

Call for Evidence on Gaming Machines
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2 December 2016

Dear Secretary of State,

Call for Evidence on Gaming Machines and Social Responsibility Measures

GambleAware, previously known as the Responsible Gambling Trust, is an independent charity focused on minimising gambling-related harm. It does this by commissioning research, education and treatment services. The strategy for our research and the precise nature of that research is principally set by the Responsible Gambling Strategy Board (RGSB), who advise the Gambling Commission. GambleAware also commissions research on its own initiative where its treatment and education work highlights the need for this.

We have commissioned a substantial body of independent, high quality research, much of which is ground-breaking, that has contributed substantially to the international body of knowledge about gambling behaviour and harm-minimisation. (Blaszczynski, 2014) And we continue to do so.

We are pleased to respond to your call for evidence on gaming machines and social responsibility measures, and to share some of the findings from the research, education and treatment work of GambleAware, all of which is published in full via our website: <http://about.gambleaware.org/>.

GambleAware does not devise policy and does not give advice directly to policy makers but the research we commission is available for all those, including policy makers, who wish to refer to it.

However, what we can say with confidence is that stakes and prizes are only one tool in the policy-makers' tool-kit, and research evidence suggests adjustments to these two variables in isolation are unlikely to be sufficiently effective in reducing either problem gambling, or the wider concept of gambling-related harm in Britain as a whole. The most effective approach will be far more comprehensive and take a wide range of actions which in aggregate, is more likely to have the desired impact:

- **Education** – ensuring that people understand how gambling works and that we build resilience, particularly among young people.
- **Public awareness** – ensuring the public know where to find help and advice when gambling-related harms arise for themselves or for others they care for.
- **Supervision** – where gambling takes place in physical locations, ensuring that staff are adequately resourced and trained to monitor consumers' behaviour and to identify problematic gambling.

- **Detection** – particularly for online gambling, but also for electronic forms of gambling in physical locations, building systems to detect early signs of problematic gambling.
- **Intervention** – the action taken either by staff or systems or both, when signs of problematic gambling are detected.
- **Breaks-in-play, limits and self-exclusion** – tools to assist consumers to break-in-play, limit or cease gambling in one or more forms of gambling.
- **Consumer advice** – brief interventions and self-help available on premises and online to help people to manage their own gambling.
- **Treatment** – easy access to the right form of treatment at the right time for those beginning to experience problems.
- **Mutual aid and relapse prevention** – ongoing support to maintain the levels of control achieved through treatment.

Q1. What, if any, changes in maximum stakes and/or prizes across the different categories of gaming machines support the Government's objective set out in this document? Please provide evidence to support this position.

Overview

- 1.1. The research evidence indicates that all gambling is risky and that the characteristics of gaming machine play are known to be associated with greater risk of harm and have a propensity to contribute to excessive expenditure and impaired control among players. Allied to these characteristics are socio-demographic and other contextual variables that are influential factors contributing in varying measures to the emergence of gambling-related harms. However, care should be taken asserting a causal relationship between harm and gaming machines.
- 1.2. Stake and prize measures do merit consideration in relation to efforts to minimise gambling-related harm. However, a stake-only approach is said to ignore the role of game speed, game volatility and return-to-player (RTP). It is argued that a coherent supply-side policy approach targeting cost of play as a means to protect players must account for all parameters contributing to how much a consumer can lose.
- 1.3. Behaviours of problem and non-problem gamblers overlap and therefore it is argued that 'trade-offs' are necessary between intervening with problem and non-problem gamblers. Also, problem gamblers tend to participate in a broader range of gambling activities than non-problem gamblers and so it is suggested that it would be helpful in minimising gambling-related harm to consider the complex interaction between cultural/social values, accessibility and availability of all gambling products in aggregate within a community and the factors that promote participation in multiple forms rather than a narrow focus on a limited range of products.

Contextual matters

- 1.4. Gambling is an inherently risky behaviour, and successive population-based surveys report that problem gambling behaviour is present to a greater or lesser degree in all forms of gambling. (Wardle, Moody et al., 2011; Wardle, Seabury et al., 2014)
- 1.5. Wardle, Seabury et al. (2014), in their analysis of two health surveys conducted in England and Scotland in 2012, report the following problem gambling prevalence rates: spread-betting (20.9%); poker in a pub (13.2%); bet on other events (12.9%); bet with a betting exchange (10.6%); played

machines in a bookmakers (7.2%); on-line gambling excluding betting (6.3%); casino table games (6%); football pools (4%); on-line betting (3.8%); and, bingo (3.4%).

- 1.6. Those who gamble frequently tend to take part in a range of different activities and when studying problem gambling prevalence by participation in individual activities it is important to understand that each gambling activity is not mutually exclusive. (Wardle, Seabury et al, 2014)
- 1.7. Problem gamblers tend to participate in a broader range of gambling activities than non-problem gamblers, although it is equally true that an individual may still experience problems with their gambling behaviour even if they only take part in one or two activities. (Wardle, Seabury et al., 2014)
- 1.8. LaPlante, Nelson, LaBrie & Shaffer (2009) in their examination of the British Gambling Prevalence Survey 2007 in terms of the relationship between types of gambling and disordered gambling, with and without controlling for gambling involvement, found the range of gambling involvement is a better predictor of disordered gambling status than type of gambling. However, the same study found a significant positive association between 'virtual gaming machines' in LBOs and disordered gambling even after adjusting for the number of other activities.¹
- 1.9. It is irrefutable that gaming machines are associated with harms. However, care should be taken in asserting the causal relationship between harm and gaming machines. (Blaszczynski, 2013)
- 1.10. Irrespective of the direction of causality, responsible gambling strategies directed to gaming machines are warranted from a public health harm-minimisation perspective. (Blaszczynski, 2013)
- 1.11. Within the construct of public health, structural characteristics (i.e. the nature of the games/gambling products) represent the 'agent' in the epidemiological triangle and combine with environmental and individual factors to determine both positive and negative outcomes of gambling participation. (Parke, Parke & Blaszczynski, 2016)
- 1.12. The evidence and theory around structural characteristics is among the most inadequate in gambling studies, probably reflecting the inherent methodological challenges. (Parke, Parke & Blaszczynski, 2016)
- 1.13. However, characteristics of machine play are known to be associated with greater risk of harm: speed of play; volatility; frequency of near misses; opportunity to stake large amounts; continuous play limited only by fatigue or exhausted funds; and, anonymity. (Blaszczynski, 2013)
- 1.14. These characteristics have a propensity to contribute to excessive expenditure and impaired control among players, and may be allied to socio-demographic, and other contextual variables that are influential factors contributing in varying measures to the emergence of gambling-related harms. (Blaszczynski, 2013)
- 1.15. A critical examination of the evidence suggests that stake and prize levels do merit consideration in relation to clinical, commercial and regulatory efforts to minimise gambling-related harm.

