



Department
for Culture
Media & Sport

Evaluation of Gaming Machine (Circumstances of Use) (Amendment) Regulations 2015

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Executive summary

Objective

On 6th April 2015 the previous Government implemented the Gaming Machine (Circumstances of Use) (Amendment) regulations 2015.

The policy objective of these regulations is to assist people who use sub-category B2 gaming machines (commonly known as fixed odds betting terminals or FOBTs) to stay in control of their gambling behaviour by requiring that those accessing higher stakes (over £50) load cash via staff interaction or use account based play.

There were three expected effects of the policy:

- An improvement in the information players have about their playing habits via verified accounts leading to greater player control and more conscious decision making;
- Increased opportunities for interaction and intervention with appropriately trained staff, leading to greater player control; and
- A reduction in industry revenue as a result of changing player behaviour causing a fall in stakes over £50 and a smaller increase in stakes under £50. The reduction in industry revenue means a corresponding reduction in player losses. This would be due to either players exercising more control through more conscious decision making (players now have to actively unlock over £50 staking) or having a preference for playing with anonymity.

Impacts

Whilst a degree of uncertainty remains as to the impact of the policy, the outputs are broadly what would be expected had it had its desired impact, though the reduction in stakes over £50 has been larger than was estimated in the pre-implementation impact assessment. The assessment of impact has been separated into impact on player control and impact on business.

Impact on player control

- Despite marketing campaigns there has been a relatively low uptake of verified accounts. Prior to implementation approximately 4% of stakes were linked to a player loyalty account. Following implementation the percentage of stakes linked to a “verified account” has been between 8% and 11%.
- Following implementation the percentage of *sessions* linked to a “verified account” has been between approximately 5% and 7%. This is despite significant marketing.
- The other mechanism for authorisation of over £50 stakes is over the counter (OTC) authorisation with trained staff. This appears to happen in a very low percentage of sessions (approximately 1%) so the direct impact may be

limited in terms of the number of people affected by this mechanism.

- All players staking over £50 are required to authorise through one of these two mechanisms. The evidence shows a large number of players opted to stake below £50 and increase the duration of their session in response to the regulations.
- There has been a consequent fall in the two quarters since the regulation was implemented of about £6.2bn in the amount bet in stakes over £50 from 2014 to 2015 for Q2 and Q3. There has also been a £5.1bn increase in the total amount staked at the £40-£50 range for the two quarters since the regulation was implemented. This is an overall decrease of approximately 10.1% in the amount staked over £40 in 2015 Q2 and Q3 compared to 2014 in nominal terms.
- This could be interpreted as either:
 - i. Players circumventing authorisation of higher stakes to maintain their anonymity with no associated increase in control of their play or;
 - ii. Those who are no longer staking over £50 are doing so because the authorisation mechanisms have given them greater control over their staking behaviour. In this respect it could be said to be increasing player control in line with the policy's objective.
- An increase in duration of play for those staking exclusively under £50 could also reflect more considered playing behaviour, but there is not conclusive evidence this is the case.
- If players are taking longer time between plays, longer session duration may simply be driven by more considered decision making. Equally if some people are increasing the duration of their play, but the speed of the play has increased, this might indicate that they are now taking less time to consider their actions and control is reduced. Gaming machine suppliers have been able to provide some data on speed of play. They found the speed of play for B2 roulette in the 10 weeks pre-implementation averaged 37.22 seconds whilst for the first 21 weeks post-implementation it was 37.33 seconds. This suggests on average the speed of play for B2 roulette, which form the majority of B2 play, has undergone minimal change. What is not apparent from this data is whether some people are playing slower and some faster and it is averaging out at a similar speed. We would require more detailed data on speed of play during sessions to examine this issue. This information should be included as part of any future research.

Impact on business

- For the three largest operators in the market, indications of one-off implementation costs from industry suggest for one of these major operators

an upper limit of £5.4m and a lower limit of £2.1m¹. This gives a very large range of possible one-off costs.

- The three largest operators in the industry have also indicated ongoing annual cost increases associated with IT, training and marketing of £0.4m-£3.5m² for their businesses.
- For more robust estimates of training, IT and marketing costs, Government requires greater granularity and a wider range of cost data from a wider range of businesses to assess the training, IT and marketing cost impact the regulations have had..
- Without this it is difficult to assess how much of the costs industry have recorded are additional and how much displaces spend that would have occurred anyway on IT, marketing and training. Relevant to this is the requirement under the Licence Conditions and Codes of Practice (LCCP) for licensees to provide training for staff on all of their licence conditions and responsibilities. This data should be gathered as part of any future research on the regulations impact.
- The revenue impact on business is likely to be larger than the implementation costs. However, attribution is difficult, with many other factors at play such as the introduction of responsible gambling measures and changes to the gambling duty regime, making it hard to separate the impact of the regulation compared to the effect of the other interventions.
It is also not possible to draw any conclusions about the medium and long term impact on the industry. Operators may adjust their products and consumers may adjust their behaviour so the effects we have seen in the first two quarters may not be representative going forward.
- We can consider what projected revenue is ahead of implementation and what we estimate it to be after. This suggests industry revenues could fall approximately £66m-£78m³ in the 12 months following implementation from the level they were growing towards before implementation (this is based on a 6% drop in revenue from what was projected for gaming machines for Q2 and Q3 2015 ahead of implementation). Although based on a trend from a relatively short time period, the estimate could be refined with more data over a longer time series. The £78m could be thought of as an upper estimate for the impact the regulation has had on industry revenues, but with a number of other significant changes to policy and voluntary measures across industry, it

¹ 2015 prices

² 2015 prices

³ 2014 prices

is difficult to isolate the effect of the regulations.

- Whilst a degree of uncertainty remains as to the impact of the policy, the outputs are broadly what would be expected had it had its desired impact, though the reduction in stakes over £50 has been larger than was estimated in the pre-implementation impact assessment.

Background:

The Categories of Gaming Machine Regulations 2007/2158 defined four classes of gaming machine for the purposes of the Gambling Act 2005 Act, known as Categories A, B, C and D, subdividing Category B into five sub-Categories (B1, B2, B3, B3A and B4)

Category B2 gaming machines offer the highest maximum stake of any gaming machine in Great Britain (up to £100). They are predominantly found in licensed betting offices, which are often located on high streets and other relatively accessible locations. Some people have experienced considerable problems from gambling on these machines, which present a combination of high stakes and natural game volatility that can generate significant losses in a short space of time.

The Gaming Machine (Circumstances of Use) (Amendment) Regulations 2015 put in place a requirement for more interaction with both staff and operators for higher stake play, putting an end to unsupervised play above £50 and generating more opportunities for intervention to improve player control.

The regulations require that for customers to stake over £50 they must either:

- a) Authorise £50+ stakes via account based play;
- b) Authorise £50+ stakes via over the counter staff authorisation.

Whilst the impact assessment for the regulations anticipated that the effect of this loss due to lower stakes being played by some players would be offset by increasing the number of plays, this effect was not predicted to offset the loss of revenue entirely, with a reduction in revenue of approximately 1.4% from predicted levels in the absence of the regulation.

There have been a number of other recent developments in the gambling industry which we need to consider carefully given the potential effect on the metrics we are examining – these include measures introduced by industry, the Gambling Commission and Government.

In March 2014 the Association for British Bookmakers (ABB) announced a review of its social responsibility code. Relevant measures to this evaluation included:

- Establishment of an independent body on social responsibility – Senet was launched January 2015. It represents the four largest operators as well as one smaller operator.
- Self-exclusion pilot schemes – cross sector trials in Chatham and Glasgow. The work on self-exclusion is also being driven by the Gambling Commission which set a deadline for a national scheme to be in operation by April 2016.
- Advertising and messaging - Measures to improve responsible gambling advertising have been in place since January 2015 including responsible gambling promotion on machines, Gamble Aware week in January 2015, national TV advertising campaign, increased advertising post 9pm in

shops. ABB members were also required to devote 20% of shop windows to responsible gambling messages.

- Time and spend limits – mandatory warnings for sub-category B2 gaming machine customers for every £250 fed into the machine or 30 minutes play were introduced in March 2014. ABB also introduced mandatory measures to force sub-category B2 gaming machine players to make an active choice on whether to set their own limits in January 2015
- Staff training on the new social responsibility code.

Elsewhere, the Gambling Commission brought in a number of new social responsibility measures in May 2015 which included requirements for operators to pay due diligence towards social responsible policies such as adequate funding of research, protecting children and vulnerable people, issuing messages to customers, and training staff to interact or intervene with customers. It also required operators have a robust self-exclusion scheme in place by April 2016 and time and money limits to be offered on all B2 gaming content in bookmakers.

From 1 March 2015, the Government increased gaming machine duty (GMD) from 20% to 25% on gaming machines where the charge payable for playing can exceed £5 (currently only B2 gaming machines). Whether or not this will have had an effect on player behaviour will depend on whether operators adjusted the products they offer customers in response to this. This would also have implications for industry revenues. For example, if operators increased the win margin on slots games to offset the tax rise this might mean revenues increase to compensate for the increased rate of duty (if this did not deter players from playing a game with a lower return to player). It is also possible that operators absorbed the full cost of this tax change themselves and did not alter their products or marketing.

Timing

The Gaming Machine (Circumstances of Use) (Amendment) Regulations 2015 came into force on the 6th April 2015. However, a number of the largest operators implemented the measures up to 2 weeks in advance of 6 April.

It takes a period of time for players and operators to modify their behaviour in response to the implementation of changes to gaming machines (the adoption curve). Industry data suggests that broad changes to the pattern of play have stabilised reasonably quickly so an initial assessment of impact and process is possible. However, some patterns have emerged in more recent data to suggest that players may still be modifying their behaviour. In particular, the total amount staked across all bets for the industry on B2 gaming machines was closer to 2014 levels for Q3 2015 than Q2 and it is difficult to therefore assess whether this indicates that the market is still adjusting in response to changing profits. It is too early to draw conclusions about the long term impact on industry profits.

Rationale for intervention

Sub-category B2 gaming content offers the highest maximum stake of any gaming content in Great Britain and attract a great deal of attention. Some players have experienced considerable problems from gambling on these machines. It should be noted that the prevalence of problem gambling in people who use gaming machines in bookmakers is lower or similar to the levels of problem gambling found in some other forms of gambling, for example “online gambling on slots, bingo or in casinos” has a prevalence rate of 6.3%.

The publication “Gambling behaviour in England and Scotland – Findings from the Health Surveys for England 2012 and the Scottish Health Survey 2012” showed an estimated 7.2% problem gambling prevalence rate among people who use gaming machines in bookmakers. However, this prevalence rate is higher than the overall problem gambling prevalence rate for the adult population, which is estimated to be around 0.6% and some other forms of machine gambling and other products available in licensed gambling premises.⁴

In addition, sub-category B2 gaming machines present a combination of high stakes and natural game volatility that can generate significant losses in a short space of time. As part of the Triennial Review of stakes and prizes in 2013, the Gambling Commission advised the Government that it is quite possible for individuals to lose several thousand pounds over an hour within the normal range of behaviour of the B2 machine. The Commission has further advised that a small but significant proportion of sessions on B2 machines result in high losses, with approximately 6% of sessions resulting in a loss of more than £100⁵. Government intervention was considered necessary to create the appropriate regulatory environment in which these machines are provided.

