile sports betting is also completely legal in Australia, with many state government licensed sportsbooks in operation, such as Centrebet, Sportingbet, & Betfair.

The Northern Territory licences online casinos, sportsbooks and racebooks. Licences are issued for five-year periods with initial and ongoing audits required. The seven Northern Territory sites do not provide services to Australian players. Western Australia currently has two licensed racebooks in operation. Land-based racebooks may be authorised to operate online for a onetime fee although online only operators are also able to apply for licences. There is no renewal or relicencing process as licences are granted permanently provided the annual fee is paid. New South Wales has three sports bookmaking sites. Sports bookmakers must obtain a licence/registration as a bookmaker as well as an electronic betting authority. Victoria and the Australian Capital Territory have gambling legislation that accords to the country's National Model, which stipulates that licences granted in one state or territory receive reciprocal status in the other states or territories. The Bookmakers' Internet Betting Rules of Racing Victoria require all betting transactions conducted over the Internet to be recorded and are able to be observed by Racing Victoria. A bookmaker who has a licence and is conducting betting on a horse race, a harness race, or a greyhound race using the Internet must only do so while operating at a licensed racecourse on which a registered race meeting is occurring.

In New Zealand exclusive operating rights for online race and sportsbooks have been granted to the Racing Board (formerly known as the Totalisator Agency Board, TAB) and online lotteries are run by the Lotteries Commission. All other forms of online gambling are prohibited and it is illegal to organize, manage or promote online gambling in New Zealand or to wager with offshore providers.

The Hong Kong Jockey Club, a non-profit government body which administers and regulates horse racing and betting in the city, offers online lottery play, sports betting and horse race betting to Hong Kong and non-Hong Kong residents. The 2002 Gambling (Amendment) Ordinance prohibits Hong Kong residents from engaging in online gambling with operators outside of Hong Kong. The government of Macau has authorised the Macau Jockey Club to offer horserace wagering products over the Internet. It has also authorized the Sociedade de Loterias e Apostas Mutuas de Macau to offer sports lottery products online. Foreign gambling providers are not permitted to offer remote services from Macau.

The state-owned and controlled Philippines Amusement and Gaming Corporation is the sole authorised gambling operator in the Philippines. The company operates casinos, bingo, sports betting and betting exchanges online. In 2002 the government opened its Internet gaming industry to competition and there are currently 13 Philippines sites.

There is an online lottery operating in India.

Europe

Various forms of online gambling are legal and regulated in most members of the European Union. Some countries put restrictions on online gambling by allowing some types and making other forms illegal, other countries restrict patronage of their online sites to residents only and others prohibit residents from accessing online gambling sites outside the country.

Online gambling is largely permitted and regulated in the U.K. The Gambling Commission (established in September 2007) grants licences for Internet gambling sites. Lotteries may not be conducted online, but traditional lottery tickets may be purchased remotely using the Internet and wireless technology.

In 2006 Italy introduced a new set of regulations for land-based and online gambling allowing companies to operate sports betting at retail locations as well as over the Internet. It is estimated that 14,000 interactive and retail betting licences were awarded to private operators in early 2007. In addition to skill gaming and person-to-person betting, these licences allow fixed odds and pari-mutuel horse and sports betting to be conducted online. As the majority of the EU increases restrictions on online gambling, Italy acts in contrast by liberalizing its policies. The Italian gambling market is expected to grow by 64% by 2010 due to the relative lack of competition.

In Liechtenstein only the government-controlled International Lottery Liechtenstein Foundation is permitted to offer gambling services over the Internet. The foundation operates PlusLOTTO, a lottery that sells tickets only over the Internet to benefit charitable organizations within Liechtenstein and is allowed to sell tickets outside of Liechtenstein.

Nine EU Member States are under investigation by the European Commission for potentially over-restrictive gambling regulations. These include:

- France permits the Pari-Mutuel-Urbain, its monopoly horse race betting network, to offer services on the Internet, but no other forms of online gambling are permitted. France has discussed a potential liberalization of the country's online gambling market by March 2008.
- Austria licenses Austria-based companies to offer lottery services and casino gaming via the Internet, mobile phones and interactive television, however, only Austrian residents are allowed to play at sites. Both domestic and foreign-based licence holders are permitted to offer online bookmaking services. Austria forbids foreign-licensed companies from advertising in the country.
- Sweden's monopoly gambling provider Svenska Spel is authorised to offer lotteries, Internet poker and number games via the Internet and mobile devices.
 Foreign providers may not offer online gambling services in Sweden and Internet

