Landman Economics

The Economic Impact of Fixed Odds Betting Terminals: 2015 update

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Executive Summary

Landman Economics has been commissioned by the Campaign for Fairer Gambling to produce an updated version of its research on the economic impact of Fixed Odds Betting Terminals (FOBTs) in betting shops. This report contains the findings from the updated research.

FOBTs only began to be installed in betting shops in the early 2000s but have grown quickly since then as a source of revenue. In 2011/12 FOBT gambling overtook traditional Over-the-Counter (OTC) betting as the main source of revenue from betting shops for the first time. Currently gross revenue from FOBTs is growing at around 5% per year in real terms, while employment in the betting industry is in decline.

Only a small proportion of the UK population use FOBTs – around 3 percent of adults in the 2012 Health Survey for England (HSE) and around 4 percent of adults in the 2014 Scottish Health Survey (SHeS). However, FOBT users are much more likely to be 'problem gamblers' and much more likely to contact gambling helplines due to gambling addiction or other related problems than are almost all other types of gamblers. FOBT users are particularly likely to be young men (aged under 35), unemployed and/or from low-to-middle income households.

The Association of British Bookmakers has claimed that increased regulation of FOBTs would lead to substantial job losses in the betting sector. However, this view does not take account of the *overall* impact of a shift in consumer spending towards FOBTs and away from other goods and services. Each pound which a consumer spends on FOBTs (net of winnings) is by definition a pound which is not spent elsewhere in the economy. This report conducts an analysis of the economic impact of FOBTs by estimating the amount of employment supported by a certain quantity of expenditure on FOBTs compared with the employment supported by the same quantity of consumer expenditure on other goods and services in the economy.

Because expenditure on FOBTs supports relatively little employment compared with consumer expenditure elsewhere in the economy, this report finds that £1bn of "average" consumer expenditure supports around 21,000 jobs across the UK as a whole, whereas £1bn of expenditure on FOBTs supports only 4,500 jobs in the UK gambling sector. This implies that, other things being equal, **an increase of £1bn in consumer spending on FOBTs destroys over 16,000 jobs in the UK.** The results in this report suggest that, if current rates of growth of FOBT expenditure are maintained:

- Gross industry revenues from FOBTs will double in real terms over the next ten years, resulting in a gain of around 5,000 jobs for the gambling sector by 2025/26 but a reduction of around 25,000 jobs for the economy as a whole.
- At the end of the ten year period, the total annual wage bill in areas where FOBTs are established will be around £700 million lower (in today's prices) than if FOBT use remained at its 2015 level.
- At the end of the ten year period net tax receipts will also be around £120 million per year less due to the expansion of FOBTs. Revenue from Machine Games Duty is forecast to increase by around £280 million but this is more than offset by reduced receipts from income tax and National Insurance contributions (due to lower employment) and reduced VAT receipts (due to lower consumer spending on other goods and services).
- Increased proliferation of FOBTs also appears to be linked to an increase in the number of incidents in betting shops which required assistance and /or intervention from the police (up by 51 percent in calendar year 2014 compared to 2013).

Introduction

Landman Economics has been commissioned by the Campaign for Fairer Gambling to conduct a research project on the economic impact of Fixed Odds Betting Terminals (FOBTs) in betting shops. FOBTs – also known as "B2 gaming machines"[1] – are electronic terminals situated in betting shops (a maximum of four machines per outlet under current rules). This report updates previous research by Landman Economics on FOBTs which was published in 2013 (Reed, 2013).

The most recent UK Government Triennial Review of Gaming Machine Stake and Prize Limits reported in October 2013 and summarised the position of the Coalition Government in office at the time as follows:

"Firstly, we recognise that the operating parameters of the B2 machine are such that the potential for harm, even among players who are not problem gamblers, is high. Second, we recognise that some problem gambling charities have indicated that a significant proportion of those presenting have experienced problems with B2 machines. Third, it is clear that B2 machines have given rise to very significant public concern and have generated a degree of controversy associated with gambling that has not improved conditions for growth." (DCMS, 2013)

Despite these concerns the Coalition Government argued that there was still "a knowledge gap... in relation to the link between machine gaming and player behaviour" and opted to maintain the maximum stake level for FOBTs at £100 (DCMS, 2013).