Whilst problem gambling can occur at all stake levels, there is some evidence to suggest higher stake sizes can increase the risk of gambling related harm through spending more money or time than intended.⁶⁷ The Government introduced a new requirement that those accessing higher stakes (over £50) load cash via staff interaction or use account-based play. The intended effect of the policy is that customers will benefit from improved interaction and more conscious decision making and therefore greater control.

Making staff interaction a component of high staking machine play ensures greater opportunities for intervention where patterns of behaviour indicate that someone may be at risk of harm from their gambling, or for other reasons, such as preventing

⁴ Whether someone is a PG is ascertained by one of two screens A) Problem Gambling Severity Index (PGSI) or B) DSM IV.

<https://www.problemgambling.ca/EN/ResourcesForProfessionals/pages/problemgamblingseverityindexpgsi.aspx>

⁵

<http://www.gamblingcommission.gov.uk/pdf/Letter%20to%20Rt%20Hon%20Maria%20Miller%20re%20Triennial%20advice.pdf>

⁶ Stake Size and Impact on Control. Parke and Harris. University of Lincoln.

⁷ RGT. Report 2: Identifying problem gambling – findings from a survey of loyalty card customers

crime. Stakeholders have indicated regular interaction can give players a reality check. This approach emphasises consumer control which is particularly important given that some experts believe that a lack of control may be a determinant of problem gambling.

The alternate option for players wanting to stake more than £50 is to adopt account based play, which provides greater opportunities for the provision of information, which is also believed to be beneficial in helping customers make informed decisions.

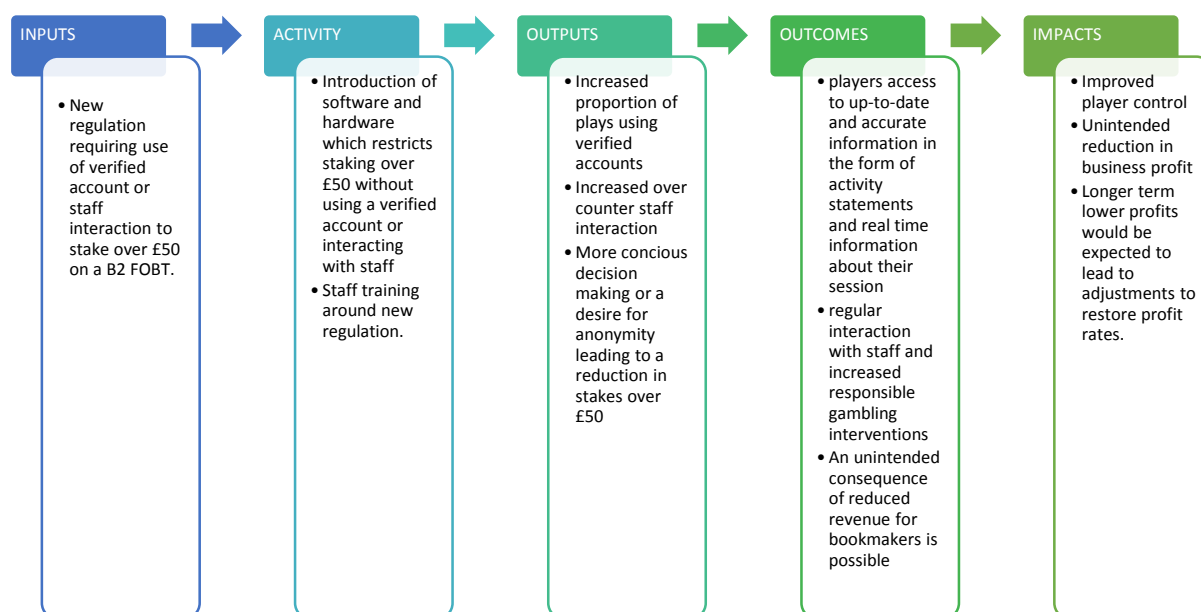
More specifically, account based play allows players access to up-to-date and accurate information in the form of activity statements and real time information about their session of play which can reduce biased or irrational gambling-related decisions and help people maintain control. The Government considers that tailored player information such as account summaries or activity statements may be a particularly effective way of giving clear and accurate information to players regarding their game play and patterns of net expenditure.

Some operators did offer loyalty accounts before the introduction of verified accounts under the new regulation however there are key differences:

- A verified account contains details of a validated method of contact for the player (email or mobile number). The previous loyalty accounts did not require such information and could be operated anonymously;
- Not all operators offered loyalty accounts whereas all operators (including independents) now provide verified player accounts;
- Loyalty accounts were purely voluntary whereas a verified account is one of the two methods required to access £50+ stakes;
- The new verified accounts now allow players to access details of their play activity on the machine by accessing their 'player statement', therefore benefitting players who want greater visibility and control over their behaviour

Theory of change

Logic model



One other indirect potential positive outcome not captured by the logic model is that with a reasonable level of use of verified accounts, operators may be able to develop algorithms to identify problem gambling. This could then give operators a greater ability to initiate a responsible gambling interaction with a problem gambler.

Research questions

The principle research questions this evaluation will attempt to answer are:

1) What has been the impact of the regulations on players

This question is about assessing whether the policy objective of increasing player control has been achieved.

- Has there been an uptake of verified accounts?
- Have there been a high level of over the counter authorisations?
- Do patterns of play indicate a change in player control?

2) What has been the impact of the scheme on operators

The second question is about the costs or benefits the new regulation has had on business.

Evaluation methodology

This evaluation will take the form of an empirical impact evaluation. It uses quantitative data to test whether a policy is associated with any significant change in empirical measures.

Following implementation of the regulations the department met with the Gambling Commission and industry to discuss the evaluation framework and the data requirements.

A series of metrics were agreed based on desk research and consultation. This process also considered the available data in finalising the metrics used for assessment.

1) What has been the impact of the scheme on customers?

For the first research question regarding player control the following metrics were used:

- The uptake of verified accounts and how this compared with previous loyalty account usage.
- The percentage of sessions which contain use of a verified account or over the counter authorisation to enable £50+ staking.
- Session duration
- How the proportion of plays in different stake bin ranges has changed, e.g. the % of plays staking over £50 and the % of plays staking under £50.
- How the proportion of total amount staked in different stake bin ranges has changed, e.g. the % of total amount staked which is over £50 and the % of total amount staked which is under £50.

Consideration needs to be given as to what would happen to these metrics under the counterfactual scenario where the regulation was not introduced. This is considered below in the analysis section for the relevant metrics. These metrics will also change due to factors other than the implementation of the regulation and the issue of what should be attributed as the cause of any change in the metrics is also discussed in the analysis section.

Interpretation of changes in these metrics requires careful consideration in terms of the potential impact on player control. This is discussed in the analysis section below for the relevant metric.

Data for the above metrics has been collected and synthesised by SG Gaming and Inspired Gaming machine suppliers to examine patterns of play. The operators SG and Inspired collect machine data for the vast majority of the UK's gaming machine market in bookmakers including nearly all B2 gaming content in bookmakers.

Transaction data is captured locally on each terminal and sent back to a central server. These transactions are then typically processed into a data warehouse on a daily basis, where it is then aggregated for use in reports and analysis. SG and Inspired have indicated over 99% of transactions are captured by the data they have provided. A very small amount of transactions may be lost due to reasons such as data corruption.

2) What has been the impact on business?

The impact on business will be split into two main components. There will be those impacts which are one-off associated with the transition to operating under the new

regulation and those impacts which are ongoing additional costs or benefits to business.

- **Transition costs**

Under transition costs the primary expected costs to business are expected to be those associated with implementing new systems and costs associated with training staff. Members of the ABB have given an indication of their estimates for costs associated with new systems and training. Members have also given an indication of costs associated with marketing account based play.

- **Annual costs**

For ongoing costs some operators have given an indication of what they expect in terms of ongoing training and operating costs, this is detailed in the analysis section.

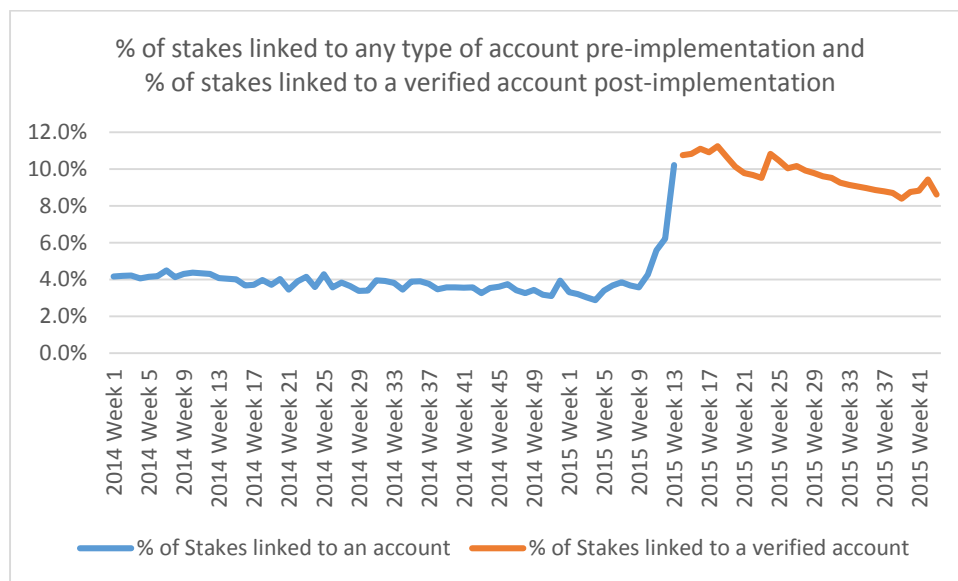
In addition any change in revenue to operators as a result of the regulation has also been estimated. This is based on changes in the total amount staked following implementation of the regulation and the percentage of total stakes which accrues to operators. Further details of the methodology are discussed in the analysis section.

Analysis

Verified account usage

One of the mechanisms identified in the logic chain for improving player control is real time information to players about player behaviour through verified accounts about their playing behaviour, allowing them to make more informed and unbiased decisions about their gambling, thus improving control. The two charts below examine uptake of verified accounts. In the absence of the regulation there would be no verified accounts, however we can consider what the usage of other types of accounts may have been.

Chart 1:



The blue line above shows the % of stakes linked to any type of account pre-implementation. For most of the period this will be traditional loyalty accounts, however as the implementation period at week 14 (6 April 2015) is approached there will be a mix of traditional loyalty accounts and the new verified accounts which exist under the regulation. Following implementation the orange line corresponds only to verified accounts. Whilst verified accounts are not the same as the types of loyalty accounts which existed before the new regulation, it is interesting to compare the usage of loyalty accounts before implementation. It is worth noting that not all bookmakers operated loyalty accounts prior to April 2015.

The percentage of all player sessions with a stake over £50 was between 6% and 7% in 2014 and 2015 ahead of implementation of the new regulation, and fell to below 2% following implementation. This means that we wouldn't necessarily expect the requirements of the new regulations to feed through into a rise much larger than observed, as those sessions without a stake over £50 would not have to use a verified account as one of the two options for enabling over £50 staking. This would be affected by a number of other issues however, such as how stakes are distributed among sessions and how sessions are distributed amongst players.