¹ Care must be taken with these results given the low number of gamblers involved (less than 25) and the relatively early adoption of products referred to as virtual gaming machines. Also, two activities, private betting and betting on horses, after controlling for involvement were significantly less likely to have gambling-related problems than people who did not. This analysis bears repetition on more recent surveys to validate its findings.

However, substantial knowledge gaps exist about their precise impact on gambling behaviour and identifying the most appropriate harm minimisation response. (Parke & Parke, 2013)

- 1.16. It is argued that restrictions on stake size alone fail to adequately address concerns in relation to cost of play. A stake-only approach is said to ignore the role of game speed, game volatility and return-to-player (RTP) and different configurations for these parameters can lead to very different implications for the size of losses a player can experience. It is argued that a coherent supply-side policy approach targeting cost of play as a means to protect players must account for all parameters contributing to how much a consumer can lose. (Parke, Parke & Blaszczynski, 2016)
- 1.17. GambleAware has commissioned a substantial body of independent, high quality research, much of which is ground-breaking, that has contributed substantially to the international body of knowledge about gambling behaviour and harm-minimisation. (Blaszczynski, 2014)
- 1.18. Specifically, GambleAware has published independent research about gaming machines situated in licensed bookmakers' offices, casinos, bingo clubs, and adult gaming centres all of which remain available via <http://about.gambleaware.org/research/research-publications/>.

Licensed bookmakers' offices (LBOs)

- 1.19. In relation to gaming machines in LBOs, researchers were given unprecedented access to customers, venues, and machine-related player data involving the then five largest operators of LBOs, and have reported a great deal about player behaviour.² The scale of this work was substantial:
 - Researchers examined 178 million sessions and 6.7 billion bets that took place within a 10 month period in 2013/14 and conducted further secondary analysis in 2016.
 - Survey responses for 4,000 loyalty-card holders were linked to their betting transactions on gaming machines using the Problem Gambling Severity Index (PGSI) as a proxy for harmful play.
 - Loyalty-card holders are generally highly engaged gamblers and account for 5% of total gamblers, so findings are skewed towards those who may already be at higher risk of harm and cannot be said to be representative of all players.
 - The sample included 951 problem gamblers – the largest cohort of problem gamblers identified in Britain and compares to around 60 in the British Gambling Prevalence Surveys.

A summary of key findings is presented below:

➤ **Distinguishing harmful behaviour**

- It is possible to distinguish between harmful and non-harmful behaviour – using PGSI as a proxy for harmful gambling.
- Predictive models showed a 66% improvement of accuracy of detection compared with then current interventions by bookmakers (such as break in play after 30mins).
- Predictive models performed 25% better among those with higher PGSI scores (19+).
- Single most important predictor was frequency of play.

² GambleAware published seven reports in December 2014 undertaken by a consortium involving NatCen, Featurespace, Geofutures and RTI International. An eighth report was published in February 2015 followed by three secondary analysis reports in May 2016. All eleven reports and summary documents are available via <http://about.gambleaware.org/research/research-publications/>

- Behaviours of problem and non-problem gamblers overlap but problematic behaviours can be distinguished.
 - Focusing on a single element such as stake is insufficient.
 - Trade-offs necessary between intervening with problem and non-problem gamblers.
- **Types of games**
- Machines in LBOs offer gamblers a range of different game content: the main options are B2 games which have a maximum stake of £100 and B3 games which have a maximum stake of £2.
 - 77% of all sessions involved gambling on B2 games only, 16% B3 games only and 7% a mix of different types of games.
 - The popularity of B2 games increased steadily throughout the day, with a dramatic rise in the proportion of all sessions that involved B2 games only in the evening, where the proportion rose from 75% at 8pm to 84% at 11pm.
- **Session types**
- The most popular type of B2 game played was roulette: 64% of all B2 games played were roulette style games.
 - The popularity of roulette increased in the evening: 66% of all games played were roulette until 8pm, the proportion rose to 72% at 9pm and to 81% at 10pm.
- **Stake**
- Mean average stake per bet was £5.13.
 - Mean average stake per bet on B2 games was £14.08.
 - Average stake size doubled after 10pm.
 - Stake size was lower in more deprived areas.
- **£100 stakes**
- B2 games - 3% of all sessions involved betting at the maximum £100 stake i.e. 5.4 million sessions of total 178 million sessions.
 - Proportion of all sessions involving betting at a maximum £100 stake doubled to 6% after 10pm.
 - 16% of regular loyalty card users had placed a £100 bet.
 - Minority ethnic and problem gamblers more likely to have placed a £100 bet.
 - Problem and unemployed gamblers more likely to have placed a £100 bet more often.
 - A typical £100 stake scenario is one where players place the maximum bet several times during a session – it is rarely an isolated, single event.
 - When playing with winnings, players tend to bet higher amounts of money and withdraw money more often.
- **Constraint on placing a maximum stake**
- Machine users playing roulette tend to gamble in a similar way to those playing roulette on a casino table. For any one turn of the wheel they will often spread their stake over a number of different outcomes (red or black, odd or even numbers, etc.), thus increasing their chances of a successful outcome and reducing their risk.
 - Set limits on the maximum pay outs which can be received on any one play also mean that there are caps on the amounts that can be staked on the riskiest outcomes.
 - The maximum prize of £500 means that the most that can be placed on the possibility of a single number coming up (the riskiest possible bet at 36 to 1) is £13.88.