With the election of a majority Conservative Government in May 2015 and the next Triennial Review imminent in 2016, there is a need for renewed debate about whether the current maximum stake levels for FOBTs and the current level of regulation of FOBT play is appropriate. The Association of British Bookmakers (ABB), which represents the bookmaking sector, has long claimed that increased regulation of FOBTs would lead to substantial job losses in betting shops (the ABB's submission to the last Triennial Review in 2013 claimed that more stringent regulations on FOBTs could cost up to 40,000 jobs[2]). The main aim of this research report is to make a wider assessment of the impact of FOBTs on the UK economy as a whole (rather than just the gambling sector). Looking at the economy as a whole, does increased spending on Fixed Odds Betting Terminals in an area create jobs and act as a spur to economic growth? Or does a shift in consumer expenditure from other goods and services to FOBTs tend to siphon resources out of local economies, destroying more jobs than are created?

[1] Gaming machines are classified into a number of categories according to the maximum stake and maximum winnings legally allowed in each category. See Gambling Commission (2015) Appendix 3.
[2] ABB (2013).

This report is structured as follows. Section 1 uses updated statistics from the Gambling Commission and from bookmaking companies' own annual reports to chart the increase in FOBTs over time and the shift from more traditional "Over the Counter" betting activity to FOBTs in the sector. Section 2 uses recent research on FOBT users to assess the number of people in the adult population using FOBTs, the profile of FOBT users by age, gender and labour market status, the extent of "problem" gambling arising from FOBT use and the characteristics of problem gamblers. Section 3 contains an updated assessment of the impact of FOBTs on local economies by comparing the number of jobs and the amount of economic output supported by a given amount of expenditure on FOBTs with the number of jobs and the amount of economic output supported by other types of consumer expenditure. This section also looks at the overall impact of increased FOBTs on tax revenues and the public finances. Section 4 assesses the limitations of the analysis and asks whether a more in-depth treatment of certain aspects of the impact of FOBTs might affect the results, and if so, in what way. Section 5 offers conclusions.

1 The shift from Over The Counter betting to FOBTs in betting shops

Fixed Odds Betting Terminals only began to be installed in betting shops in the early 2000s but the growth in the number of FOBTs and the revenue from them has been very substantial since then, to the extent that FOBTs have now overtaken more traditional Over The Counter (OTC) betting activities (such as bets on horseracing, etc.) as the main source of revenue generation for bookmakers.

Industry statistics from the Gambling Commission (2015) show that in the six years between 2008/09 and 2014/15, the number of FOBTs in betting shops in the UK increased from 31,439 to 34,552 – a rate of growth of just under 2% per year. Meanwhile, the Gross Gambling Yield[3] (GGY) from FOBTs increased from £1,051 million to £1,664 million – a rate of growth of around 8% per year (around 5% per year in real terms).

Meanwhile, the number of people employed in the bookmaking industry fell from 54,956 in March 2010 to 50,809 in March 2015 (a rate of decline of just under 2 percent per year), while the total number of betting shops fell from 9,128 in March 2012 to 8,819 in September 2015 – a decline of around 2 percent. This implies that each B2 gaming machine is being played more intensively, so that GGY is increasing even though the number of betting shops has fallen slightly over the past three years.

In the financial year 2008/09, Gross Gambling Yield from OTC betting was £1.66bn whereas Gross Gambling Yield from FOBTs was £1.05bn. By 2014/15, the equivalent figures were £1.41bn for OTC and £1.66bn for FOBTs. 2011/12 was the year in which machine gambling overtook OTC betting as the main source of revenue for the (off-line) betting sector for the first time.

The high rate of growth in revenue from FOBTs is reflected in the annual reports of the leading bookmaking firms. Despite the fact that William Hill in their most recent half year update described recent government measures to help players stay in control as “disruption to gaming revenues”, their profits from their circa 9,400 FOBTs increased to £949 per week – a year-on-year increase of 4 percent (William Hill, 2015). For Ladbrokes, profit per FOBT each week in 2014 was £913, but in the first half of this year their 8,700 FOBTs yielded £1,022 every week, an increase of 12 percent (Ladbrokes plc, 2015). Meanwhile, Coral's third quarter 2015 update showed their FOBTs each bringing in £963 per week, up 4 percent on last year (Gala Coral Group Coral, 2015).