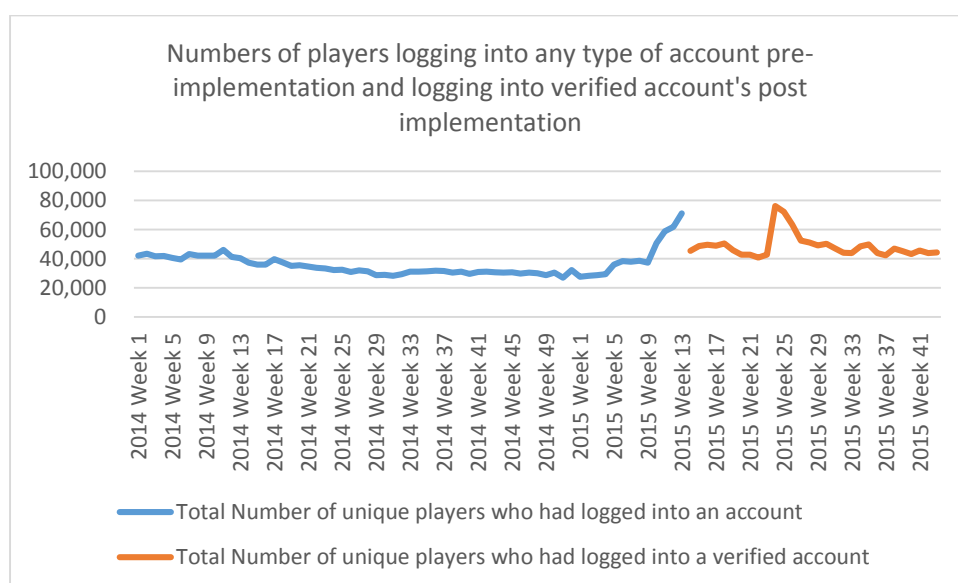
It can be seen that the percentage of stakes linked to a verified account peaked in week 18 (week commencing 03/05/2015) after implementation of the regulation at 11.2%.

This suggests that the numbers of players able to track their play through an account and make more informed decisions as a result is likely to have increased but that this is still happening for a limited percentage of stakes (less than 12% though this is limited partly by the % of stakes which are over £50).

It is also not possible to be certain that this means that more people are engaging as it could be that just as many or even less people are using accounts but for a higher proportion of their stakes. We do not know how regularly players use their account in a session and for what proportion of the session they use their account.

Chart 2 below however does show something of a step change in numbers of unique users using an account which suggests that there is an increase in the number of individuals using an account, be it a loyalty account pre-implementation or a verified account post-implementation.

Chart 2:



The number of unique players here may be overstated as a player may have several accounts with different operators or have created multiple accounts using different verification methods such as different emails or telephone numbers.

It can be seen that usage of any type of account was declining slightly up to the period immediately pre- implementation before a rapid increase in the numbers of unique players using an account.

The number of unique players who logged into an account saw a peak at week 24 (week commencing 14/06/2015) of around 76,000 players. Industry have suggested this is likely due to a marketing push to encourage use of verified accounts (including free bet incentives). This seems to have led to an initial increase in usage that then

declined to a similar level after the promotions finished, with the exception of a peak from week 24 to week 27 (week commencing 14/06/2015 to week commencing 05/07/2015).

There was also a surge in the number of players the week before mandatory implementation of the regulation. This is likely to be due to some operators promoting verified accounts ahead of the final implementation date. In both cases it is noteworthy that this surge, which was likely to be associated with promotion by operators, quickly fell away. This strongly indicates that large expenditure on marketing did not lead to a significant long term increase in the proportion of players using verified accounts.

£50+ stake patterns and usage of account based play and over the counter (OTC) verification

The regulation has two key mechanisms for improving player control. One is increased customer interaction through over the counter authorisation, the other is players' improved understanding of their behaviour leading to more conscious decision making. By examining the percentage of sessions which contain these two methods of authorisation we can consider the potential impact of these mechanisms.

No authorisation was required in the absence of the regulation but as discussed above some level of information may have been available to players through loyalty accounts.

Chart 3:

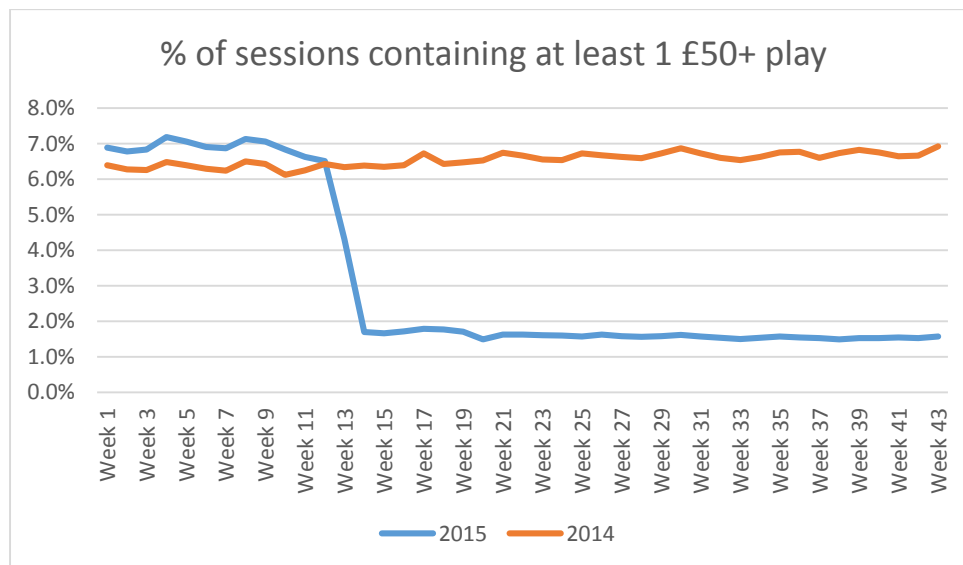
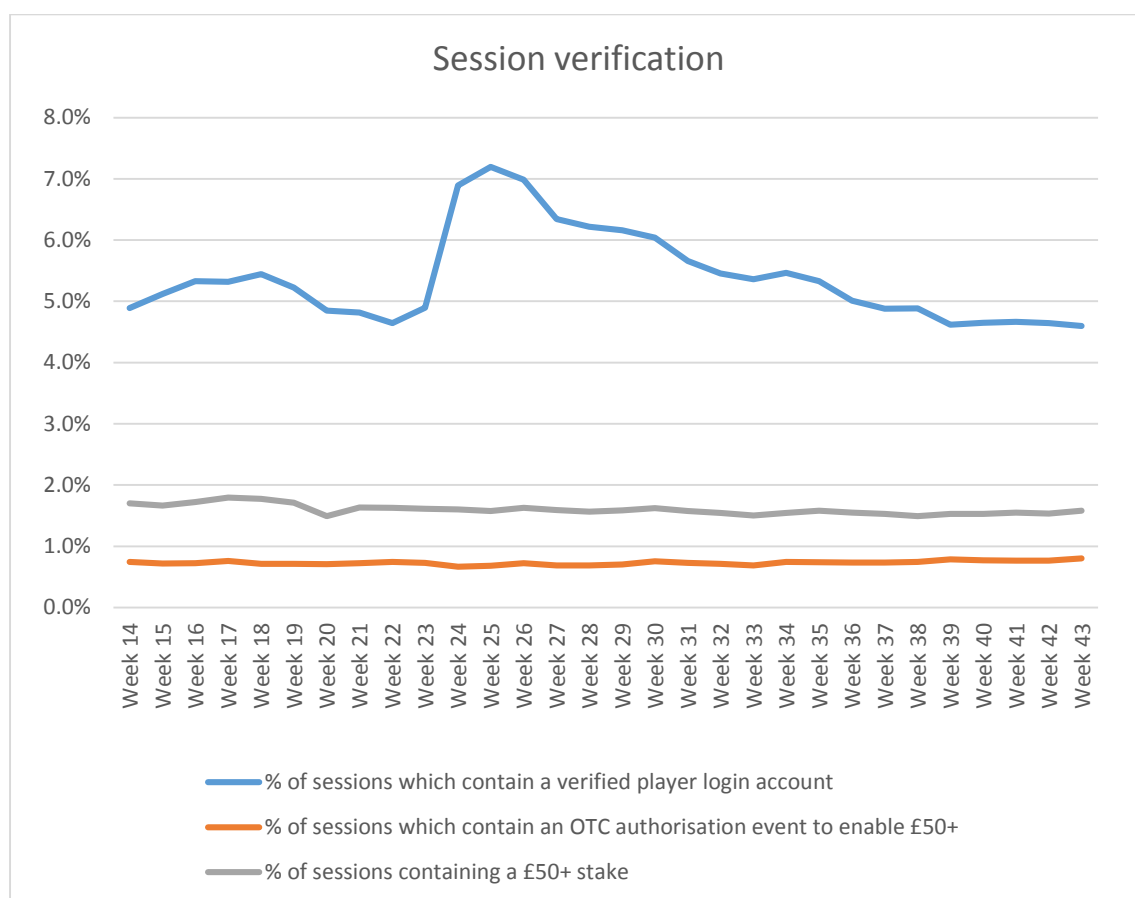


Chart 4:



In chart 4 it can be seen that the percentage of sessions which were authorised for £50+ staking remained low from weeks 14 to week 43 (week commencing 05/04/2015 to week commencing 25/10/2015) following implementation of the regulation. The percentage of sessions verified via a verified player login was higher moving between roughly 4.5% to 7% over the period. The percentage of sessions containing OTC authorisation has remained below 1% following the regulations. This would suggest the reach of the regulation in terms of stimulating customer interaction may have been limited. It is not clear what percentage of players the sessions involving authorisation are spread across however.

The low engagement with authorisation, and the large shift in players moving from the £50+ range into the £40-£50 staking category, indicates that the majority of players are making a conscious choice to control their stake levels or staking less per play to maintain their anonymity, keeping them below £50 for most sessions as the chart (chart 3) comparing 2014 and 2015 above shows.

It is worth noting that this is still a large number of authorisations in absolute terms. In week 43 there were approximately 190,000 sessions authorised through an account and 33,000 sessions authorised over the counter (see chart 18 in Annex A).

It is interesting to note there was also approximately 17,000 over the counter sessions in week 43 (chart 19 in Annex A) where authorisation was enabled but no

£50+ stake was played, suggesting some players will request £50+ staking through an OTC interaction even if they are not going to stake over £50. This could indicate that a player would like to have the option to stake over £50+ as well, or that they are simply loading cash at the counter for convenience but with no intention of staking over £50.

From weeks 14 to week 43 in 2015 (week commencing 05/04/2015 to week commencing 25/10/2015), there have been approximately 6.5m sessions where a verified account was used, 0.9m sessions where an OTC authorisation was used and 1.9m sessions where over £50 was actually staked. This suggests more sessions involve the use of verified accounts than is required to enable £50+ staking. This may mean that players are willing or even desire to use account based play where it is not required.