- casino gambling is not permitted. Sweden has begun taking steps to reduce the over-restrictive policies with the goal of de-monopolizing the country's gambling industry and a licensing system is expected to be introduced along with the sale of the state's gambling assets.
- The Netherlands does not allow its citizens to gamble online through foreign gambling operators. De Lotto has a long-standing licence for online gambling in the Netherlands and in September 2006 the Holland Casino (a major government-owned land-based casino) operator to offer Internet casino games, which are only available to residents of Holland.
- Finland's 2002 Act on Gaming permits only one licence holder to operate offtrack betting on horseracing, and one licence holder to operate slot machines and casino games. These licenses are currently held by domestic companies who have launched sports betting, horserace wagering and lottery products for Internet and mobile phones but the Act on gaming does not allow slot machines and casino games to be offered via remote channels. In response to allegations by the European Commission that Finland was not abiding by EU rules, the Finnish government organised a group to reform the country's legislation to that it complies with European law as well as meeting national needs. In January 2008 the Ministry of Social Affairs and Health announced plans to introduce an amendment to the law on gambling that would enable Internet gamblers to claim back their losses. The payer would be either the firm providing the online poker services, a credit card company, or the winning player in the game, which in practice would mean that foreign companies running Internet poker services would prevent Finnish players from taking part in games. The Minister of Culture and Sports has also proposed the launch of a state-run poker site.
- Germany has a monopolistic regulatory regime for online sports betting and lotteries. It is forbidden for non-authorized betting operators to offer wagers in Germany or for private and foreign lottery operators to sell tickets over the Internet. In January 2008 a ban began to ban online gambling and preserve the country's state monopoly. According to these rules, the states will order Internet service providers to block illegal betting Web sites and banks to halt money transfers to these sites.
- Norway has taken steps to make it illegal for their financial institutions to process payments related to online gambling sites.
- Greece is reported to be one of the biggest gambling markets of the EU, however in 2002 a law was passed banning all electronic games involving betting.
- Portugal explicitly prohibits most forms of gambling.

Other Countries

Several countries explicitly prohibit all or most forms of online gambling including Russia, Pakistan, Saudi Arabia, and Bermuda. Other countries, including Gibraltar, Antigua & Barbuda, Malta, Netherland Antilles, and Panama, have either completely legalised or permit all forms of online gambling, and allow both foreign and domestic companies to operate and residents and non-residents are permitted to gambling within and outside the country. In South America online casinos operate in Argentina and Venezuela (which also operates the Venezuelan national lottery online) and Brazil permits online lotteries and also has an online Bingo site. There is currently one website, Atlantic Sportsbet, registered in South Africa.

6. Problems and Issues for Consideration

6.1. Fair Play and Player Protection

Given the nature of online gambling as a largely unregulated industry fair play practices are difficult to monitor as there is less evidence of the authenticity and fairness of gambling outcomes. There are high levels of mistrust and cynicism amongst consumers regarding online gambling, with security concerns and legitimacy cited as the main reasons for not playing online in a survey of U.S. poker players (Ipsos Reid, 2005). Similar concerns are cited by Internet gamblers with 55% of a sample of online gamblers stating they believe that online casinos cheat players (American Gaming Association, 2006). In a large scale survey of international Internet gamblers, over one-third of respondents claimed to have had a dispute at some point with an operator, with less than half of these saying it had been resolved (eCOGRA, 2007).

It is unclear whether unresolved disputes are a consequence of players making invalid or unrealistic claims, or whether operators are failing to meet their obligations. The most common problem reported by players was being disconnected from the game or related to software malfunctions, which suggests responsibility is shared between operators and software providers as well as Internet providers and players own IT setup (eCOGRA, 2007). The majority of players consider 3rd party reports, endorsements and general vigilance regarding unfair play to be important to their overall game play and play on the 'biggest named' sites to minimise the potential impact of cheating (eCOGRA, 2007). Many casino gambling portals and player forums maintain blacklists of 'rogue' casinos, however, given the lack of regulation for online casinos these are generally based on individual webmaster or player opinions rather than anything official from any type of regulating body

Concerns regarding fair play practices appear to be somewhat realistic given numerous cases where online sites have apparently not paid winnings, have cheated players with unfair games or disappeared with player deposits (Games and Casino, 2006). Fraud and cheating players is not limited to small scale sites, a recently released report from the Kahnawake Gaming Commission (2007) detailed how an unnamed senior staff member had defrauded and cheated players at Absolute Poker, one of the world's leading poker rooms. As a result the Commission implemented several sanctions including random audits of the site and a fine of \$500,000. This mild reprimand (Absolute Poker is estimated to generate between \$150,000 and \$250,000 in poker revenue per day, making the fine virtually meaningless and the perpetrators were allowed to continue to hide behind screen names) highlights the distinction of the online gambling industry from any other industry, which would be held accountable for their actions with potential criminal investigations. This incident demonstrates that without regulation the online gaming industry is susceptible to damage from rogue elements. Furthermore, the ability for players or governments to address alleged cheating is limited due to the foreign jurisdiction of sites and lack of regulatory enforcement.

