



Regulation of online gambling in Sweden

Evaluating tax scenarios in order to define the best regulatory model for the re-regulation of online gambling

Prepared by PwC's Gaming Centre of Excellence
November 2012

Disclaimer



This document has been prepared only for Branschföreningen för onlinespel and solely for the purpose and on the terms agreed with Branschföreningen för onlinespel. We accept no liability (including for negligence) to anyone else in connection with this document, and it may not be provided to anyone else without our consent. Any recipient of this (other than our client) is, with respect to personal data in the report, required to comply with the Data Protection Act 1998.

This is the original version of our study, which was prepared in English. All possible care has been taken to ensure that the Swedish translation of this report is an accurate representation of the original. However, in all matters of interpretation of information, views or opinions, this original language version of our report takes precedence over the translation.



About the authors

PwC is a major provider of consulting and advisory services to the public and private sectors covering: strategy, policy and economics, financial management, people, outsourcing and shared services, procurement, technology, governance, risk and controls and programme/project management.

Our experience and credentials in the gambling sector range widely, spanning from evaluations of the socio-economic impact of casino developments, to numerous engagements where we have provided commercial, financial and operational due diligence services, as well as strategic advice and market reviews, to numerous types of gambling operators (casino, gaming machine, bingo and online gambling operators among others), financial institutions, and public bodies in various countries (including the UK, France, Germany, Italy, Ireland, Greece, Spain, Portugal, the Netherlands, Eastern Europe, South Africa, Macau and the US).

This study was prepared by PwC's Gaming Centre of Excellence, in Stockholm and London.

Contact:

David Trunkfield
Partner, Strategy, Head of Gaming for PwC
Direct Line: +44 (0) 2078 046 397
Mobile: +44 (0) 7764 235 446
Email: david.trunkfield@uk.pwc.com



Table of Contents

	Page
1. Executive summary.....	5
2. Introduction.....	7
2.1. Purpose of this study	
2.2. Scope and approach	
2.3. The online gambling market in Sweden: the current situation	
2.4. Terms of reference	
3. Different approaches to taxing online gambling.....	16
3.1. Effects of the range of permitted gambling products	
3.2. The effects of the tax level	
3.3. The effects of the chosen tax base	
3.4. Conclusion	
4. Lessons from online regulation in other jurisdictions.....	21
4.1. UK	
4.2. Italy	
4.3. France	
4.4. The Czech Republic	
4.5. Denmark	
4.6. Tax choices made by selected other jurisdictions	
5. Modelling the impact of re-regulating online gambling in Sweden.....	41
5.1. Overview of scenarios and modelling assumptions	
5.2. Overview of model output	
5.3. Scenario 0: Status quo	
5.4. Scenario 1: 20% tax on GGR	
5.5. Scenario 2: 15% tax on GGR	
5.6. Scenario 3: 10% tax on GGR	
5.7. Factoring in Svenska Spel's profit contribution to the state	
5.8. Conclusions from modelling	
6. Non-tax considerations involved in re-regulating online gambling in Sweden.....	56
6.1. Enforcement of gambling regulation	
6.2. 'Problem gambling' and player protection	
6.3. Other economic benefits	
7. Conclusions.....	63



1 Executive summary

This study investigates the potential social and economic impact of re-regulating online gambling in Sweden. Specifically, it considers the relative merits of introducing different rates of tax on gross gambling revenue (10%, 15% and 20%) when re-regulating the market. The principal focus of the study is the impact of regulation and taxation on the proportion of the market which is accounted for by operators regulated with a Swedish license ('absorption'), and hence the degree of regulatory control over the industry. Ultimately this controls the ability of the government to protect players and to effectively address problem gambling concerns. We also provide an estimate of the potential tax revenues to the state under different re-regulation scenarios and of the state's share of Svenska Spel's online GGR.