[3] Gross Gambling Yield is defined by Gambling Commission (2015) as “the amount retained by operators after the payment of winnings but before the deduction of the costs of the operation.”

2 FOBT users, expenditure on gambling and problem gamblers

Characteristics of FOBT users

The 2012 Health Survey for England (HSE) and the 2014 Scottish Health Survey (SHeS) are the most recent detailed studies of gambling behaviour in (most of) the UK to date[4]. 3 percent of adults surveyed in the 2012 HSE had played Fixed Odds Betting Terminals at some point in the year prior to the survey; in the 2014 SHeS the comparable figure for adults was 4 percent.

Analysis of the 2012 HSE data by Landman Economics shows that 7.2 percent of survey respondents aged 16 to 24, and 6.4 percent of respondents aged 25 to 34, used gaming machines in betting outlets in the previous 12 months compared to only 2.4 percent of 45 to 54 year olds and just 0.7 percent of 55 to 64 year olds. Furthermore, just under 5 percent of male respondents used gaming machines compared to only 1 percent of women. Use of FOBTs therefore appears to be an activity concentrated among young men.

Breaking the HSE data down by labour market status, 6.6 percent of unemployed respondents had used gaming machines in betting outlets in the last 12 months compared to 3.6 percent of respondents who were in work. Analysis of the data by quintile of household disposable income (correcting for household size) showed that respondents in the second lowest income quintile (3.2 percent) and the middle income quintile (4.3 percent) were more likely to have used gaming machines in the last 12 months than respondents in the top two income quintiles and the lowest income quintile (between 2.2 and 2.6 percent).

Problem gamblers and helplines

Problem gambling is defined by the American Psychiatric Association as 'gambling to a degree which compromises, disrupts or damages family, personal or recreational pursuits' (Lesieur and Rosenthal, 1991). There is international evidence that problem gambling is associated with a range of physical and mental health issues, including

[4] The earlier report on the economic impact of FOBTs (Reed, 2013) used statistics from the 2010 British Gambling Prevalence Survey but BGPS has now been discontinued. Instead, questions on gambling behaviour were added to the HSE and the SHeS in 2012, and the plan is to repeat these questions every few years in future.

experience of depression, insomnia and stress-related disorders as well as alcohol abuse or dependence.

The Health Survey for England and the Scottish Health Survey use two different measures to identify problem gambling:

(i) The DSM-IV (Diagnostic and Statistical Manual-IV) "screening instrument" which contains ten diagnostic criteria ranging from 'chasing losses' (described to participants as '[when you] go back another day to win back money you lost') to committing a crime to fund gambling. A threshold of meeting at least three of the DSM-IV criteria is used to define problem gambling.

(ii) The Problem Gambling Severity Index (PGSI) consists of nine items ranging from chasing losses to gambling causing health problems and feeling guilty about gambling. Responses to each item are scored on a scale ranging from 0 (never) to 3 points (always). A score of at least 8 out of 27 is defined as indicating problem gambling in a respondent.

Data from the HSE and the SHeS for 2012 analysed by NatCen and reported in Gambling Commission (2015b) show that in 2012, 7.2 percent of people who had used FOBTs in the last 12 months were identified as problem gamblers using either the DSM-IV or PGSI measures. A further 14.7 percent were identified as in the less severe 'moderate risk' category. The proportion of problem or moderate-risk gamblers was higher for FOBT users than for any other betting activity except for spread betting.

As with the overall profile of FOBT gamblers, the age profile of problem and at-risk gamblers who use FOBTs is heavily skewed towards younger people with 30 percent of this group being aged between 16 and 24, while 83 percent are aged under 45. Almost nine-tenths of problem and at-risk FOBT users are men.

Statistics from the gambling helpline www.gamcare.org.uk[5] show that in the 2013/14 financial year, 35 percent of calls to the helpline were from gamblers who were experiencing problems as a result of FOBTs or roulette machines. This compared with 28 percent of callers who were experiencing problems as a result of betting (including online betting and racecourse betting as well as OTC betting at betting shops). This means that FOBT users were much more likely to call the helpline than people involved in other forms of gambling were. In terms of the location which helpline callers were doing their gambling from, betting shops were the most common gambling location for callers in 2013/14 (43% of callers), followed by the internet (34% of callers).