➤ **Role of stake size**

- In a laboratory experiment³, higher stakes (£20) impaired decision-making quality for both winning and losing outcomes:
 - Although the impact was stronger at £20 stakes, the quality of decision-making was impaired at £2 stakes.
 - Higher stakes may reduce self-regulation after the gambling event by impairing the quality of evaluative process in decision-making.
 - Higher stakes may thus increase the risk of gambling-related harm through spending more money or time intended.
- In non-laboratory gambling settings stake size will influence gambling behaviour in integration with other game-related and environmental factors such as speed of play, volatility, social interaction and not in isolation.
- Of all the structural characteristics of gaming machines, it is most important to understand the interaction of stake size and event frequency on gambling cognition and behaviour, because in Britain gaming machines are to an extent categorised primarily across these two dimensions. For example, although a B2 has a higher theoretical loss per hour in comparison with a B3, it is possible that the faster rate of play on B3 machines may have a more significant and negative effect on executive control in machine gambling than rate of loss.
- If a relationship with gambling-related harm exists in relation to stakes or prizes it may not necessarily be linear. For example, a low or moderately sized prize may alone be sufficient to provide optimal conditions for within session chasing. It is also possible that excessive monetary loss may be possible at low to moderate staking levels even in the absence of high stakes gambling.
- For these reasons, depending on where such thresholds exist, restrictions on stakes and prizes may be less meaningful. A complicating factor is likely to be that such thresholds may vary across consumers according to individual (e.g., risk preferences, or trait-based arousal) and situational differences (e.g., disposable income, social support, state-based arousal).
- This should invoke due consideration from policy makers and guard against making simplistic harm minimisation decisions which potentially wrongly assume that increases will necessarily increase risk and/or reductions will necessarily reduce risk.

➤ **Expenditure**

- 70-80% of sessions resulted in a loss to the gambler.
- Mean average loss per session was £7.
- Net expenditure varied based on the type of game and gamblers who played both B2 and B3 games in the same gambling session played for longer and lost the most money:
 - B2 games only – mean average of £6.31.
 - B3 games only – mean average of £6.37.
 - B2 and B3 games within a session – mean average of £14.16.

This is likely a reflection of the lower return to player rates on B3 games.
- Averages can conceal a wide range of outcomes:
 - 5% of sessions involved losses greater than £105.
 - 70% of sessions involving B2 content only resulted in a loss of under £13.
- Around 20% of players accounted for 65-70% of losses.

³ Parke, Harris, Goddard & Parke (2014) investigated the impact of increased stake size on decision-making, inhibition and arousal using an artificial, simplified version of virtual roulette. For practical and ethical reasons it was only possible to observe the effect of stake size at £20 per spin, £2 per spin and a control condition where there was no opportunity to win or lose money.

- Those who lost the most money were more likely to be older, to have placed a maximum stake bet of £100, and more likely to be engaged in machine gambling generally.
- **Extreme outliers**
 - Very large losses in a single session did occur. But they were relatively rare. Only seven of the 178 million sessions involved a loss greater than £10,000.
 - The largest single loss experienced in any of the 178 million sessions was £13,777.90. That occurred over a unique session lasting 7½ hours.
- **Session length**
 - The mean session length was 3 minutes 54 seconds and the median was 11 minutes ten seconds.
 - Gamblers who played B2 and B3 games had an average session length of 23 minutes.
- **Problem gambling**
 - Found at all staking levels in the sample.
 - Disproportionately found at higher staking levels.
 - £28 is the threshold above which more problem gamblers occur than other gamblers in the loyalty card sample, which covers the 5% of players who have loyalty cards and is not representative of the other 95%.
 - At £28, 44% were problem gamblers, 25% moderate risk.
 - Median average cumulative loss per loyalty card holder over ten-months studied were fairly modest:
 - Problem gamblers - £66.
 - Non-problem gamblers - £32.
 - Mean averages of £449 and £342 due to some very high losses.
 - Among loyalty card holders who gambled on gaming machines – 26% losses were attributable to 23% of players who were problem gamblers.
 - Rates of problem gambling and at-risk gambling were higher among those who lived near to a greater number of LBOs and among those who lived in close proximity to a concentration of LBOs.
 - However, the number of machine sessions and number of gambling days did not vary by proximity to LBOs.
 - Not all problem gamblers behave the same way and so it may be difficult to identify all problem gamblers using industry data alone.
 - The most distinct identifiers of problem gamblers are their chaotic behaviours and that on average they seem more successful when playing.
- **Return-to-player (RTP)**
 - RTP messages are not well understood.
 - The use of technical language and mathematical concepts is unhelpful and ineffective, and may even be encouraging some players to overestimate their chances of winning.
- **Volatility**
 - Ratio of small wins to large wins.
 - Complex and may be a useful metric by which to compare game types within the context of player motivation and gambling behaviour.
 - RTP volatility may increase significantly if the player transitions from category C to B3 gaming.