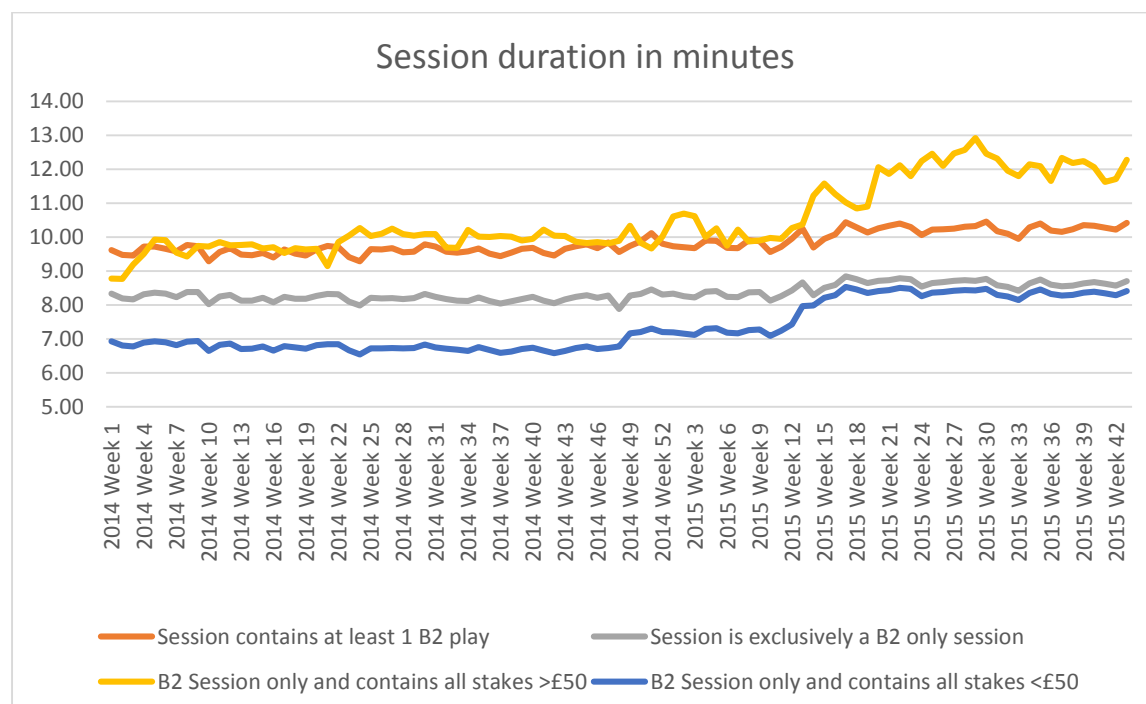
Ideally data on the number of responsible gambling interactions (RGIs) would be assessed, unfortunately data on the number of RGIs linked specifically to £50 plus staking is not available.

Player session duration

Player session duration is an important metric in considering player control. Players taking longer to stake the same amount may reflect more conscious decision making to their actions due to increased control. Equally, it may be that they have a set amount of money to stake and if they choose to stake at a lower level this takes longer to play.

It is also worth considering that as player session length increases they are becoming more “time-poor”. Spending longer gambling can be a sign of problematic gambling behaviour.

Chart 5:



It can be seen that players staking under £50 for all bets are playing for over a minute longer on average. As can be seen in the next metric “total amount staked” this is likely to be driven by a shift in players choosing to stake under £50 rather than authorise over £50 stakes and staking the same amount in total over a session (or less than they would have) but over a longer period of time. This is discussed further in the next section.

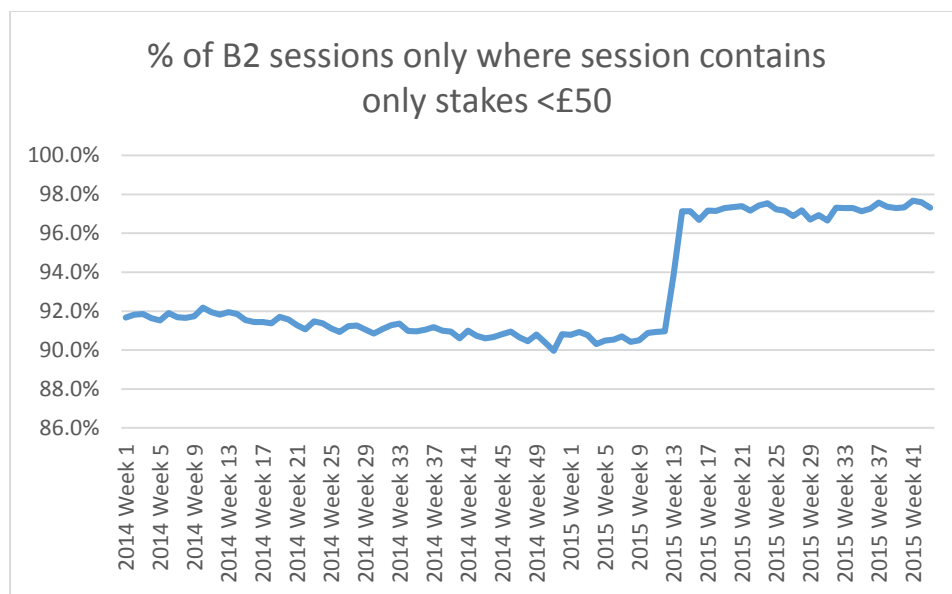
Players staking over £50 in all bets have also seen a significant rise in their duration of play. This may be because those players who choose to no longer stake over £50 were generally playing for less time before, so when they stopped staking over £50 the average duration of play for stakes at this range increased. An alternative explanation is that the players who are staking over £50 post implementation are playing for longer than they did previously. This is considered further in the next section on the amount staked at different stake sizes.

For sessions containing at least one B2 play, average session duration increased approximately 6% from an average of 9.65 minutes for week 1 2014 to week 13 2015 (week commencing 05/01/2014 to week commencing 29/03/2015) to 10.23 minutes for week 14 2015 to week 43 2015 (week commencing 05/04/2015 to week commencing 25/10/2015).

It is possible that there are other reasons for increased duration of play besides changes in player behaviour. For example, it may be that the frequency of pop-up messages (measures introduced by industry) has increased which slows down the speed of play. Logging into a verified account and accessing player statements would also increase the duration of play. If speed of play is reduced this may indicate that players are taking more time to consider their actions as they are in more control.

Equally if players were playing for less time but trying to stake the same amount over a session, they may increase their speed of play. If this is the case, a reduction in session length (or the same session length) could actually indicate players exercising less control, taking less time over decisions. Gaming machine suppliers have been able to provide some data on speed of play. They found the speed of play for B2 roulette in the 10 weeks pre-implementation averaged 37.22 seconds whilst for the first 21 weeks post-implementation it was 37.33 seconds. This suggests on average the speed of play for B2 roulette, which form the majority of B2 play has changed little on average. What is not apparent from this data is whether some people are playing slower and some faster and it is averaging out at a similar speed. We would require more detailed data on speed of play during sessions to examine this issue.

Chart 6:

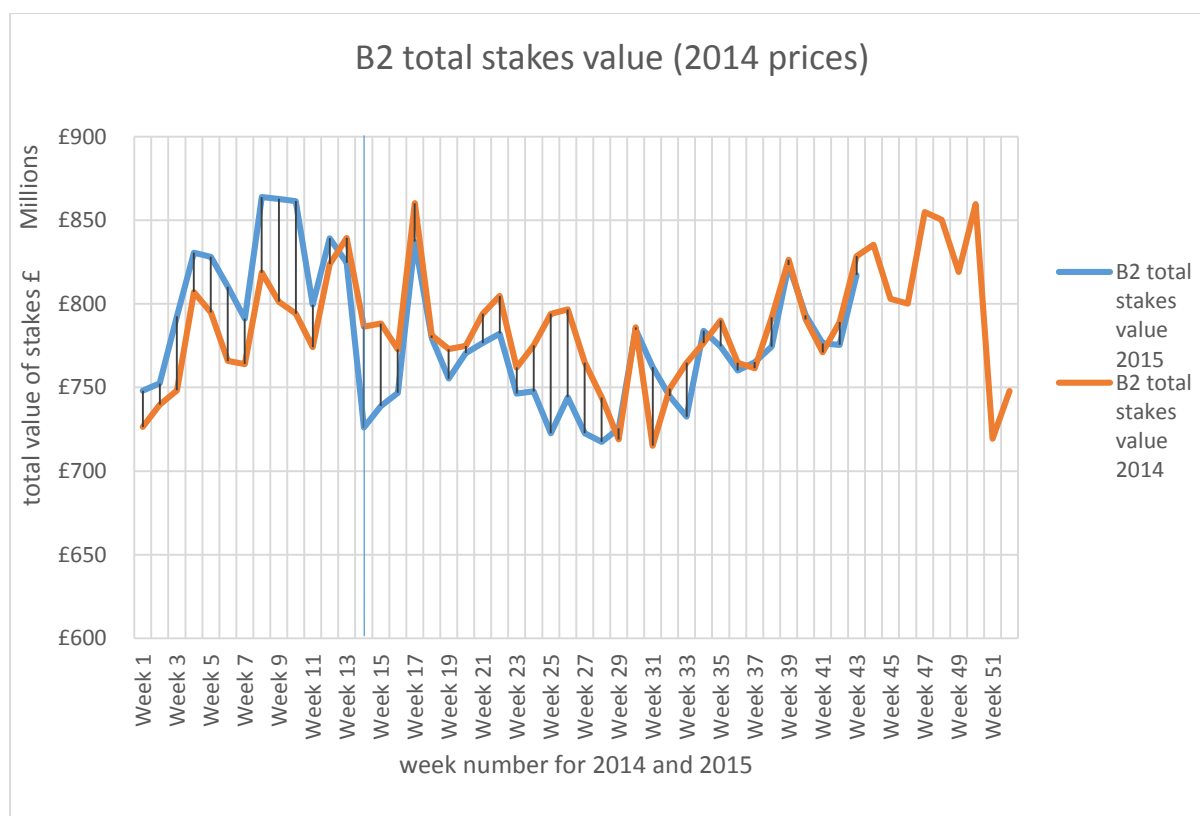


Total amount staked at different stake levels⁸

In this section the total amount staked is examined. This will inform our revenue estimates in the section below on the impact to business but it is also used to examine the issue of player control.

Examining how the amount staked at different values changes (particularly the amount staked over and under £50) helps inform how players may have adapted their behaviour in response to the regulation.

Chart 7:



It can be seen that the total amount staked on B2 content declined following the implementation of the regulation before returning approximately to its 2014 level in Q3 2015. Note a number of the largest operators implemented the measures up to 2 weeks in advance of 6 April. We will consider this further when examining the impact on business but it is useful to first examine how the composition of the total amount staked has changed to assess how players' behaviour may have adapted and what this may mean in terms of impact on player control.

⁸ Note that this data includes the effect of an unknown number of promotional free bets as these cannot be cleaned from the data.