[5] See GamCare (2014) for more details

3 The economic impact of increased expenditure on FOBTs

This section estimates the overall economic impact of increased expenditure on FOBTs on economic conditions in the localities where the FOBTs are located.

The impact on jobs and economic output

As Section 1 of this report showed, with OTC betting and employment in the betting sector in decline, Fixed Odds Betting Terminals are currently the only real growth area for the sector. The growth in FOBTs business has led industry representatives to lobby against greater controls on FOBTs (for example, a reduction in the maximum stake, currently £100 for B2 machines) on the grounds that restrictions on FOBTs would reduce growth and lead to job losses in the industry[6].

However, it makes no sense, economically speaking, to consider the impact of increased expenditure on FOBTs on the betting sector in isolation from the rest of the economy. Each pound which a consumer spends on FOBTs (net of winnings) is, by definition a pound which is not spent elsewhere in the economy. Hence the question of whether increased expenditure on FOBTs generate increased economic activity or not is really a question about whether each pound spent on FOBTs supports more economic activity than a pound spent elsewhere in the economy.

The basic approach taken in this report to calculating the impact of FOBTs on the economy is to estimate the amount of employment supported by a certain quantity of consumer expenditure on FOBTs compared with the employment supported by the same quantity of consumer expenditure on a weighted basket of other goods and other services in the economy. Thus, rather than asking the question “how much economic activity is created by Fixed Odds Betting Terminals?” the analysis here asks, “what is the change in economic activity if consumer expenditure shifts from other goods and services to FOBTs?” In terms of the aggregate economic impacts of FOBTs on the UK economy, the latter question is much more appropriate than the former.

Note that the focus here is explicitly on *local* economies; the analysis draws a distinction between expenditure on wages, which (if betting shop employees live reasonably locally) is likely to be “re-circulated” into the local economy via consumers spending a proportion of what they earn, and profits for the betting

[6] For example, the ABB's submission to a recent enquiry by the Scottish Parliament's Local Government and Regeneration Committee into proposed devolution of legislative powers over maximum stakes on FOBTs to the Scottish Government (ABB, 2015) referred to research undertaken by KPMG looking at data from 6,347 betting shops which found that at year-end 2014 there were nearly 500 systematically loss -making shops and a further 507 shops making less than £20,000 in profit per year and therefore considered 'at risk of closing' by the industry.

industry, which (given that most betting shops are owned by large-scale national chains) are not likely to be re-spent in the local economy.

The analysis in this section proceeds by attempting to calculate what proportion of Gross Value Added (GVA - a measure of economic output used by the UK Office for National Statistics – essentially equal to net industry revenue after subtracting costs of production) from FOBTs is accounted for by wage costs. This "share of wages in GVA for FOBTs" is compared with the proportion of GVA from consumer expenditure in the UK economy as a whole which is accounted for by wage costs (the "share of wages in GVA for overall consumer expenditure"). To the extent that £1 of expenditure on FOBTs supports fewer jobs than the "average" £1 of consumer expenditure, an increase in spending on FOBTs *will reduce overall employment and economic activity*.

The following assumptions are made about the amount of employment supported by Fixed Odds Betting Terminals:

- It is assumed that each set of 4 FOBTs supports one full-time job at the average hourly wage rate for people working in the gambling industry on an hourly rate (rather than a salaried basis). According to the 2014-15 Labour Force Survey Annual Survey of Hours and Earnings[7], the average annual salary for full-time employees in the gambling industry without supervisory responsibilities is £17,660. In practice is likely that FOBTs, as a completely automated gambling format, support less employment than this, but given that there is a maximum of 4 FOBTs per betting shop it seemed reasonable to apportion at least some cleaning and maintenance time for each shop to maintain the FOBTs and the environment around them, as well as allowing for some of the tasks undertaken by counter staff in betting shops to support FOBT play (e.g. use of debit cards rather than cash to fund play, "selling" the machines to customers by offering free play sessions and tournaments as marketing tools, and so on.)[8]
- Gross Value Added from FOBTs is estimated by taking measured GVA for the entire gambling industry (including bookmaking, casinos, betting and online gambling) from the Office for National Statistics' Annual Business Survey

[7] Based on SIC 2-digit code 92, "Gambling and betting activities." The Annual Survey of Hours and Earnings is the largest survey of pay in the UK, based on a 1% sample of the entire working population. See http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/2014-provisional-results/index.html for more details.