- RTP volatility does not necessarily increase if the player transitions from category B3 to B2 gaming.
- A counterargument that might be explored is the gambler who “builds up a bank of winnings” and then wants to bet at a higher stake. As the size of their potential win increases with the higher stakes available, they may actually be looking for lower volatility; i.e. by placing bigger bets on “Black” or “Red” in a Roulette game they can still win larger prizes (in absolute rather than relative terms) and have a better chance of winning.

Casinos

1.20. Forrest & McHale (2016) investigated the behaviour of casino gaming machine players utilising data derived from customers using a loyalty card to play at tables or on machines collected across the casino estate of Rank Group plc, Britain’s largest casino operator. More than 85,000 individuals are represented in the data set which describes players’ activities over periods of up to six years. Key findings include:

- About 28% of all visits to the casino where gambling took place involved the use of gaming machines and in about 21% of visits the only gambling was on machines.
- The proportion of machine-visits has been increasing over time. Female visits were much more likely than male visits to include use of machines.
- A large majority of users visit only very occasionally, often only once.
- Significant numbers gamble at the casino regularly. For example, in 2014, more than 1,200 customers were recorded as gambling at the casino on more than 100 occasions (i.e. twice a week or more).
- Levels of play are usually modest. The median duration of play on gaming machines is close to or a little below one hour.
- In half of all visits, the player either wins money on the machines or loses an amount up to the range £20-£25.
- More than 11% of machine visits include more than three hours of play on the machines and more than 7% of visits end up with the player losing more than £200.
- Given the return-to-player offered by the machines (which is very likely to be close to a player’s return from several hours of play), duration of continuous play even at maximum stake and maximum speed would have to be very long indeed for losses to go beyond the high hundreds of pounds.
- Typical behaviour exhibits loss-aversion rather than loss-chasing, and that extreme behaviour is often self-correcting⁴.
- Just over 2% of the approximately 15,000 players studied showed a statistically significant tendency to return to play sooner than usual after losing more than their typical loss. These ‘chronic loss chasers’ were disproportionately likely to be young, male and ‘heavy’ players (in terms of how much they usually spent on a machine visit).

Bingo clubs and adult gaming centres

1.21. Wardle, Welch, Bollen, Kennedy & Gariban (2016) investigated the nature and extent of ‘problem gambling’ behaviour in licensed bingo clubs in Great Britain. Key findings include:

- 28% of patrons played gaming machines in-club.

⁴ However, Forrest & McHale (2016) warn that this does not imply that much harm has not been experienced in the meantime. Indeed they argue that heavy play may be self-correcting just because it proves to be unsustainable in terms of its impact on players’ lives.

- Patrons who play fruit/slot machines in-club (as their most frequent gambling activity) are much more likely to have engaged in a number of external gambling activities, including fruit/slot machines played in other venues.
- People who gambled on fruit/slot machines on their most recent visit tended to play them for less than 30 minutes (60%). One in five (20%) played for over an hour, and a few (2%) played for more than three hours.
- Expenditure was highest for playing bingo games on electronic terminals/touchpads (£26.80 on average), closely followed by fruit/slot machines (£24.50 on average).
- Problem gambling rates were highest among those who either played fruit/slot machines and bingo (4.2%) and those who played bingo, cash bingo interval games and electronic terminals/touchpads (4.3%).
- Problem and risky gambling rates were higher among frequent attendees and those who took part in a greater range of other (non-lottery based) gambling activities outside of the bingo club.
- Total spend was higher among problem and risky gamblers. Average spend among patrons with no problems with their gambling behaviour was £29.90. Among problem gamblers, it was over double this amount at £61.80 and the top 5% of problem gamblers spent more than £295 on their most recent visit.

1.22. Husain, Wardle, Kenny, Balarajan & Collins (2013) undertook a qualitative exploration of machine player behaviour on category D, C and B3 gaming machines in adult gaming centres and bingo clubs. Key findings include:

- Patterns of play are complex and driven by the interplay of 3 factors: personal, environmental and machine.
- Considerable heterogeneity in player's beliefs, motivations and behaviour; far greater and more nuanced than previous research suggests.
- Players' value variety: some players prefer simpler, lower stake machines and some prefer more complex, higher stake machines.

1.23. Husain, Wardle, Kenny, Balarajan & Collins (2013) show that players seem to value the ability to choose between different machine types with different levels of features. Of particular note is the preference for lower stakes among more controlled players⁵, here acting as a factor restraining play. The researchers argue that there is evidence that some players purposively chose lower stakes to restrain their play and to play responsibly.

Complex issues requiring a holistic approach

1.24. Machine gambling behaviour is dynamic and changes over time, with people starting, stopping and switching machine gambling to different venues. (Wardle & Philo, 2014)

1.25. While it seems that some displacement may be inevitable, the precise extent to which problems may be experienced on other gambling products, following heavy restrictions on gaming machines remains unclear without directly relevant evidence. The argument against heavy restrictions on the basis that online gambling is easily accessible may be overly simplistic due to complex issues relating to individual and situational differences in individual contexts influencing the product preferences of problem gamblers. (Parke, Parke & Blaszczynski, 2016)

⁵ Based on analysis of participant's behaviour focusing on these issues, machine players were placed into one of three mutually exclusive groups. In this typology, the term 'control' relates to the level of control the players attempted to exert over their own behaviour within the session observed.

- 1.26. Potential harm-minimisation responses to address the potential impact of stakes and prizes might include: i) product-based restrictions and modifications (e.g., restrictions on size of stakes, prizes or slowing game speed); ii) operator-led, player-focused initiatives that restrict access (e.g., self-exclusion), facilitate awareness (e.g., statements and player analytics) and facilitate control (e.g., limit-setting). Player-focused initiatives have the advantage of retaining core properties of the gambling game that make it an attractive proposition as a leisure activity. (Parke & Parke, 2013)
- 1.27. It is argued that rather than directing attention to gaming machines over other forms equally capable of causing harm is not an optimal approach to harm minimisation. It may prove to be more fruitful to investigate the complex interaction between cultural/social values, accessibility and availability of all gambling products in aggregate within a community and the factors that promote participation in multiple forms rather than a narrow focus on a limited range of products. (Blaszczynski, 2013)

Q2. To what extent have industry measures on gaming machines mitigated harm or improved player protections and mitigated harm to consumers and communities? Please provide evidence to support this position.