Regulating the online gambling market in Sweden with a 10% tax on gross gambling revenue ('GGR') would result in the highest proportion of the market being regulated under a Swedish license (.se license) relative to the other higher tax scenarios modelled and the status quo. This gives the regulator the greatest oversight of the market and enables the highest level of player protection and problem gambling control. This tax scenario is thus better in line with the Swedish government's primary objective in gambling regulation (i.e. consumer protection). On the other hand regulating with a 20% tax on GGR would result in lower absorption (and thus a lower level of regulatory control in terms of player protection and problem gambling control) but higher tax revenue in the short term, which is not the government's primary objective in gambling regulation. Having the maximisation of tax revenue as a primary objective in gambling regulation would also contradict guidance provided by the European Commission and the ECJ.¹

In addition, further non-tax benefits derived at lower rates of tax (e.g. job creation, greater marketing spend and driving innovation and development within the ICT sector²) would help mitigate, the slightly lower projected tax revenues relative to a higher tax rate scenario, at the same time as delivering greater non-financial benefits associated with a higher rate of absorption (e.g. higher levels of problem gambling control). For example a larger locally-licensed market (which is best supported by the 10% tax on GGR) is also expected to lead to greater employment opportunities in the industry. We note in particular the potential role of leading ICT gambling companies in Stockholm, providing mainly highly innovative B2B solutions for B2C gambling operators across the world, in supporting employment. This Stockholm ICT cluster can be best compared to the 'Silicon Valley' of the global digital gambling industry, and would be expected to best be able to continue developing and to support employment in the industry under a 10% tax on GGR.

All other things being equal, in the long term we would expect a 10% tax on GGR to lead to the greatest tax revenues as this rate will ultimately sustain the highest proportion of the market being regulated with a Swedish license and encourage higher levels of growth than other higher tax scenarios.

Retaining the status quo would result in both the lowest level of player protection and problem gambling control and the lowest revenues to the state.

Our conclusions are based on a number of key findings which we discuss in detail within this study:

¹ This is referred to in the following ECJ case rulings C-275/92 Schindler and C-243/01 Gambelli and in the EC's staff working paper, "Online gambling in the Internal Market", Strasbourg, 23.10.2012

² Information and Communication Technologies.



- Regulating online gambling with a fuller range of products is more likely to incentivise customers to use the Swedish-regulated offering thus maximising the size of the locally regulated market and generating better regulatory control and higher tax revenues
- A competitive tax rate that takes account of the margins achieved in the global online sector encourages operators to participate in the locally regulated market and enables them to provide customers with an attractive alternative to businesses operating without a Swedish license
- A tax on GGR is the most appropriate way to regulate online gambling and complements a fuller range of products and a more competitive tax rate, again positively affecting 'absorption'
- By maximising the size of the locally regulated market and therefore minimising the size of the non-locally regulated or even 'black' market, a GGR tax at a competitive rate enables greater control of fraud, corruption, 'problem gambling' and effective player protection. It supports the effective implementation of social responsibility policies as a higher proportion of customers will be playing on sites locally licensed and with appropriate regulatory oversight
- The experience of other EU jurisdictions suggests that regulation of online markets does not cannibalise the offline (retail) sector in a material way. Attempts to prevent customers accessing and playing on online sites (e.g. ISP and payment blocking) have proven to vary in effectiveness (and none have proven truly effective) due to legal, practical and technical limitations. The online gambling sector will therefore exist whether it is under a local license or not, implying the best approach is to introduce a competitive tax base and rate that incentivises operators to obtain a local license and that also incentivise customers to transact with locally regulated operators, due to the products and prices on offer compared to operators outside of the local regulations

Our conclusions have been based on, amongst other things, extensive analysis of the gambling markets across Europe, particularly those which have already regulated online gambling, as well the development of a detailed market and economic model to capture the learnings from other countries, economic theory, customer and operator incentives and our experience in this sector.