In spite of uncertainty and concern among players, the level of customer service offered in the Internet gambling industry was rated on the whole as marginally better than that of other industries (eCOGRA, 2007). Similarly, an independent audit of U.K. gambling websites conducted by Talisma (2007), found improved levels of customer services in

the areas of responsiveness, new interactive channels and accuracy of information as compared to 2006. However, the audit revealed that U.K. gambling websites failed to provide personalised answers to phone calls, a poor ability to track previous correspondence between customers and the company and as many as 92% of websites did not provide a knowledge base to enable users to easily search and access information online. These findings suggest that online gambling websites have a large scope for improvement in particular with customer service and provision of accurate information.

6.2. Unfair Player Practices

The lack of regulation of the online gambling industry, anonymity offered to players and complications relating to international jurisdictions mean that online gambling sites are also vulnerable to fraud and cheating by players. The American Gaming Association (2006) survey revealed that 46% of online gamblers believe that players have found a way to cheat the sites. With the increasing use of the Internet for commercial transactions, online purchases and online skill games, criminal theft and fraud, such as identity theft or the theft of virtual assets that can be sold in the real-world marketplace, is a realistic possibility (Chen et al, 2005).

Common fraudulent online gambling player behaviour includes signing up for multiple casino accounts using different identities to claim a bonus offer multiple times, disputing charges, using someone else's credit card or manipulation of gaming software. There are also several reports of hackers successfully manipulating online sites to pay wins (RSeconsulting, 2006; Rueters, 2001). As mentioned previously, online poker is susceptible to player collusion (where several online poker players at the same table are actually in the same physical location) as well as the use of computer programs to facilitate optimal play against other players (Brunker, 2004).

Reports indicate that the greatest problem caused by individuals and criminal organisations is extortion where payments are demanded for not disrupting the site's online activity during major periods of business such as prior to sporting events and during tournaments (Williams & Wood, 2007). It is estimated that online sites pay millions of dollars to such criminals each year (Current Digest, 2006; Ksetri, 2005; RSeconsulting, 2006).

Law enforcement officials are reportedly significantly concerned with the potential for Internet gambling to be a vehicle used by individuals and the sites themselves for laundering of criminal proceeds and other forms of financial crime, including tax evasion (United States General Accounting Office (GAO), 2002). The extent of such criminal activity is unknown, but the Federal Bureau of Investigation (FBI) has been involved in multiple cases and laid charges against individuals for using Internet gambling as a venue for money laundering and reports from the multinational Financial Action Task Force (FATF) state that there is evidence of criminals using Internet gambling to launder illicit funds (FATF, 2001; GAO, 2002 United States Attorney, 2008).

6.3. Youth

Underage gambling is of particular concern and research from Canada, the U.S., U.K., and Australia shows that 4-7% of adolescents exhibit serious patterns of pathological gambling, with 10-15% at risk for either developing or returning to a serious gambling problem (Delfabbro & Thrupp, 2003; Derevensky & Gupta, 2004; National Research Council, 1999). The involvement of youth in online gaming appears to be increasing with recent prevalence studies reporting 6% of high school students in New York State having gambled online in the past year (Rainone & Gallati, 2007) and 9% of Canadian high-school students reporting having gambled for money on the Internet; an increase from 3.6% in 2005 with over half of those surveyed reporting play on 'practice' sites (MacKay, 2005; McBride, 2006). Adolescents who bet online are more likely to be problem gamblers, have lower grades, engage in delinquent activities, abuse alcohol and illicit drugs and take medication for depression and anxiety (MacKay, 2005).

Although most online sites ban individuals younger than 18, their ability to effectively accomplish this appears to be questionable. In addition to reports of the prevalence of youth gambling, a study conducted in the U.K. found that a 16 year old was able to place bets online on 30 out of 37 sites tested and a European survey found 17% of visitors to online gambling sites were under the age of 18 (NCH, 2004; NetValue, 2002). The problem of youth gambling online is of significant concern and should be addressed by key stakeholders including industry, government, and the community.

In addition to the apparent increase in adolescents gambling online for money, the high use of practice sites is of considerable concern as, relative to money sites, these have an over-inflated pay-out rate (Griffiths & Parke, 2004; Sevigny, Cloutier, Pelletier, & Ladouceur, 2005), which may lead youth, accustomed to winning to switch to the money sites, where they do not experience the same success. There is evidence to suggest that the possibility to play without money makes games more attractive, reduces barriers to play, and may undermine attempts to quit (Blaszczynski, Sharpe, & Walker, 2001). Furthermore, free gambling sites have been identified as fostering future gambling problems and are frequently accessed by adolescents identified as at-risk for gambling problems or already experiencing gambling problems (Derevensky, 2005).