Overview

2.1 The research into gaming machine play in LBOs has provided evidence that there are patterns of play identified from the analysis of industry-held data that can be used to distinguish harmful play. The ongoing research into industry-held data relating to remote gambling player behaviour is expected to reinforce this finding. And these collaborative efforts between multiple industry operators and independent researchers is praised as representing a substantive and world-leading contribution to the understanding of gambling behaviour. (Blaszczynski, 2014) However, these are foundational studies and make clear that data alone is not able to be wholly effective in distinguishing harmful play. The interaction between player, product and environment requires further and better understanding, and the effectiveness of interventions employed by the industry require robust evaluation.

Contextual matters

- 2.2 There are significant gaps in knowledge around what patterns of harm are most likely to suggest that a person may be experiencing harm. It is evident that identifying harm is likely to require a more holistic approach to understanding behaviour and consideration of several different behavioural markers at the same time. (Wardle, Parke & Excell, 2014)
- 2.3 Wardle, Parke & Excell (2014) identify 19 different potential markers of harm in gaming machine play. These include patterns of play that can be measured across time (such as frequency of machine gambling), those that might be observed within a single session of play (such as exhausting funds on a debit card) and those that were more contextual (such as how the person behaves whilst gambling on machines).
- 2.4 To look at patterns of play across time, machine gambling needs to be registered to an individual, for example via a loyalty card. (Wardle, Parke & Excell, 2014)
- 2.5 Technology increasingly permits the tracking of individuals' gambling over time. Resulting research which investigates patterns of behaviour has led to the development of tools which may have the potential to detect problematic play, triggering interventions which might mitigate harm. (Forrest & McHale, 2016)

Evaluation of player awareness systems

2.6 An evaluation of player awareness systems (PAS) implementation by British bookmakers conducted by PricewaterhouseCoopers (2016) found that the initiative was “still a work in progress” and considered it premature to claim certain controls are considered ‘best practice’.

2.7 However, PricewaterhouseCoopers (2016) acknowledges progress has been made to design and implement the PAS initiatives and advises focus should now shift to developing best practice across the various components and to perform research into the level of discrepancy resulting from applying different algorithms, scoring mechanisms and categorisations between the different companies.

Player behaviour in remote gambling

2.8 PricewaterhouseCoopers and the Responsible Gambling Council (Canada) have been jointly commissioned by GambleAware to explore the potential usefulness of industry-held data and behavioural analytics in the remote gambling sector, primarily to indicate markers and patterns of harmful or risky behaviour, and then to recommend best ways to mitigate such risks and harms and work with the industry to pilot and evaluate their success. A report will be published early in 2017.⁶

Evaluation of Association of British Bookmakers’ Code for Responsible Gambling

2.9 Salis, Wardle, Morris & Excell (2015) carried out an evaluation of the early impact among machine gamblers of the Association of British Bookmakers’ Code for Responsible Gambling and Player Protection (ABB Code). The evaluation did not find any statistical evidence that the ABB Code had an impact on the four outcomes considered and stated it was premature to conclude that the findings of this evaluation provide final evidence that the ABB Code is ineffective or effective.

2.10 Salis, Wardle, Morris & Excell (2015) was limited to analysing data from machines and did not consider the broader impact of staff interventions specifically or of responsible gambling messaging, nor the impact of these elements of the ABB Code on non-machine gamblers. Other evaluation methods and techniques could and should be used to explore changes further.

2.11 In support of this evaluation, Bridges, Wardle & Husain (2015) reports on how a logic model for the evaluation of the ABB Code was developed and provides an appropriate framework upon which robust evaluation design comprising process and impact studies can be constructed in the future.

Self-exclusion as a gambling harm-minimisation measure

2.12 GambleAware has published a review of the academic evidence and perspectives from industry and treatment professionals regarding the use of self-exclusion as a gambling harm-minimisation measure, (Parke & Parke, 2014). The empirical evidence does not currently permit one to draw definitive conclusions as to whether exclusion should be promoted as a tool for supporting abstinence only or whether it should also evolve as a tool to support control. However the report advises multi-operator self-exclusion is a priority while acknowledging that any self-exclusion solution involving multiple operators is unlikely to be straightforward or amenable to swift implementation.

⁶ GambleAware published an interim report in 2016. See - PricewaterhouseCoopers & Responsible Gambling Council (Canada) (2016)

Operator-based approaches to harm-minimisation

2.13 GambleAware has published a summary, review and future directions for operator-based approaches to harm-minimisation in gambling, Blaszczynski, Parke, Parke & Rigbye (2014). This report makes a range of recommendations including about: staff intervention training; self-exclusion; pre-commitment facilities in respect of time and money limits; evaluation; and, the value of industry codes of practice regarding harm-minimisation.

Further analysis of LBO data regarding the £50 regulations

2.14 GambleAware has commissioned Forrest & McHale to undertake a further analysis of LBO gaming machine data to examine the impact of the £50 regulations⁷ introduced in April 2015. This report is expected to be available early in 2017.

Q3. What other factors should Government be considering to ensure the correct balance in gaming machine regulation? Please provide evidence to support this position.