2 Introduction

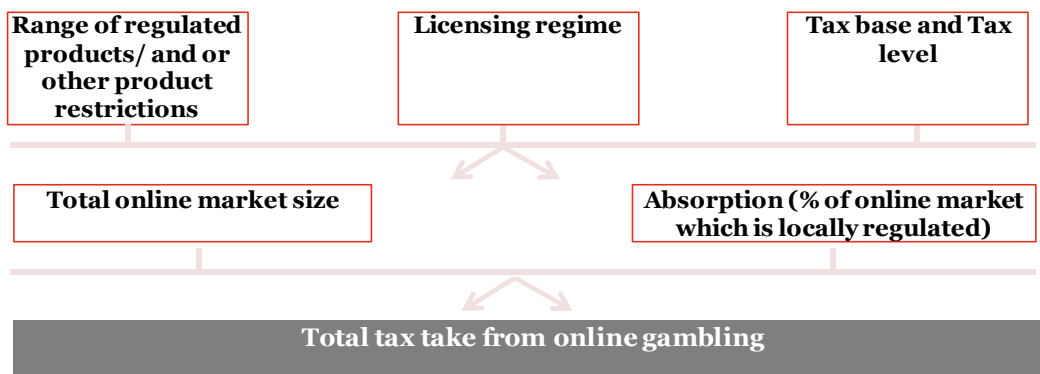
Regulators and fiscal authorities across the globe take a wide range of approaches to regulating online gambling. These involve decisions on the nature of regulation (or re-regulation) of the online gambling market (e.g. which products to regulate, the number of licenses to grant, licensing requirements) as well as what tax base to use and the rate of tax to apply. Gambling tax can be applied to the industry in a number of different ways, the most common of which are:

- a tax on gross gambling revenue (GGR) - for games in which the operator accepts risk GGR is defined as stakes less winnings less marketing bonuses; for games in which the operator accepts no risk GGR is defined as the revenue that accrues to the operator (e.g. commission or equivalent charges). This is the most common form of gambling tax being introduced today
- a tax on stakes (or tax on turnover), i.e. the total monies gambled. There are fewer examples of markets where this has been introduced in recent years (or is proposed to be introduced)

In addition to these gambling specific taxes, there may also be gambling license fees, sales or VAT taxes and corporate taxes. These are excluded from the scope of this report.

Figure 2.1 below illustrates the main determinants of the tax take from online gambling.

Figure 2.1 – Main drivers of online gambling tax revenue



2.1 Purpose of this study

The background to this study is the ongoing trend towards country by country regulation of online gambling across Europe, and the decisions that regulators and politicians are making on how to regulate their markets under national law. These decisions involve the range of products to regulate, licensing conditions (e.g. number of licences, conditions of application), the tax base, the level of tax, as well as other considerations. There is currently debate in Sweden regarding a potential re-regulation of online gambling. The question being asked is: “is a move from Sweden’s current exclusivity system, under which only state sanctioned monopolies (ATG and Svenska Spel) are permitted to offer certain online gambling products, appropriate and if so what form should such a move take?”



Branschföreningen för onlinespel (BOS) has commissioned PwC to provide an independent, robust and quantified view of the potential benefits of re-regulating online gambling in Sweden. In particular, we consider the relative merits of regulating the market with different rates of GGR tax, in addition to considering the benefits of fully regulating the market (to cover all gambling products). The views expressed in this study are those of PricewaterhouseCoopers and not of BOS.

2.2 Scope and approach

The approach taken in this study has been to carry out a range of analyses and benchmarking of Sweden against other territories in order to draw relevant conclusions. We have used case studies of how online gambling markets have developed in the UK, Italy, France, the Czech Republic and most recently Denmark post-re-regulation (understood as openly allowing different operators to provide gambling products in a highly regulated manner to local end-customers under a local license),³ and examined the impact this has had on land-based gambling products in these jurisdictions. We have conducted and reviewed primary and third-party research and analyses, and drawn on experience from a significant amount of previous work in this sector, with operators, regulators and governments. The majority of our work was completed in September 2012; the data presented here attempts to be the latest at the time of writing, however, we cannot guarantee the completeness of the data at the time of publication.

Based on the research and analyses completed, we have modelled four different scenarios for Sweden. The outputs from these scenarios are used to evaluate the potential impact on the size of the regulated Swedish online gambling market and the tax take from online gambling:

0. Status quo. Regulation of online gambling remains 'as is'
 1. Online gambling re-regulated with a 20% tax on GGR
 2. Online gambling re-regulated with a 15% tax on GGR
 3. Online gambling re-regulated with a 10% tax on GGR

The scope of this study is confined to online gambling in Sweden, including sports betting (including horse-race betting), casino, poker, bingo and lottery. We have modelled online lottery separately across all scenarios and the remaining products all together. In modelling the potential tax take from re-regulating online gambling in Sweden we have looked to the historical experiences of other countries who have recently regulated (or re-regulated) online gambling in their jurisdictions. We have excluded online lottery from these comparisons as online lottery products have tended to remain the domain of local monopolies when markets regulate or re-regulate, and also, because the success of online lotteries has varied significantly from country to country. This is different from the case of Sweden where lottery is provided by Svenska Spel and NGOs (see section 2.3).