6.4. Problem Gambling

Research has suggested that certain features of Internet gambling may result in this form of gambling leading to problem gambling behaviour for some individuals (Griffiths, 1999; 2003; Griffiths & Parke, 2002; Griffiths & Wood, 2000; LaRose, Mastro & Eastin, 2001). These aspects include the greater availability, convenience and ease of play, greater anonymity, the solitary nature of play, immersive nature of the Internet, the use of electronic payment and the ability of players to gamble while under the influence of drugs or alcohol (Wood & Williams, 2007). It has been suggested that Internet gambling may attract individuals who would not play at land-based venues, which may lead to an increase in the prevalence of problem gambling (Wood et al., 2007).

These suggestions are supported by findings that the prevalence of problem gambling is higher amongst samples of Internet gamblers than land-based gamblers. Among an online sample of 1,920 Internet gamblers a substantial proportion were classified as

moderate (22.6%) or severe (20.1%) problem gamblers (Wood et al., 2007). Similar levels of problem gambling have been found amongst university students who gamble online (Griffiths & Barnes, 2007; Griffiths, Wood, & Parke, 2006; Ladd & Petry, 2002). When compared to national prevalence surveys from a range of countries finding that 1.1% to 5.4% of the population have gambling problems (Alberta Gaming Research Institute, 2007) it appears that Internet gambling may lead to higher rates of problem gambling.

However, despite the apparent relationship between online gambling and problem gambling, a causal connection has not been established. While it has also been suggested that problem gamblers are more likely than non-problem gamblers to prefer Internet gambling, it is also possible that although many problem gamblers may prefer land-based venues, they may utilise Internet gambling sites when land-based ones are unavailable (Wood et al., 2007).

6.5. Responsible Gambling Features

There is a paucity of empirical research on the applicability and general effectiveness of responsible gambling features in the context of Internet gambling, and the discussions above highlight the general lack of responsible gambling practices and safeguards typically found in land-based venues. An investigation of 30 Internet gambling websites in the U.K. found that only half of these made significant attempts to verify the age of players and only 7 made explicit references to problem gambling (Smeaton & Griffiths, 2004). Wide variation has been found in the extent and type of responsible gambling practices ranging from statements of age limits, and links to problem gambling help sites to self-exclusion programs, on-line counsellors and options for self-imposed time and money limits (Wood & Williams, 2007). When asked how useful responsible gambling features provided by Internet gambling sites include self-set spending and time limits, self-exclusion, regular financial statements, and self-assessment tests would be, the majority of respondents in a large-scale survey of Internet gamblers stated that they would find these at least "quite useful" (eCOGRA, 2007). However, there are limits to the degree these practices can be used, for example, a player may set up limits on one account, but if they decide to continue gambling, may open new accounts with competitors where there would be no restrictions in place. Furthermore, although the majority of Internet gamblers surveyed stated responsible gambling features could be useful, they were not as favourable of these being applied to everyone (eCOGRA, 2007).

eCOGRA, a non-profit organisation which acts as an independent standards authority of the online gaming industry recommend the following responsible gambling practices:

- Presence of mechanisms to prevent youth from playing
- A clearly identified self-exclusion program for a minimum of 6 months during which time no promotional materials are sent to the individual, with the option of applications being made by a concerned third party
- A link to the Player Protection and Responsible Gambling page, which provides an accepted and simple self-assessment tool to determine risk of problem gambling and other details regarding responsible gambling practices offered by the site

- The ability for players to make limitations on their daily, weekly or monthly deposits
- A clock on the screen at all times
- The denomination of each credit clearly displayed

Mobile gambling services also need specific features to protect consumers from harm. Robust age verification systems and other safeguards are needed to prevent underage clients from gambling using their handsets. Mechanisms are also need to monitor and deal with problem-gambling. In the U.K., six mobile operators currently have put in place age verification systems to ensure that underage users cannot access gambling and other adult content on their mobiles. However, there is a lack of empirical research demonstrating the effectiveness of these responsible gambling measures.

7. Future Directions

In a review of Internet gambling, Wood and Williams (2007) predicted the following future trends:

- Continued strong revenue growth
- Particularly strong growth among the Asian market
- Strong growth in betting exchanges and skill games
- Market consolidation
- Growth of mobile gambling
- Movement towards legalised and regulated markets
- Increasing rates of problem gambling
- Increasing prevalence of online counselling services

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