The following research themes and references may be useful to the Government in its considerations about gaming machine regulation:

Stakes and prizes on B1 gaming machines

3.1 Forrest, McHale & Wardle (2015) evaluated the impact of the uplift of stakes and prizes on B1 gaming machines in casinos at the beginning of 2014. Previously the maximum stake had been £2 and the maximum prize £4,000. Under the new regulatory regime, these limits were set at £5 and £10,000 respectively. Also, for the first time, a higher maximum jackpot was permitted where machines were linked (on a premises-only basis). This allowed casinos to offer a £20,000 pay-out.

3.2 The study examines the impact of these changes in the first year using data from Rank, the largest casino operator in Great Britain. Key findings include:

- 7% increase in weekly house win from B1 gaming.⁸
- 10% increase in the weekly amount staked in B1 machines.
- About 90% of the increase in amount staked derived from an increase in the average stake per spin (the increase in the number of spins was only marginal).
- At a typical casino, the mean stake per spin increased from about 79 pence to about 88 pence.

3.3 The statistical analysis suggests that a disproportionate amount of the increase in B1 revenue may have derived from the young, from those living in deprived areas, from heavy players and from those playing late at night. All this suggests that the relative share of industry revenue derived from groups where harm is most concentrated has increased following the uplift in maximum stakes and prizes. (Forrest, McHale & Wardle, 2015)

3.4 Forrest, McHale & Wardle (2015) conclude that all established forms of gambling involve benefit for many and costs borne by others. On the margin, there is some indication that the ratio of total costs to total benefits may have increased for B1 gaming. But it is not possible to say whether any additional harm in some absolute sense offsets the gains from this regulatory change.

⁷ Regulations were introduced which restricted stakes above £50 on B2 machines to those players who are either registered for account-based play, or who load cash onto the machine via staff interaction (at the shop counter).

⁸ This is close to the industry forecast of 5% quoted in the Impact Assessment issued by the Government in advance of the changes. (Forrest, McHale & Wardle, 2015)

Late operating hours

3.5 Forrest & McHale (2016) measured 'intensity of play' by average loss per minute spent gambling on machines in casinos and traced how this varies by time of day. They found intensity of play is sharply higher late at night and through the early hours. Since high intensity of play may be a marker for poorly controlled gaming, they have recommended further research, in this and other contexts, on how gambling behaviour varies by time of day. They noted that casino staff training and procedures should take into account that customers attending the casino during the night may be particularly vulnerable to harm. This resonates with the findings of Forrest, McHale & Wardle (2015), as well as the patterns of play on gaming machines in LBOs.

Young people

3.6 Valentine (2016) has reviewed research in relation to young people and gambling, and reports that a significant body of research has suggested that the younger the age at which problem gambling develops the greater will be the consequences and severity of gambling in later life. This may be thought relevant in the context of Category D machines and National Lottery products being legally available to young people under 18 years old.

3.7 Valentine (2016) argues that in the light of the prevalence rate for young people's problem gambling and the limited success of regulatory and enforcement regimes, problem gambling should be recognised as a potential public health issue – with young people the group at most risk.

3.8 Valentine (2016) advocates for a public health model of gambling that would involve: (i) challenging the normalisation of gambling; (ii) preventative policies (e.g. public education) which might better equip young people with the skills to understand the potential negative impacts of gambling; and (iii) a harm reduction strategy (including specific treatment programs aimed at young people).

3.9 There is relatively little public information about, or awareness of, the potential risks associated with underage gambling in relation to other risk taking behaviours such as alcohol and drugs. Greater emphasis needs to be put on raising teachers' awareness of gambling in teacher education training and in establishing prevention programmes to address gambling with young people similar to those used in relation to other 'risky' behaviours. (Valentine 2016)

Gaming machines and problem gamblers

3.10 Forrest & McHale (2016) argue that regardless of the directions of causation, the high concentration of problem gamblers among gaming machine players justifies greater regulatory attention be paid to the machine gaming sector than to many other forms of gambling. They point out that problem gamblers represent a vulnerable group and care must be taken to ensure that the harm they suffer from gambling is limited if possible. Also, they point out that the concentration of problem gamblers in venues where machine gaming is offered presents an opportunity to reach out to a group which is generally hard to reach, for example through provision for interventions triggered by observing problematic patterns of play.

Q4. What, if any, changes in the number and location of current gaming machine allocations support the Government's objective set out in this document? Please provide evidence to support this position.

The following research may be useful to the Government in its considerations about the location of gaming machines:

Location of LBOs

4.1 Astbury & Thurstain-Goodwin (2015) undertook a spatial investigation into bookmakers using industry data. Key findings include:

- Spatial occurrence is not the result of a simple function of the location of either resident population density or economic centres.
- Underlying complexity of distribution and a need to understand local factors.
- Areas close to LBOs tend towards higher levels of crime events, resident deprivation, unemployment and ethnic diversity.
- LBOs do not exclusively serve the resident populations of proximate areas.
- 8% of loyalty card users sampled live within 400m of an LBO and 23% 1km.
- Players tend to live in neighbourhoods with higher levels of resident unemployment, multiple deprivation and economic inactivity, and which are more ethnically diverse than the national average.

Q5. What has been the impact of social responsibility measures since 2013, especially on vulnerable consumers and communities with high levels of deprivation? Please provide evidence to support this position.