Excluding lottery from our comparison of Sweden with other countries enables us to build a more accurate picture of the impact of re-regulation in Sweden when considering online gambling products other than lottery.

³ The form of 're-regulation' differs from country to country and is discussed at length in chapter 4.



In the case of online sports betting we have applied some sports betting specific considerations as a contributory factor to our modelling of the market as composed of all products (i.e. the impact of major tournaments on market growth). We have not explicitly modelled the offline (retail) market under different scenarios, however, we have included considerations of the potential impact of the online gambling market on the offline market, such as for instance cannibalisation; this is based on detailed examination of experiences from other countries.

For modelling purposes, we have assumed that the tax regime detailed in the scenarios above is applied from 1st January 2013, in order to work with complete year data. With regards to regulation of online gambling, we assume that it would not be possible for the regulator to significantly prevent non-Swedish regulated online gambling, reflective of the situation in other regulated European online markets, and Sweden's historical experience. The level of Swedish regulated versus non-Swedish regulated online gambling activity (i.e. the 'absorption' rate, defined here as the proportion of total gambling activity accounted for by operators with a local Swedish license, is a function of the range of online products permitted, license conditions (e.g. customer registration process) and the tax regime, as well as the extent to which the regulator is able to effectively enforce regulation (i.e. block illegal sites, enforce advertising restrictions etc) hence the rate will differ between scenarios; we discuss this in detail in chapter 5.

We make a number of other key assumptions as follows in our scenario modelling⁴:

- No mandatory stakes limits or deposit limits for customers
- No restrictions on the number of operator licenses
- No restrictions on the types of games permitted (e.g. in-play betting, casino games)
- Operators which obtain Swedish online gambling licenses will be allowed to advertise; however, those without licenses will not be permitted to advertise in Sweden. We assume that advertising bans are effectively enforced (in particular in the case of Above-the-line advertising) and thus contrary to the historical situation in Sweden there will be a benefit (in terms of advertising benefits) for operators from being regulated in Sweden
- Enforcement measures (such as ISP blocking and payment blocking) are not truly effective

Our model includes gambling taxes (on GGR), but excludes VAT (or equivalent) taxes incurred and corporation tax, as well as potential government revenue derived from licensing (including processing and application fees). This implies that the revenues to the state presented in this report will be lower than potential revenues to the state from re-regulating online gambling as a result of the exclusions already discussed.⁵

In addition to our scenario modelling of market size and gambling tax, we also provide a high-level estimate of the potential revenue to the state from re-regulating online gambling by also including an estimate of the state's share of Svenska Spel's online revenue.

The focus of our study is on evaluating the impact of re-regulating the market on 'absorption' and consequently on determining the proportion of the market which will fall under regulatory control. Ultimately this controls the ability of the government to protect players and to effectively address

⁴ These assumptions represent competitive market conditions, which evidence from other European jurisdictions suggests would be likely to result in higher absorption than restrictive market conditions, and would be consistent with the conditions in the majority of European jurisdictions.

⁵ We note that according to EU law member states are expected to treat licensing fees as a way of covering their costs of auditing and supervising regulated operators rather than as a way to raise revenue from the regulation of online gambling.



problem gambling concerns. We also provide an estimate of the potential tax take to the state under different re-regulation scenarios.