[8] This is consistent with the ABB's *Code for Responsible Gambling and Player Protection in Licensed Betting Offices in Great Britain* which recommends that "all shop staff will be trained, in consultation with providers of responsible gambling expertise, to recognise a wider range of problem gambling indicators and will aim to identify those customers at risk of developing a gambling problem", and that "all shop staff will be actively encouraged to 'walk the shop floor' as part and parcel of an enhanced customer engagement role, including initiating customer interaction in response to specific customer behaviour which needs to be addressed." (ABB 2013, p 9) However, these initiatives are being implemented against a backdrop of low and falling levels of employment in betting shops.

dataset (ONS, 2015) and apportioning GVA in line with the share of total gross revenue from FOBTs as a share of total industry revenue[9].

Table 1 shows the calculation of the share of wages in Gross Value Added for the Fixed Odds Betting Terminals industry and compares this with the share of wages in GVA across UK private sector industries excluding financial services[10].

Table 1. Share of wages in Gross Value Added for FOBTs compared with average across UK private sector industries

Industrial sector	Gross Value Added (£bn)	Employment costs (£bn)	Share of wages in GVA (%)
FOBTs	1.96	0.15	7.8
Entire UK private sector (excluding financial services)	954.48	501.75	52.6

Notes:

FOBTs GVA calculation based on ONS's 2013 Annual Business Survey (ABS) estimate of GVA for the gambling industry (SIC2007 code 92), allocated pro-rata to FOBTs on the basis of data from Gambling Commission (2015) showing that betting shop activities (including OTC betting and FOBTs but excluding online betting) and account for approximately 43% of total gross revenue for the gambling industry, while FOBTs account for 52% of gross revenue from betting shops. Employment costs for FOBTs calculated assuming one full-time employee per set of 4 FOBTs at annual wage of £17,660.

Entire UK private sector GVA and employment costs calculations calculation based on data from 2013 ONS ABS for SIC2007 industries B (mining), C (manufacturing), D (electricity and gas), E (water), F (construction), G (wholesale and retail trade), H (transport and storage), I (accommodation and food services), J (information and communication), K (finance and insurance), L (real estate), M (professional scientific and technical activities), N (administration), R (arts and entertainment) and S (other service activities) summed together. Industry K (finance and insurance) is currently excluded from the ABS dataset due to concerns regarding data quality.

Table 1 shows that the total share of wages in Gross Value Added for Fixed Odds Betting Terminals, under our assumptions, is around 8 percent – much lower than the share of wages in Gross Value Added for the UK private sector (excluding financial services) overall, which is approximately 53 percent. The implication of these figures is that consumer expenditure on FOBTs supports very little employment compared with an average basket of consumer spending on goods and

[9] Statistics from Gambling Commission (2015) show that FOBTs account for approximately 52% of total gross revenue for the gambling industry.
[10] The UK public sector – principally health and education – has been excluded from the analysis because most of what the sector produces is not sold at market prices and hence is not an relevant destination for consumer expenditure.

services. If one pound of consumer spending is diverted from other goods and services to FOBTs, it is likely to support less than one-sixth as much employment as it would have done, on average, if that pound had been used to buy other goods and services. The corollary of this finding is that FOBTs deliver particularly high profits for bookmaking firms because wage costs required to support FOBTs are so low relative to the amount of revenue that they generate.

In terms of overall employment generation, what is the impact on local economies of a shift of consumer spending into FOBTs? Taking into account average wages in the betting sector compared to average wages across the UK private sector, this analysis finds that £1bn of "average" consumer expenditure supports around 21,000 jobs across the UK as a whole, whereas £1bn of expenditure on FOBTs supports only around 4,500 jobs in the UK betting sector. This implies that, other things being equal, **an increase of £1bn in consumer spending on FOBTs destroys just over 16,000 jobs in the UK**. Furthermore, the jobs created in the UK betting sector are on average lower paid (average full-time weekly salary around £18,000) than jobs created by consumer expenditure on other goods and services (average full-time annual salary around £32,000[11]).