Total amount staked by bin range

Chart 8:

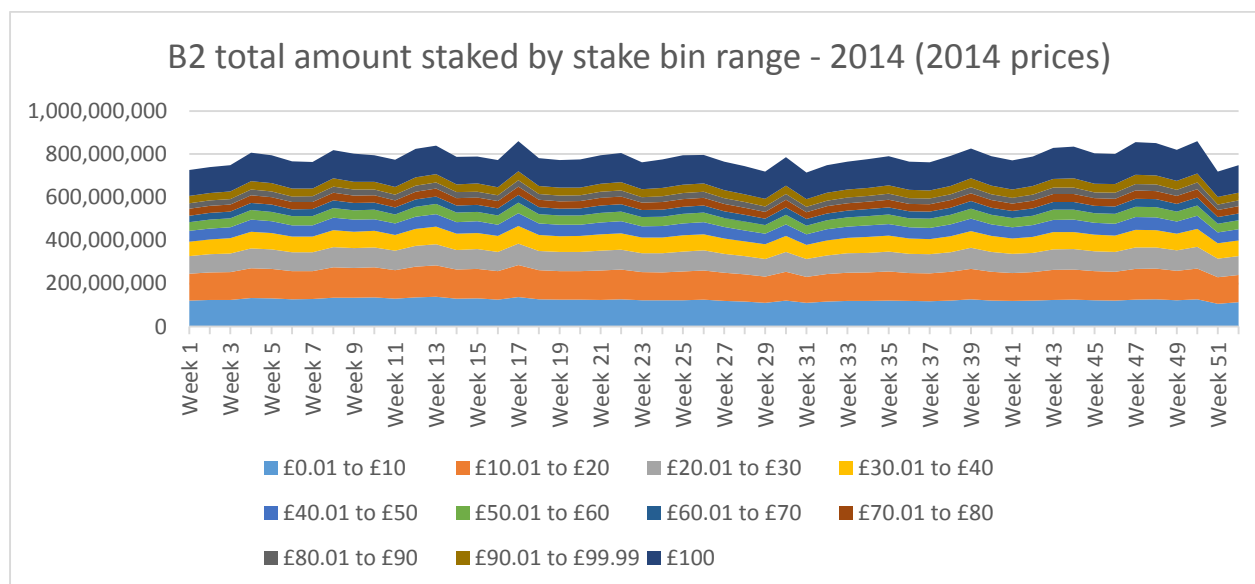
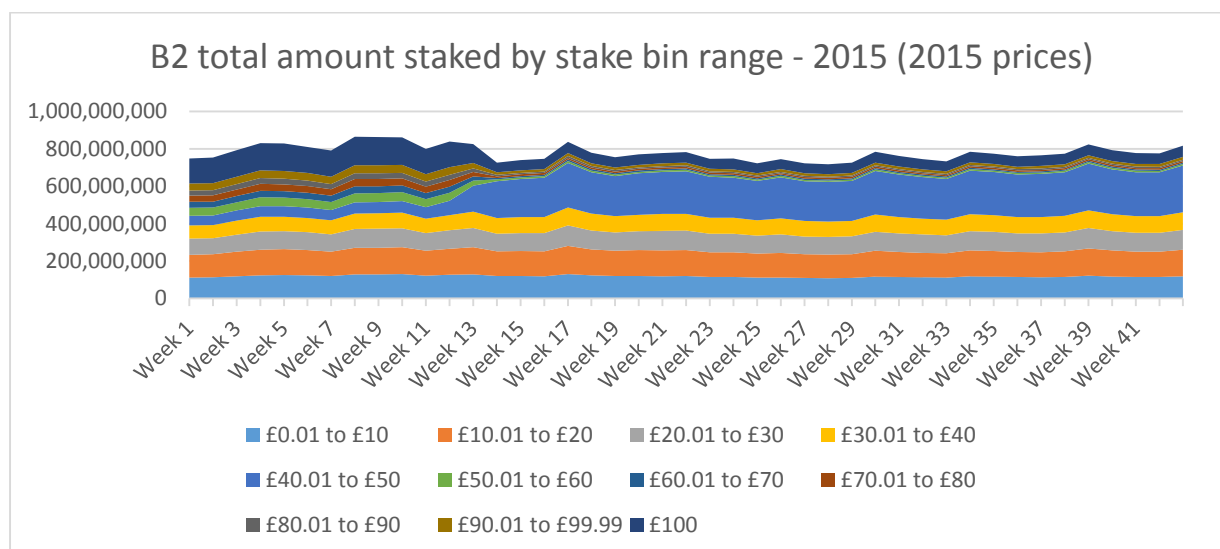


Chart 9:



The reduction in the number of plays over £50 can be seen in the reduction in the total amount staked over £50. The amount staked over £40 but less than £50 has seen very large growth as a result.

The reduction in the amount staked over £50 can also be seen in the reduction of plays over £50 (see chart in annex A). The amount of plays over £40 but less than £50 has seen very large growth as a result.

The following table sets out how the percentage of stakes in different stake ranges in 2015 has changed for the same period in 2014 in nominal terms.

Table 1:

Week	Year		£0.01-£40 stakes	£40-£50 stakes	Stakes over £50	Total
Weeks 1-13	2014	Amount staked	£5,594,889,910	£698,766,221	£3,903,965,423	£10,197,621,554
Weeks 14-26	2014	Amount staked	£5,556,434,127	£706,932,717	£4,000,053,934	£10,263,420,778
Weeks 27-39	2014	Amount staked	£5,314,005,590	£681,753,996	£3,958,387,172	£9,954,146,758
Weeks 1-13	2015	Amount staked	£5,625,074,851	£841,585,488	£4,148,999,671	£10,615,660,011
Weeks 14-26	2015	Amount staked	£5,739,979,734	£2,825,986,731	£1,317,753,331	£9,883,719,795
Weeks 27-39	2015	Amount staked	£5,653,834,648	£2,947,612,344	£1,279,616,160	£9,881,063,153
Weeks 1-13	2014 to 2015	% increase	0.5%	20.4%	6.3%	4.1%
Weeks 14-26	2014 to 2015	% increase	3.3%	299.8%	-67.1%	-3.7%
Weeks 27-39	2014 to 2015	% increase	6.4%	332.4%	-67.7%	-0.7%

It can be seen that there has been a fall in the two quarters since the regulation was implemented of about £6.2bn in the amount bet in stakes over £50 from 2014 to 2015. There has also been a £5.1bn increase in the total amount staked at the £40-£50 range for the two quarters since the regulation was implemented. Overall this led to a 3.7% reduction in the overall amount staked in the first quarter compared to the same period in 2014 following implementation of the regulation and a 0.7% reduction in the second quarter (weeks 27-39) compared to the same period in 2014 (a 2% drop on 2014 for weeks 14-43).

It seems reasonable to infer that the trend towards staking below £50 is due primarily to the regulation. This suggest many players preferred to stake less rather than authorise £50+ staking. This could be either due to players wanting to maintain anonymity or because they are having to consciously enable over £50 staking, giving them greater control and so choosing not to.

In combination with the duration data, this lends weight to the theory that players staking under £50 are taking longer because there are a number of players who would have staked over £50 previously who are now staking under £50 and taking longer to gamble the same amount. It could be that some players have a set amount to play in mind and interventions do not have much impact on this. It could also be that the speed of play has reduced, so more time is being taken between plays. The data available on speed of play does not suggest a large change on average, although individuals may have changed their speed of play following implementation.

It is also possible that the increase in duration for those staking exclusively over £50 may be because the composition of people playing in this group has changed rather than the same people playing for longer.

Cost analysis

The impact on business will be split into two components. There will be those impacts which are one-off impacts associated with the transition to operating under the new regulation and those impacts which are ongoing additional costs or benefits to business.

- **Recurring annual costs**

Revenue impact

We can estimate how much of the total amount staked accrued to business as revenue by using an estimate for the average win margin on different machines. However, first we need to consider the counterfactual situation of what would have happened in the absence of the regulation. We will compare B2 play with other gaming machine play in bookmakers to examine whether there has been a substitution effect. We do not have sufficient data to consider substitution into other forms of gambling.

We can examine past trends in the total amount staked on different games as a first step. Prices are in real terms, 2014 prices.

Chart 10:

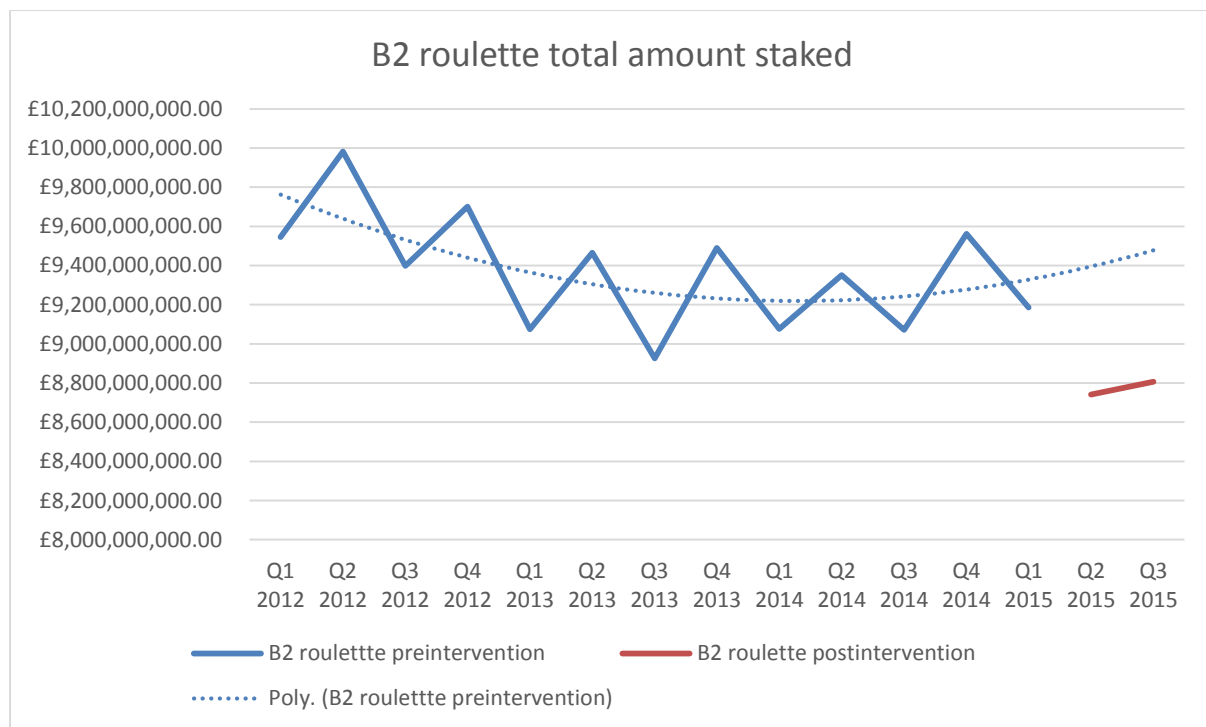


Chart 11:

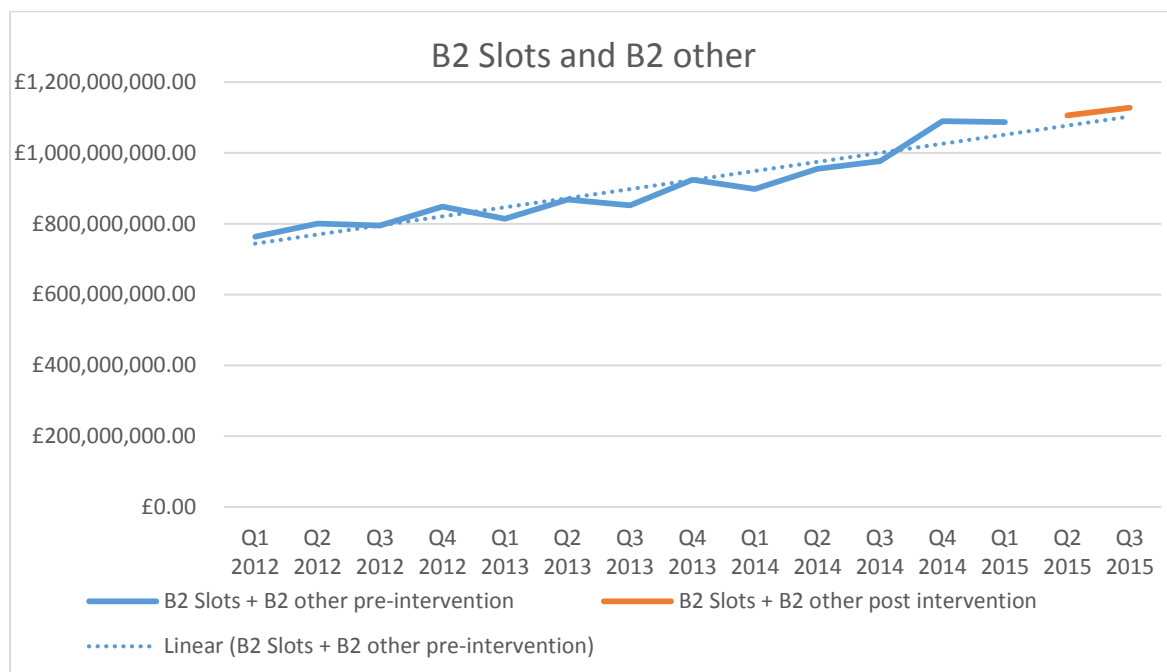
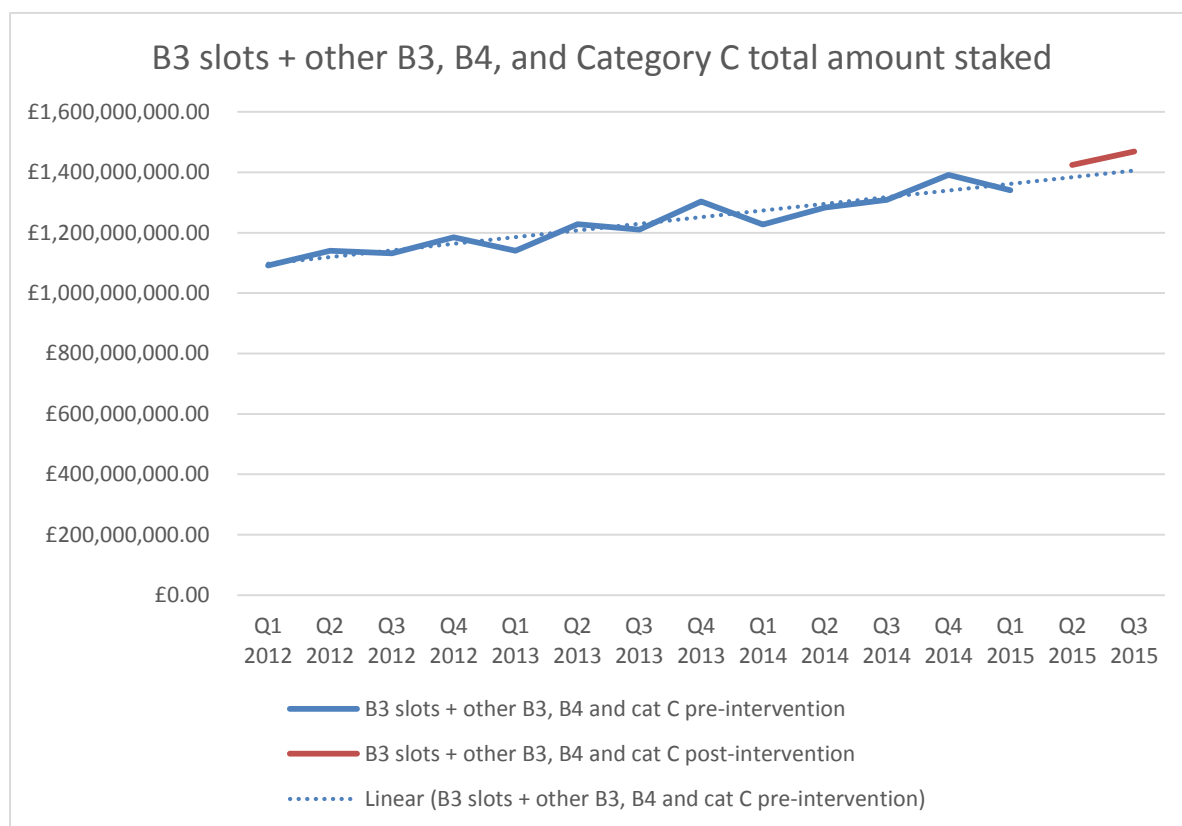


Chart 12:



For B2 roulette we can see the quarterly growth rate looked to be on an upwards trend.

B2 “slots and other types of non-roulette games” also had an upward trend as did “B3 slots, other B3 content, B4 machines and category C machines”. Each of these trends appear to show some seasonality (this is particularly true for roulette).

As a result, rather than use sequential quarters growth rate to establish a trend, e.g. Q1 2014 growth to Q2 2014, the counterfactual is developed using year on year quarterly growth rates, e.g. Q1 2013 to Q1 2014, Q2 2013 to Q2 2014 etc. The charts below show this.

Chart 13:

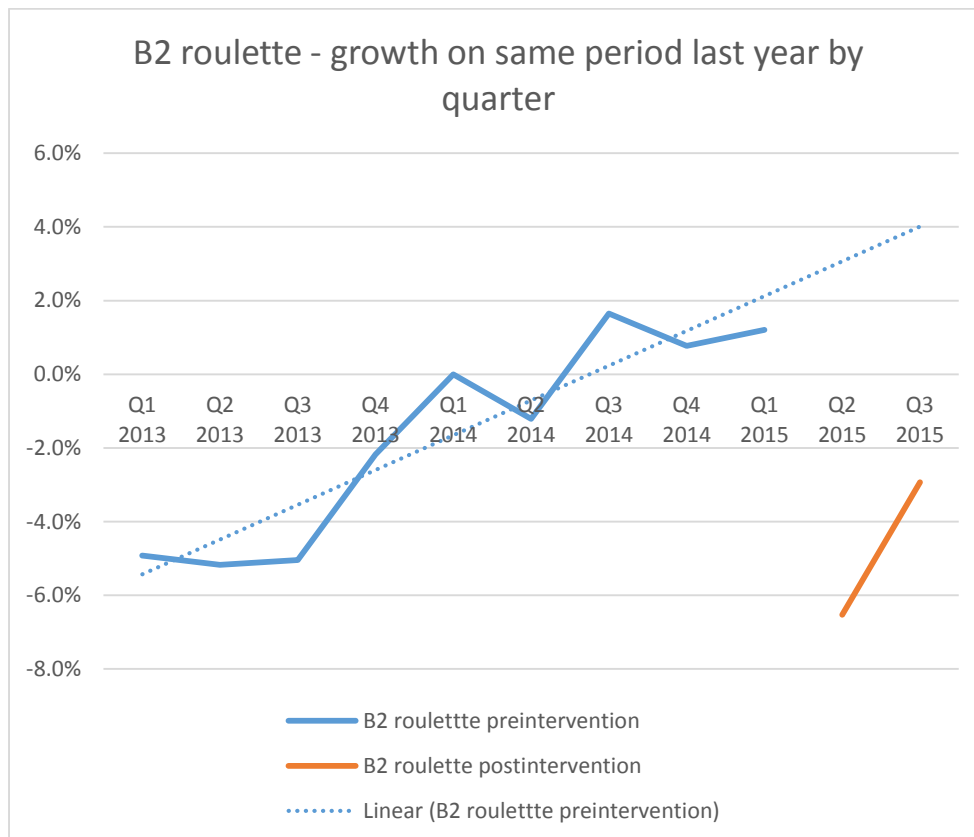


Chart 14:

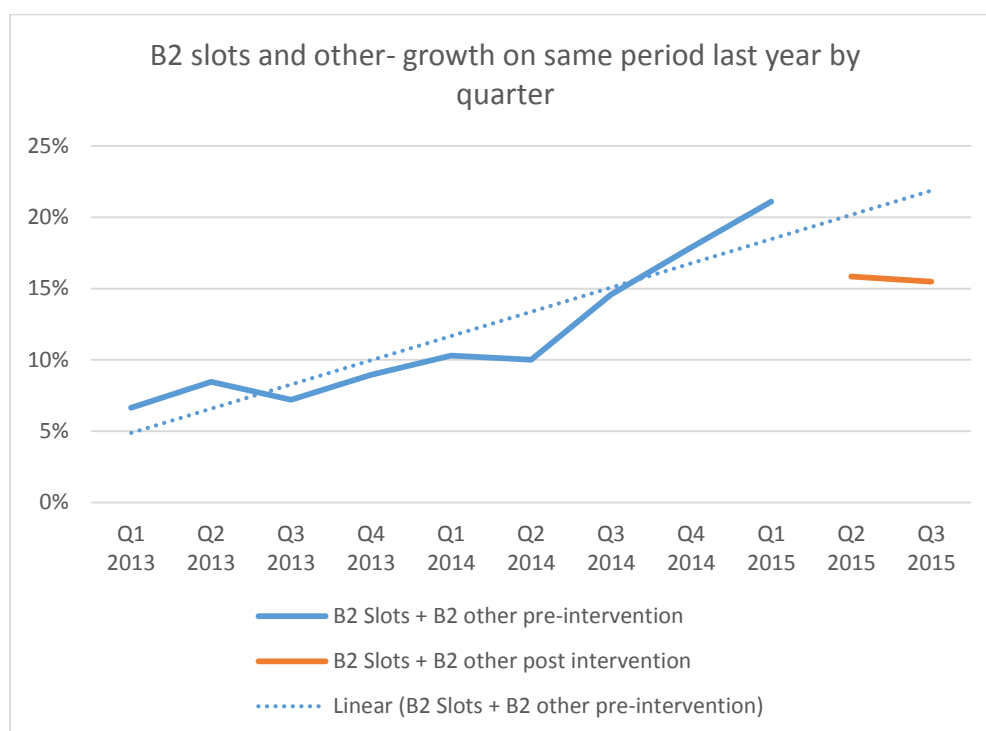
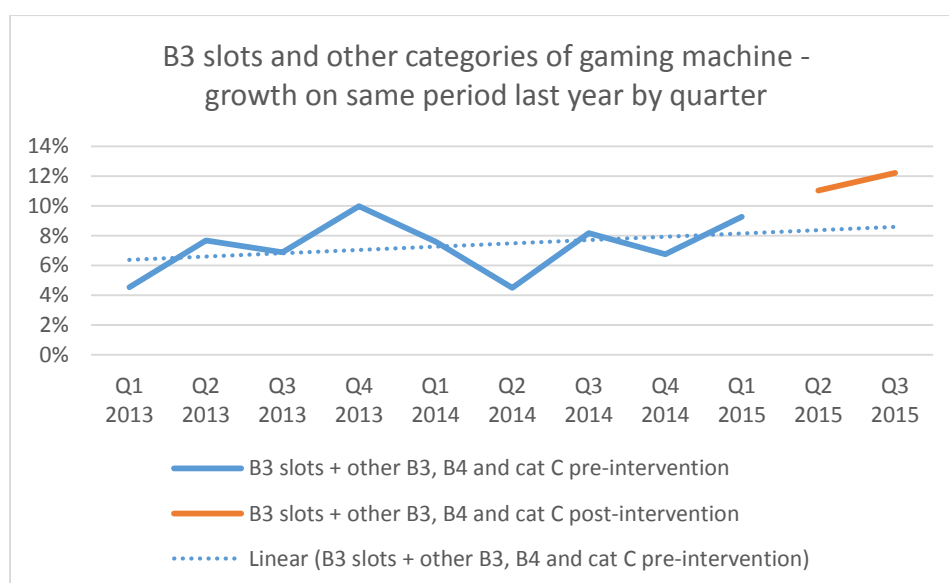


Chart 15:



Post- implementation we can see that for B2 gaming machines growth for the Q2 and Q3 2015 on the same periods in 2014 is not as high as we might expect pre-implementation. B3 growth has been slightly stronger than we'd anticipate, suggesting there may have been some substitution to this gaming machine category.