The following summarises briefly the estimated prevalence of problem gambling in Britain together with some details relating to the performance of treatment-related services funded by GambleAware:

- 5.1 Delfabbro (2013) reports that across numerous countries, it is recognised that problem gambling is a significant public health concern with between 1-2% of the population estimated to be affected. Despite having a lower prevalence than substance abuse disorders such as alcoholism, problem gambling often presents as an acute disorder.
- 5.2 Also, problems can emerge within a relatively short period of time and the effects are often thought to extend to as many as seven people who have contact with the gambler (Productivity Commission, 2010). These documented harmful impacts include: psychological distress, financial hardship, disruptions to work, study and close relationships and legal difficulties. (Delfabbro, 2013)
- 5.3 Wardle, Seabury et al. (2014), in their analysis of two health surveys conducted in England and Scotland in 2012, report the number of adult (16+) problem gamblers in England and Scotland is approximately 224,100, according to the DSM-IV, 180,200 according to the PGSI and approximately 280,000 according to either screen.⁹
- 5.4 Wardle, Seabury et al. (2014), report that overall, problem gambling rates in Britain appear to be relatively stable, though they caution against viewing the combined health survey results as a continuation of the British Gambling Prevalence Survey time series. This is because of the change of survey vehicle which could affect the ability to make direct comparisons.
- 5.5 Delfabbro (2013) warns that while incidence studies play a potentially important role in understanding the recent impacts of problem gambling on the community, such studies also call into question some of the assumptions of medical/pathology models of gambling that assume that the disorder is reasonably stable over time. These findings further indicate that caution should be applied when interpreting prevalence studies and the extent to which current measures indicate the existence of ongoing problems. Although some problem gamblers may have problems which extend over many years, there are likely to be many people whose status varies across time, so that their experiences need to be researched from a longitudinal perspective.

⁹ These estimates should be considered alongside the confidence intervals. The confidence interval for the DSM-IV estimate was 0.3%–0.7%, for the PGSI estimate 0.2%–0.6% and for either screen 0.4%–0.9%. This equates to somewhere between 141,200 and 355,000 adults according to the DSM-IV, between 107,000 and 303,000 adults according to the PGSI, and between 108,900 and 413,000 adults according to either screen. (Wardle, Seabury et al. 2014)

5.6 In 2015/16, over 45,000 contacts were made with the National Gambling Helpline, and 7,700 adults were referred to GambleAware-funded problem gambling treatment service providers. These numbers have increased annually in recent years, which is likely to be due to a number of factors, including increasing awareness of the services available.

5.7 The number of clients referred to GambleAware-funded services accounts for just 3% of the estimated number of problem gamblers.

5.8 In April 2015, GambleAware introduced a common Data Reporting Framework (DRF),¹⁰ which is implemented by GambleAware-funded treatment providers to produce comparable treatment outcome data from across the range of providers. In time this will provide robust data to evaluate the effectiveness of the treatment provided as well as to better understand the socio-economic background and gambling history of those entering treatment.

Q6. Is there anything further that should be considered to improve social responsibility measures across the industry? Please provide evidence to support this position.

The following summarises GambleAware's approach to fundraising, the development of the GambleAware brand and continued collaboration with the industry to minimise gambling-related harm:

Funding

6.1 GambleAware estimates that it will require a minimum of £10 million each year to deliver its elements of the National Responsible Gambling Strategy, published by RGSB in April 2016. £10 million is equivalent to about 0.1% of the gross gaming yield (GGY) of the licensed gambling industry in Britain excluding the National Lottery and large society lotteries.¹¹

6.2 In 2015/16, GambleAware received donations from more than 80% of British-licensed gambling operators totalling £7 million, excluding voluntary settlements.

Developing services and public awareness

6.1 The industry currently contributes sufficient funding to deliver the level of treatment required to meet demand. Indeed, those seeking treatment wait on average less than two weeks for an assessment. However, we know that only 3% of the estimated 250,000 problem gamblers access GambleAware-funded services and so there is a need to develop both the extent, mix and awareness of services.

6.2 Wardle, Welch, Bollen, Kennedy & Gariban (2016) in their investigation of behaviour in licensed bingo clubs found that 66% of patrons who feel they have a problem with their bingo playing have attempted to cut back on their gambling. Trying to get help to do this was not widespread, with most (57%) not seeking any support. 36% sought help from family and friends and less than 10% accessed formal sources of support, such as health care professionals, problem gambling services or others.

¹⁰ Data Reporting Framework is GambleAware's tool for the collection of data on all clients accessing treatment. Available at <http://about.gambleaware.org/commissioning/treatment-and-harm-prevention/>

¹¹ Total GGY including National Lottery and large society lotteries was £13.6billion during the period April 2015 to March 2016 – see <http://www.gamblingcommission.gov.uk/pdf/Gambling-industry-statistics-April-2013-to-March-2016.pdf>.

6.3 GambleAware.org is now well-established as the most well recognised specialist website for those seeking advice about gambling responsibly or help in dealing with problem gambling. During 2015, there were 2.2 million hits on the GambleAware website, 1.8 million of which were unique users. Visits to the site have increased to over 6,000 per day and a recently commissioned YouGov poll reported 30% of people stating, when prompted, that they had heard of GambleAware.

Strategic direction and industry collaboration

6.4 GambleAware has recently published a five-year strategy that sets ambitious goals for the development of its brand and the research, education and treatment services it intends to fund. It is important that the industry understands and accepts that directing donations via GambleAware is more likely to achieve a coherent, accountable and efficient system of treatment and education where relatively limited finances can be directed to ensure the maximum impact in relation to minimising gambling-related harm, in accordance with the priorities set by the Responsible Gambling Strategy Board in its National Responsible Gambling Strategy.

6.5 GambleAware will seek to broaden its sources of funds and partnership working beyond licensed operators to ensure all those responsible for gambling behaviour contribute to our harm-minimisation work:

- Broadcasters feature major betting events and benefit from significant advertising revenue, and in some cases, refer explicitly to bookmakers' odds and will frequently refer to the favourites, or highlight unexpected wins by outside bets.
- The online advertising industry also secure significant revenue from gambling advertising.
- Sport governing bodies receive extensive sponsorship and broadcast rights income for activity which is at the heart of gambling.
- Sport teams also benefit from direct sponsorship and other commercial contracts with gambling business as well as a share of the income secured by governing bodies.
- Venues which are not in themselves licensed entities nevertheless make commercial gains from gambling-related activity.