This is important in terms of the likely expansion of the FOBTs industry over the next decade, if rules governing maximum stakes stay as they currently are. Table 2 extrapolates the trend in Gross Gambling Yield from the period 2008/09 to 2014/15 to provide estimates of total gambling yield from FOBTs in 2015/16 (the current financial year) and 2025/26 (ten years from now). The Table shows the implied growth in GGY from 2015/16 onwards, and the implied loss of jobs across the economy as a whole resulting from this expansion of FOBTs in the betting sector.

[11] Source: comparison of data from Annual Survey of Hours and Earnings 2014 for average gross weekly full time earnings in the gambling sector (SIC2007=92) with average gross weekly full-time earnings across all industries.

Table 2. Implied growth in FOBTs business and economic impact at current rates of growth

Year	Total annual GGY from FOBTs (£bn)	Growth since 2015/16 (£bn)	Number of extra jobs in betting sector	Number of jobs lost in other sectors	Overall jobs impact (UK economy)
2015/16	1.7				
2025/26	2.8	1.0	5,000	-25,000	-20,000

Notes: all figures at April 2015 prices.

Source: author's own calculations

Table 2 suggests that Gross Gambling Yield from FOBTs will increase from £1.7 billion to £2.8 billion over the next ten years, resulting in a gain of around 5,000 jobs in the betting sector but a loss of around 25,000 jobs elsewhere in the economy, leading to an overall net reduction of around 20,000 jobs for the economy as a whole by 2025/26.

Over the ten year period, the impact of the expansion of FOBTs in terms of reduced wage payments to people working in the local economies where FOBTs are established is to reduce the total wage bill in these areas by around £700 million by 2025/26. This is due to a combination of two factors: (a) the reduction in the total number of jobs supported by consumer spending as a result of switching spending from other goods and services into FOBTs, and (b) the fact that jobs arising as a result of the expansion of FOBTs are relatively low-wage compared with jobs supported by other types of consumer spending.

Impact of increased FOBTs on tax receipts

One important aspect of the economic impact of increased numbers of FOBTs is their impact on tax revenues. This report models three main revenue impacts of a shift in consumer expenditure towards FOBTs:

(1) Increased receipts of Machine Games Duty (MGD) – this is paid at a rate of 25% on gross revenues from category B2 gaming machines (following an increase from the previous rate of 20% in March 2015).
(2) Reductions in VAT receipts arising from reduced consumption on goods and services elsewhere in the economy, the majority of which attracts VAT at the standard rate of 20%[12].

[12] The House of Commons Library (2012) reports that approximately 52 percent of overall consumer expenditure is subject to the standard rate of VAT of 20%. This assumption has been used in the

(3) Reductions in income tax and National Insurance Contributions (NICs) arising from reduced overall employment in the UK economy (as explained above), meaning that there are fewer people in work to pay income tax and NICs to the UK Exchequer.

Table 3 adds these tax revenue impacts together to calculate the total impact of the expansion of FOBTs on tax revenue over the 3-year period of the next Triennial Review (up to 2019/20) and over a 10-year period (up to 2025/26).

Table 3. Impact of increase in FOBTs on per-year tax revenues over a 3-year and 10-year period

Change in tax revenue	2019/20 (£m)	2025/26 (£m)
Machine Games Duty	+74	+283
Income tax and NICs	-61	-231
VAT	-45	-170
Total	-32	-118

Notes: Machine Games Duty revenues calculated as 25% of the increase in Gross Gambling Yield over 3 and 10 years using GGY figures in Table 2.

Income tax and NICs revenues calculated assuming that the average full-time weekly wage of additional workers taken on in the betting sector is £23,760 per year, whereas the average wage of workers made redundant in other sectors of the economy is £32,250 per year.

Reduced VAT revenue calculated on the basis that 52 percent of consumer expenditure shifted from other goods and services to VAT would have attracted VAT at the standard rate of 20% (House of Commons Library, 2012).