As well as substitution from players using B2 content, growth in B3 content could reflect an increased push from industry to develop B3 content independent of new player demand. Gaming machine suppliers have also indicated that resources prior to implementation were focused on developing the new platform software for the new

regulations in the two quarters prior to implementation. This removed resource from testing and developing new B3 content which means some of the post implementation growth in B3 content may be due to the increased resource going into developing this content post implementation, and it is more of a supply side effect.

We can estimate what the growth rate would have been using the trendline for the counterfactual. Using the estimated counterfactual growth rate we can estimate what total stake size would have been. From this we can then consider the difference in the total amount staked following the regulation compared to if it had not gone ahead. We can then use the win margins for different machine types to estimate what the revenue impact is.

For B2 roulette, business is assumed to make a revenue of 2.7% of the total amount staked, this is based on the typical win margin for B2 Roulette.

For “B2 slots and B2 other” business is assumed to receive 3.69% of the total amount staked as revenue, this is based on an average win margin for “Slots (B2/B3 and Cat C)” and “B2 Roulette, Cards and Other types of game” from week 1 2014 to week 43 2015 (week commencing 05/04/2015 to week commencing 25/10/2015).

For “B3 slots, B4 machines and category C machines” business is assumed to receive 8.03% of the total amount staked as revenue, this is based on the win margin for “Slots (B2/B3 and Cat C)” machines from week 1 2014 to week 43 2015 (week commencing 05/04/2015 to week commencing 25/10/2015).

The estimated revenue change from projection pre-implementation is shown in the table below. Q1 looks to have seen a greater revenue change than Q2. Staking levels were closer to their 2014 levels for Q2 and it may be that as consumers adapt their behaviour the revenue changes are reduced, thus the Q2 revenue change may be more indicative of medium term revenue change than Q1. For this reason the high estimate for first year revenue change is based on an average of the Q1 and Q2 revenue change and the low estimate for annual revenue change is based on the Q2 revenue change.

This gives an estimate for the revenue change from what was projected based on pre-implementation data for Q2 2015 to Q1 2016 of between approximately £66m and £78m.

Attribution is difficult here though, with many other factors at play, such as the introduction of responsible gambling measures by industry and the Gambling Commission, as well as changes to the gambling duty regime. The impact of any changes in disposable income at a national level could also have an effect. It is also not possible to say what this means over the medium and long term for the industry. Business may adjust their products and consumers can adjust their behaviour so the effects we have seen in the first two quarters may not be representative going forward.

Table 2:

(2014 prices)	Roulette (B2)	B2 Slots + B2 other	B3 slots + other B3, Bb and cat C	Total
Total amount staked Q2 2014	£9,350,902,061	£955,218,643	£1,283,312,028	£11,589,432,732
Total amount staked Q3 2014	£9,072,338,355	£976,660,438	£1,308,869,056	£11,357,867,849
Total amount staked Q2 2015 - actual	£8,749,538,980	£1,107,570,078	£1,426,321,807	£11,283,430,865
Total amount staked Q2 2015 - actual	£8,814,983,460	£1,128,933,694	£1,470,270,254	£11,414,187,408
Actual % growth Q1 2014 to Q1 2015	-6%	16%	11%	
Actual % growth Q2 2014 to Q2 2015	-3%	16%	12%	
Projected counterfactual % growth Q1 2014 to Q1 2015	2%	23%	9%	
Projected counterfactual % growth Q2 2014 to Q2 2015	3%	25%	11%	
Projected counterfactual Q2 2015	£9,551,622,700	£1,173,020,427	£1,405,186,856	£12,129,829,983
Projected counterfactual Q3 2015	£9,352,359,500	£1,215,954,447	£1,456,151,645	£12,024,465,592
Loss of amount staked from actual Q2 2015	£802,083,720	£65,450,349	-£21,134,951	£846,399,118
Loss of amount staked from actual Q3 2015	£537,376,040	£87,020,753	-£14,118,609	£610,278,183
Win margin	2.70%	3.69%	8.03%	
Revenue loss from counterfactual - Q2 2015	£21,656,260	£2,415,118	-£1,697,137	£22,374,242
Revenue loss from counterfactual - Q3 2015	£14,509,153	£3,211,066	-£1,133,724	£16,586,495
Average revenue loss from counterfactual Q2 and Q3 2015	£18,082,707	£2,813,092	-£1,415,430	£19,480,368
Annual cost change - high estimate	£72,330,827	£11,252,367	-£5,661,722	£77,921,473
Annual cost change - low estimate	£58,036,612	£12,844,263	-£4,534,897	£66,345,978

Other annual costs

As well as revenue costs there may be costs associated with operating as a result of the regulation. This can include training and new IT system costs. The three largest operators in the market who account for the majority of the market have provided some indicative costs.

One of the three largest operators indicated ongoing IT costs in the region of £100,000.

It is important to note that SME businesses may be more adversely affected by IT systems costs where costs may be less variable with a certain fixed level of investment needed, however industry have indicated costs did vary depending on the business.

Major operators in the market have also indicated marketing costs may result from the regulation. Estimates range from approximately £0.3m to approximately £3.4m for one of the three major operators. Without more granular data and a developed counterfactual spend, it is difficult to know what level of marketing would have happened in the absence of the regulation and therefore how much of this spend is additional as a result of the regulation. Over the long term it would seem likely that operators may change their operating model so these costs may reduce.

If a £100,000 ongoing IT cost was assumed then this would give a range of ongoing costs to a major operator of £0.4m to £3.5m

No indication of ongoing training cost was given.

- **One-off transition costs**

The primary expected transition costs to business are expected to be costs associated with implementing new systems and with training staff. Members of the ABB have given an indication of their estimates for one-off transition costs associated with new systems and training.

The three largest operators indicated one-off IT costs from approximately £0.4m to approximately £1.0m as a result of the regulation. Estimates from these operators for training costs were between £0.7m and £1.0m Major operators indicated marketing costs from approximately £1.0m to £3.4m, however as mentioned above, it is not clear how much of this cost can be attributed as an unavoidable cost due to the regulations.

Government requires greater granularity of cost data from business to more robustly assess the training, IT and marketing cost impact the regulations have had and from a wider range of businesses. This data should be gathered as part of any future research on impact.

Combining the lower estimates for the 3 categories of costs suggests a lower estimate for the one-off cost to a major operator of approximately £2.1m. Combining the upper estimates for the three categories of one-off costs gives an upper estimate of £5.4m. This gives a range of £2.1m to £5.4m.

Conclusion

Impact on player control

Despite marketing campaigns there has been a relatively low uptake of verified accounts. Prior to implementation approximately 4% of stakes were linked to a player loyalty account. Following implementation the percentage of sessions linked to a “verified account” has been between 8% and 11%.

Following implementation the percentage of *sessions* linked to a “verified account” has been between approximately 5% and 7%. This is despite significant marketing. By week 43 (25/10/2015) the number of sessions authorised in this way was approximately 190,000.

The other mechanism for authorisation of over £50 stakes is over the counter authorisation. This appears to happen in a very low percentage of sessions (approximately 1%) so the impact may be limited. However, in absolute terms it still accounts for approximately 33,000 sessions in the latest weeks data (week 43 2015) (week commencing 25/10/2015).

All players staking over £50 are required to authorise through one of these two mechanisms, however the target group of people staking over £50 previously will not all have been reached as many appear to have chosen to stake less and increase the duration of their session.

There has been a fall in the two quarters since the regulation was implemented of about £6.2bn in the amount bet in stakes over £50 from 2014 to 2015 for Q2 and Q3. There has also been a £5.1bn increase in the total amount staked at the £40-£50 range for the two quarters since the regulation was implemented. This is an overall decrease of approximately 10.1% in the amount staked over £40 in 2015 Q2 and Q3 compared to 2014 in nominal terms. This may be a result of more conscious decision making or it could be because players wish to maintain their anonymity.

This could be interpreted as either:

- Players circumventing authorisation of higher stakes to maintain their anonymity with no associated increase in control of their play or;
- It is possible that those who are no longer staking over £50 are doing so because the authorisation mechanisms have given them greater control over their staking behaviour. In this respect it could be said to have increased player control in line with the policy’s objective. The increase in duration could also reflect players taking more considered action. There is not conclusive evidence this is the case though.

An increase in duration of play for those staking exclusively under £50 could also reflect taking more time to think through actions. Again, there is not conclusive evidence this is the case.

If players are taking longer time between plays, longer session duration may simply be driven by more considered decision making. Equally if some people are increasing the duration of their play, but the speed of the play has increased, this might indicate that they are now taking less time to consider their actions and control is reduced. Gaming machine suppliers have been able to provide some data on speed of play. They found the speed of play for B2 roulette in the 10 weeks pre-implementation averaged 37.22 seconds whilst for the first 21 weeks post-implementation it was 37.33 seconds. This suggests on average the speed of play for B2 roulette, which form the majority of B2 play has changed little on average. What is not apparent from this data is whether some people are playing slower and some faster and it is averaging out at a similar speed. We would require more detailed data on speed of play during sessions to examine this issue. This information should be included as part of any future research on impact of the regulation.

Impact on business

The three major operators in the market have given an indication of their annual costs associated with IT and marketing as a result of the regulation. One of these operators gave an estimate of £100,000 ongoing IT cost. Combining this with the upper and lower estimates given for ongoing marketing costs gives a range of ongoing IT and marketing costs to a major operator of approximately £0.4m to £3.5m.

The three major operators also gave an indication of their one-off transition costs associated with the regulation for funding marketing, IT and training. Combining the lower estimates for the 3 categories of costs (marketing, IT and training) suggests a lower estimate for the one-off cost to a major operator of approximately £2.1m. Combining the upper estimates for the three categories of one-off costs gives an upper estimate of £5.4m. This gives a range of £2.1m to £5.4m.

Government requires greater granularity of cost data from business to more robustly assess the training, IT and marketing cost impact the regulations have had and from a wider range of businesses. This data should be gathered as part of any future research on impact.