6.6 GambleAware understands that a number of harm-minimisation measures are being taken by individual businesses, industry sectors, and the industry as a whole under the umbrella of the Industry Group for Responsible Gambling (IGRG). Indeed, GambleAware is playing a role co-ordinating and commissioning the evaluation of some of these initiatives including: staff training and various levels of messaging.

6.7 Also, GambleAware intends to establish an 'industry engagement panel' early in 2017 and will explore a number of possible initiatives with the industry, including:

- How best to encourage industry-wide agreement that all donations, including voluntary settlements agreed with the Gambling Commission, are directed to GambleAware to ensure the maximum impact in relation to minimising gambling-related harm in Britain?
- Whether individual businesses would consider some form of 'self-certification' in relation to meeting GambleAware's recommended minimum donation of 0.1% of GGY?
- How best to facilitate the sharing of industry data with researchers in the future?¹²
- What opportunities might exist to encourage regular advertisements dedicated to the promotion of responsible gambling behaviour?

¹² Blaszczynski, Ladouceur & Shaffer (2004) argued for the need for stakeholder collaboration data sharing as the fundamental requirement in informing and evaluating public policy.

Q7. Is there any evidence on whether existing rules on gambling advertising are appropriate to protect children and vulnerable people from the possible harmful impact of gambling advertising?

The following research may be useful to the Government in its considerations about gambling-related advertising:

Advertising

7.1 Binde (2014) in a critical research review of gambling advertising reports:

- The impact of advertising on the prevalence of problem gambling is in general likely to be neither negligible nor considerable, but rather relatively small.
- Advertising is one of many environmental factors that contribute to the prevalence of problem gambling. The total environmental impact may be substantial.
- Only in particular conditions, such as extensive advertising for especially risky forms of gambling that are offered on an immature market with few if any player protection features (such as stake limits and possibilities for self-exclusion), may one assume that advertising in itself substantially contributes to problem gambling.
- It would therefore be unrealistic to expect that general advertising restrictions would in themselves have a great preventive effect on problem gambling. Such restrictions should be coordinated with other preventive measures and together they are likely to have a significant positive effect.
- It would be equally unrealistic to believe that “play responsibly” and warning messages embedded in gambling advertising would greatly reduce the negative effects that advertising may have. Such messages can be seen as just one “pellet” in the preventive shotgun blast.
- With regard to harm prevention targeted at young people, advertising may be approached in accordance with “inoculation theory”; rather than trying to persuade young people that gambling is risky, they could be taught how to question and resist the messages in gambling advertising.
- The conclusion of this report is that although research on the impact of gambling advertising is methodologically challenging, it is possible to conduct studies that produce knowledge valuable for policy making, regulation and the responsible marketing of gambling.

Social media

7.2 Miller, Krasodonski-Jones & Smith (2016) report that a very large number of users are using social media and online forums to discuss or interact with gambling. Key findings include:

- Volumes of data across the three platforms examined were extremely high.
- 877 Twitter accounts were identified as dedicated to producing content promoting gambling. They sent over 78,000 Tweets during the period of study; two per minute.
- People following the three most prolific pro-gambling accounts would have received 8,500 Tweets, or one every four minutes.
- Seven million people around the world follow at least one of these accounts. Within the UK, over 900,000 do so, or one in 20 of the UK’s fifteen million regular Twitter users.
- A free-to-play gambling app on Facebook had more than 14,000,000 likes, and gambling tips pages on Facebook had tens of thousands.
- A problem gambling website hosted more than 300,000 posts.

7.3 The vast majority of discussions relating to gambling that were analysed related to sports. Across Twitter and Facebook, explicit gambling offers, tips and odds are wrapped up in broader

discussions about sport - the transfers, big matches and tactics. (Miller, Krasodonski-Jones & Smith, 2016)

7.4 About a quarter of Tweets sent from bookmakers, and 15% of messages from Facebook tipsters, were not about gambling, but are jokes and updates from a range of different sports, and commentary on matches and events. This may contribute to the normalisation of gambling as a natural part of being a sports fan, and of appreciating sport. (Miller, Krasodonski-Jones & Smith, 2016)

7.5 Social media is changing what gambling is, and how it is done. This poses new challenges and risks to regulators, as they have to evolve current definitions and frameworks to reflect both a rapidly changing technological landscape and the habits of those who use it. (Miller, Krasodonski-Jones & Smith, 2016)

7.6 Miller, Krasodonski-Jones & Smith (2016) argue that especially important challenges are:

- New digital currencies and apps: A genre of online apps allow people to undertake activity similar to gambling. Users do not play for cash prizes, but they are encouraged to pay real money for new, app-specific digital currencies, whether 'coins' or 'credits', on which the platform operates.
- New voices: The digital world has allowed new voices, sometimes influential and highly followed, to promote gambling. Most important are the 'tipsters' (also known as affiliates) - organisations and individuals who share specific betting tips to their followers. Demos identified 572 tipsters and affiliates, and they included some of the most vocal producers of content that promoted gambling. Both of these are significant parts of the gambling ecosystem online, yet neither clearly falls within the current regulatory framework. Apps operating with digital currency look and feel like traditional gambling products, but because the winnings do not produce prizes in conventional cash, they are not considered to be licensable gambling. Likewise, tipsters do not themselves handle money, and so are unregulated and have no formal safeguarding responsibilities.

As we say at the start of our submission, the issues you are looking at are complicated, and the research does not lead always to clear and unequivocal answers but we hope that this synthesis of the research we have commissioned is helpful in what we regard as an important and timely review. If GambleAware can help further in these matters we would be pleased to do so.

With kind regards,



Marc W. Etches
Chief Executive

Please see attached bibliography

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