Table 3 shows that although the expansion in FOBTs over the period covered by the next Triennial Review is estimated to lead to increased MGD revenue of around £75m, this is accompanied by a reduction in income tax and NICs revenue of around £60m and reduced VAT revenue of around £45m, meaning that total tax revenue decreases by just over £30m. By 2025/26, further expansion of FOBTs in line with current trends is projected to lead to a £120 million net loss for the Exchequer.

calculations in Table 3. Note that gambling expenditure on FOBTs does not attract VAT as it is subject to Machine Games Duty instead.

4 Limitations of the analysis

The analysis of the economic impact of FOBTs presented in this paper has not attempted to capture every aspect of the impacts because of the inherent difficulties of modelling some of the potential economic impacts. This final section discusses how the results might change if it were possible to take account of some of these other aspects of the economic impacts of FOBTs.

Impact of increased profits

The economic analysis in this report has only looked in detail at the consequences of lower levels of wages supported by gamblers' spending on Fixed Odds Betting Terminals compared with consumer spending on most other goods and services. The corollary of this is that profits derived from FOBTs in the betting sector tend to be higher (for a given amount of gambling spend) than for most other consumer goods and services industries. If these increased gambling profits were recycled into the local economy then this might create additional employment through another route. However, in practice it is unlikely that this will happen. To the extent that profits are distributed to shareholders as dividends, the shareholders are mainly likely to be large institutional investors (some of which will not be based in the UK) or high net-worth individuals. Neither of these groups is likely to reinvest significant amounts in the local economies where FOBTs have become established in high street bookmakers' over the last decades, because they are unlikely to be based in these local areas.

Other local spending by businesses

Some businesses contribute to the local economy through their supply chain – the goods and services which they purchase. A good example of this would be if a supermarket or grocery store sells products sourced from local suppliers – an increase in retail sales of these items would then lead to an additional positive "multiplier" effect on the local economy as demand for local products would increase in turn.

For betting shops, this kind of multiplier effect is likely to be very limited – indeed close to non-existent – as the amount of products purchased from local suppliers is minimal. The large bookmaking firms which control the vast majority of the betting shop sector source most of the materials used in the shops centrally including cleaning materials, shop display materials, and the equipment used in the shop (the

FOBT machines are supplied by two providers each supplying around half the betting shop market and one is under US ownership (SG Gaming). Thus to the extent that growth in FOBTs displaces other economic activity which is based on "buying local", it is likely that growth in FOBTs in the betting sector is likely to have an even more negative impact on the local economy than we have forecast earlier in this section. However, these local supply chain effects are difficult to model with any accuracy[13], which is why this analysis has focused on the employment impacts, which are more straightforward to model.

The cost of treatment for problem gambling

One of the key external costs arising from gambling activity is the cost of treating gambling addicts and other problem gamblers[14]. This is a key topic for further research. Given that the proportion of problem gamblers among FOBT users appears to be higher than for other forms of gambling, any increase in consumer spending and/or more intensive use of FOBTs in the UK betting sector is likely to lead to an increased incidence of problem gambling. Because of the limited UK research on the costs which problem gambling imposes on the NHS, local authorities, and on the problem gamblers themselves and their families, this study has not attempted to include these "negative externalities" arising from increased use of FOBTs in the calculations of the economic impact of FOBTs. However, if it were possible to include these additional costs the result would be that increased FOBT activity would have even more of a negative impact than the results in this study indicate.

Potential links between gambling behaviour and criminal activity

The potential links between gambling behaviour and criminal activity is an under-researched area in the UK[15] and so this report has not attempted to include any estimate of the costs of criminal activity in the analysis. However, some indicative evidence is available from police statistics obtained by Landman Economics in October 2015 under the Freedom of Information Act. Table 4 shows the number of incidents in betting outlets requiring police assistance for the calendar years 2013 and 2014, together with comparable figures for other gambling venues (e.g. casinos, entertainment centres and bingo halls). The figures for 2014 show a 51 percent