The revenue impact on business is likely to be larger than the costs associated with training, marketing and IT. Attribution is difficult with many other factors at play, such as the introduction of responsible gambling measures by industry and the Gambling Commission. The effect of the regulation and the effect of other interventions therefore remains uncertain. The impact of any changes in disposable income at a national level could also have an effect. It is also not possible to say what this means over the medium and long term for the industry. Business may adjust their products and consumers can adjust their behaviour so the effects we have seen in the first

two quarters may not be representative going forward. What we can consider is what we project revenue to be ahead of implementation and what we estimate it to be after. This suggests industry revenues have fallen approximately £66m-£78m from the level they were growing towards before implementation (this is based on a 6% drop in revenue from what was projected for gaming machines for Q2 and Q3 2015 ahead of implementation). This is based on a trend from a relatively short time period and the estimate could be refined with more data from a longer time series. The £78m could be thought of as an upper estimate for the impact the regulation has had on industry revenues, but with a number of other significant changes to policy and voluntary measures it is difficult to isolate the effect of regulations.

Whilst a degree of uncertainty remains as to the impact of the policy, the outputs are broadly what would be expected had it had its desired impact, though the reduction in stakes over £50 has been larger than was estimated by the impact assessment ahead of implementation.

Considerations for future research

- The data that SG and Inspired have been able to collect and provide has been essential to this evaluation. If future research is to look at a wider gaming machine environment, the availability of such data for other types of machine (e.g. B1 machines) would be very valuable.
- Ideally data on the number of responsible gambling interactions would be assessed too, unfortunately data on the amount of RGIs linked to £50 stakes specifically was not available for this evaluation.
- Survey data and qualitative data on what has driven changes to players' behaviour might help to examine the possible explanations behind the observed changes in patterns of play. For example, it would be useful to know what players thought had caused them to stake less than previously where this was the case.

Annex A:

Total number of plays by stake bin

Chart 16:

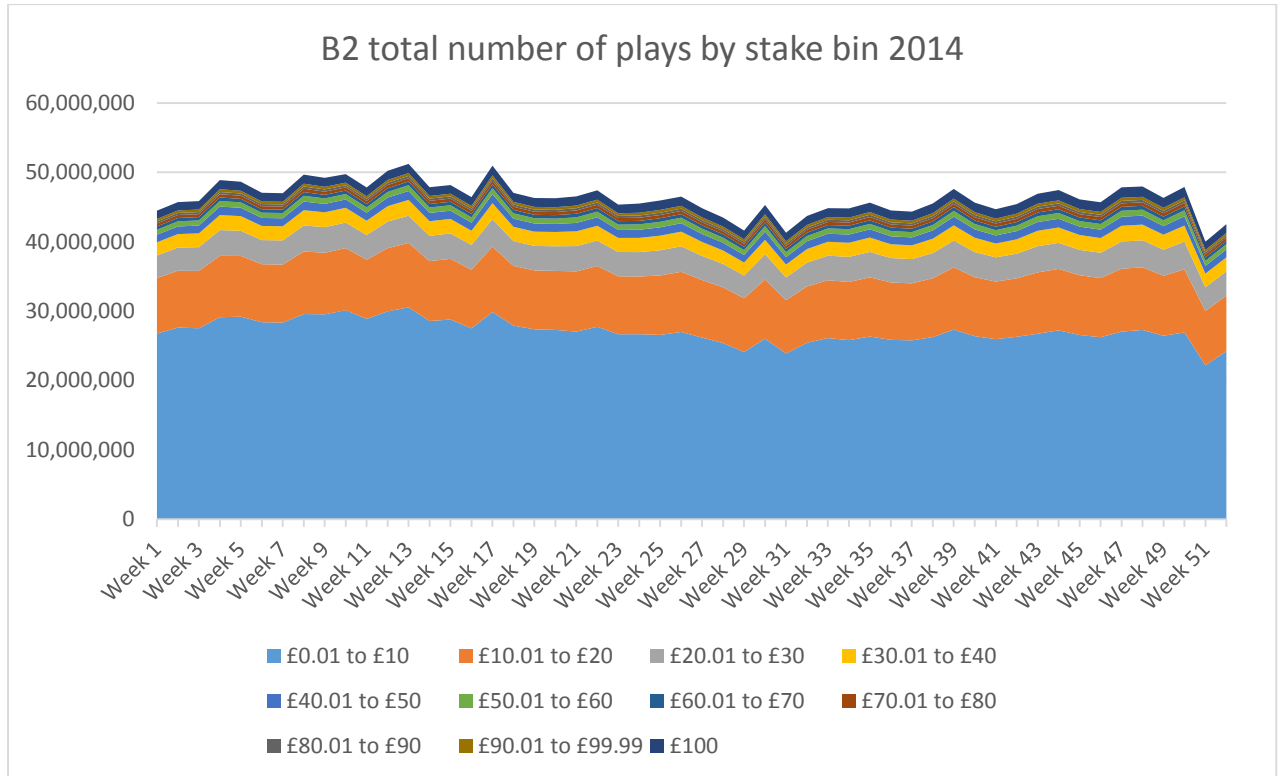
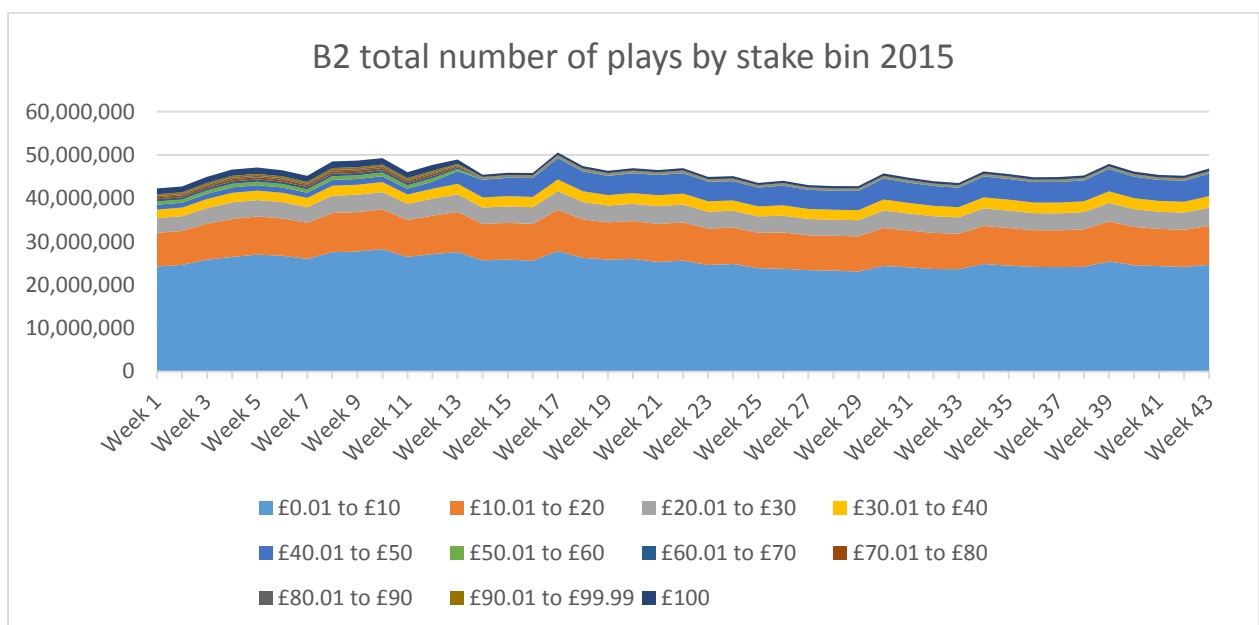


Chart 17:



It can be seen there is a significant increase in the proportion of plays in the £40.01-£50 range following implementation of the regulation. It is reasonable to conclude given the decrease in plays over £50 and subsequent increase in plays in the £40.01-£50 range is due to the new regulation. This suggests many players are opting to stake under £50 rather than authorise £50 plus stakes.

Total number of authorisations

Chart 18:

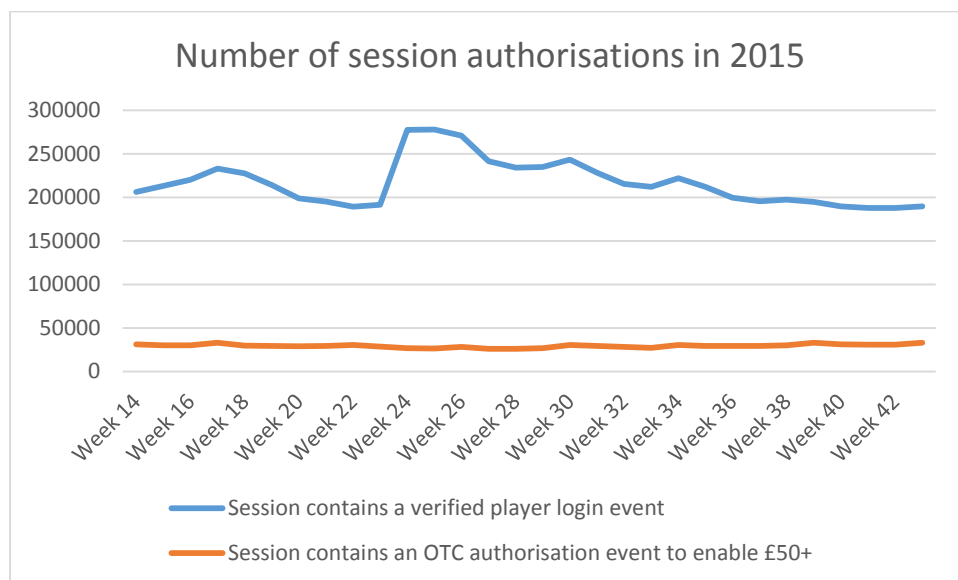
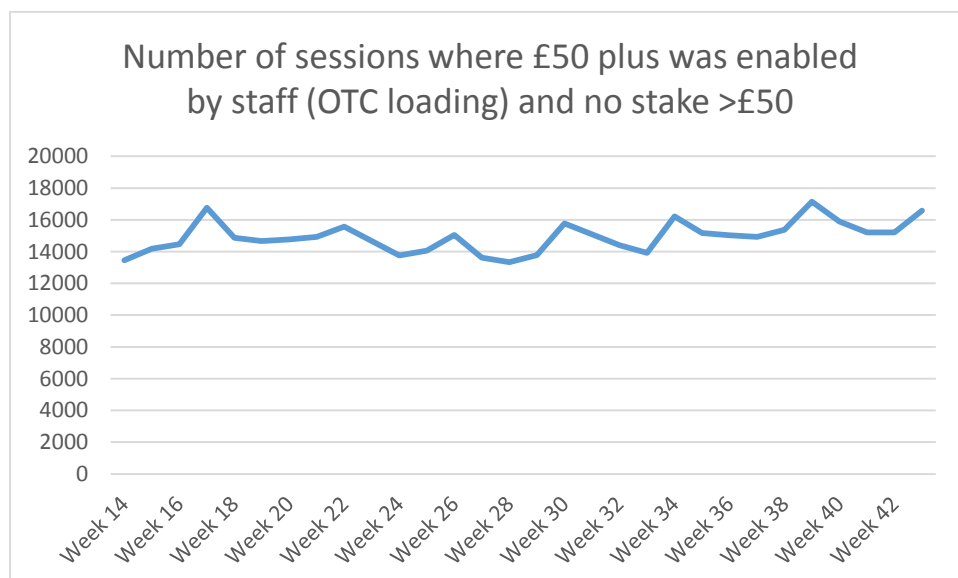


Chart 19:





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