[13] See New Economics Foundation (2002) for an example of modelling local supply chain effects.
[14] There have been previous attempts to estimate the cost of treatment for problem gamblers in the United States: see for example Thompson and Quinn (1999). In the UK the evidence base on the costs of problem gambling is thinner.
[15] There is some research in the United States, for example Kindt (2003).

increase in the number of incidents in betting shops requiring police assistant compared to the previous year – even though the number of active premises declined slightly by the end of 2014 compared to 2013. This compares with almost no increase in the number of incidents per venue for other types of gambling venue. In 2014, an average betting shop was over seven times more likely to be witness to an incident requiring police assistance compared to other types of gambling venue taken together. It seems clear that violent behaviour in betting shops is on the increase and an increased proliferation of FOBTs – with increased numbers of players incurring losses from gambling on B2 machines – is a likely reason for this trend. In 2013, betting shop managers told a BBC *Panorama* documentary that they believed one cause of the rise in violent crime was FOBTs due to the relatively high stakes involved.

Table 4. Number of incidents requiring police assistance in betting shops and other gambling venues, 2013 and 2014

	Betting shops			Other gambling venues		
Year	Number of incidents	Active premises at end of year	Average incidents per premise	Number of incidents	Active premises at end of year	Average incidents per premise
Jan – Dec 2013	7,436	9,040	0.82	429	2,620	0.16
Jan – Dec 2014	11,232	8,980	1.25	479	2,747	0.17

Source: Gambling Commission responses to Freedom of Information requests from Landman Economics (Jan-Dec 2014 figures) and the Campaign for Fairer Gambling (Jan-Dec 2013 figures). See http://www.gamblingcommission.gov.uk/About-us/Freedom-of-Information-Act/FOI-requests.aspx for full details.

Notes: "other gambling venues" comprise: casinos, adult gaming centres, family entertainment centres and bingo halls.

5 Conclusions

This research project has provided updated evidence on the economic impact of future growth in the number of Fixed Odds Betting Terminals (FOBTs) in use in betting shops in the UK over the next decade.

The report first established that gambling industry revenue from FOBTs is growing at a rapid pace – around 5 percent per year in real terms, adjusting for inflation. FOBT users are particularly likely to be young adults, male, and/or unemployed. They are also more likely to be classified as "problem" gamblers using the DSM-IV or PSGI definitions, and are also more likely to experience symptoms associated with “problem” gambling (e.g. gambling addiction) than OTC betting shop customers.

The most important finding from this report is that increases in spending on FOBTs are likely to *destroy* jobs in the UK economy rather than creating them. For every additional £1 billion spent on FOBTs, an estimated 4,500 jobs are created in the betting sector. However, at the same time consumer spending on other goods and services falls by £1 billion, which reduces employment in other industries by around 21,000. The reason for this is that FOBTs are a very “labour-unintensive” form of consumer spending. The fact that the machines are automated means that FOBTs support very few jobs compared with expenditure on other goods and services. Furthermore, a shift of consumer spending from other goods and services into FOBTs reduces overall tax revenue accruing to the Exchequer. Revenue from Machine Games Duty increases but not by enough to offset falls in revenue from income tax, National Insurance contributions, and VAT.

The implication of this analysis is that while relaxing the restrictions on maximum gambling stakes and maximum number of machines per betting shop would be good for the betting sector (in terms of increased revenue and some increase in employment) it would be bad for the rest of the economy (because many more jobs would be lost elsewhere in the economy than would be created in the betting sector). Even if current restrictions are not relaxed and the current rate of growth in FOBTs continues over the next decade this is likely to lead to a net loss of over 20,000 jobs across the UK. There is also evidence that the growth in the number of FOBTs is associated with an increase in incidents requiring police attendance at betting outlets.

The clear implication for policymakers is that *increasing* restrictions on FOBTs – for example, reducing the maximum stake down from £100 to a lower figure – would help increase UK employment because it would result in a shrinkage of the number of FOBTs in use in betting shops and divert consumer spending into other areas of the economy which are more conducive to employment growth. It is also possible that a lower maximum stake for B2 gaming machines might divert betting expenditure into other forms of gambling – for example the lower-stake B3 gaming

machines, or Over-the-Counter betting – which are less harmful (according to the statistics on problem gambling) and also, in the case of OTC betting, have the potential to support higher levels of employment per betting shop.

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