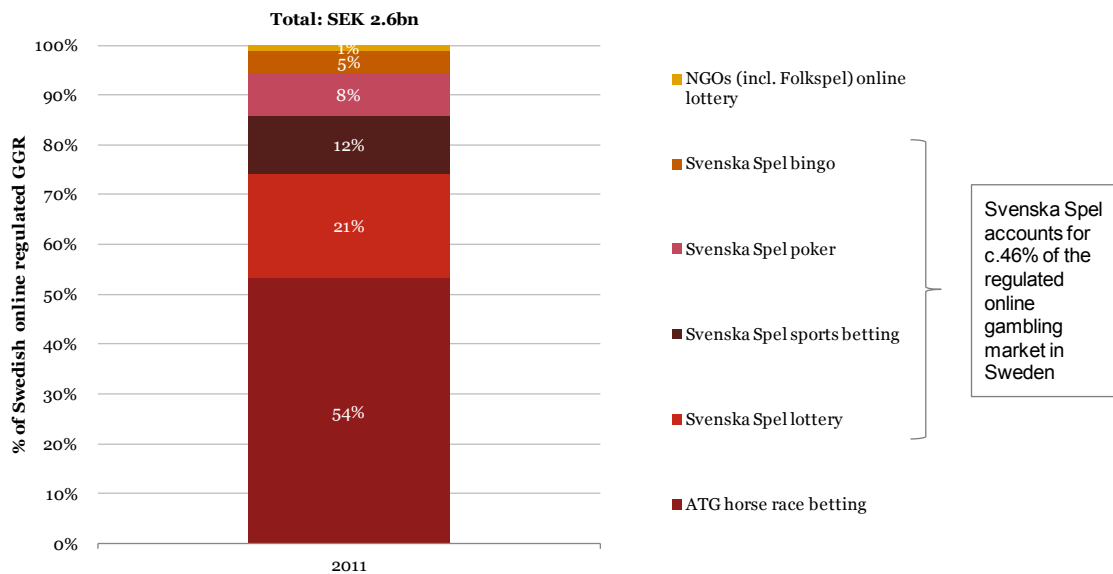
2.3 The online gambling market in Sweden: the current situation

2.3.1 Regulatory context

The Swedish gambling system is based on the principle of exclusive rights, with significant restrictions on entities which can offer gambling services in Sweden. As the system currently stands online gambling services can only be provided by state controlled companies (ATG - the legal horse racing monopoly, Svenska Spel – the legal sports betting monopoly which is also allowed to provide online poker and online bingo)⁶ and local lotteries (non-governmental organisations the most important of which is Folkspel). Currently online casino games are not regulated in Sweden.

The figure below provides an illustration of the current locally regulated online gambling market in Sweden.

Figure 2.2 – Swedish online regulated gambling market (GGR), 2011



Source: Svenska Spel Annual reports, H2, PwC analysis

The current range of products provided by ATG and Svenska Spel (jointly accounting for 99% of the locally regulated online market) is currently limited (for example Svenska Spel is not yet permitted to

⁶ ATG is 90% owned by the Swedish Trotting Association (ST) and 10% by the Swedish Jockey Club (SG), but is controlled by the Government via the composition of its Board. ST and SG appoint five members to ATG's Board while the Government appoints six members, one of whom is the Board Chairman. (Source ATG in Brief, ATG Annual report 2011). Svenska Spel is entirely owned by the government. The description of these companies as monopolies only relates to their legal status and does not reflect the commercial reality under which both ATG and Svenska Spel face competition from non-Swedish regulated operators.



offer online casino games)⁷ and the permitted payout levels are generally lower than payouts provided by .com operators resulting in payout levels, in the regulated market, which are considerably lower compared to international .com payout levels. For example, Svenska Spel's average sports betting payout is reported to be c.60% (2011),⁸ and ATG's average payout is c.70% (2011),⁹ considerably lower than international sportsbook payout levels of c.90-93% and from online sports betting payout levels in other regulated markets such as France and Italy where payouts are c.79% and c.82-83% respectively (in the regulated market only).¹⁰ These comparisons suggest that increased competition can lead to improvements in value to customers and are also confirmed by the findings of the Kiel Institute of the World Economics, 2010, which found that the local German monopoly led to worse customer value.¹¹ In addition, ATG and Svenska Spel face certain advertising regulations in how they present their games and approach customers (e.g. Svenska Spel is not allowed to offer deposit bonuses, or free bets).¹² At the same time the high levels of internet penetration and e-commerce in Sweden,¹³ and the popularity of gambling in general has led to a high degree of popularity for online gambling. The charts below present an illustration of the popularity of online gambling in Sweden compared to other European jurisdictions.

⁷ Gambling compliance, 4th May 2011, "Swedish monopolist seeks more fun". In this article GC quotes a Svenska Spel spokesman saying: "It has been pretty difficult in the past for us to get any permits for new products, or sometimes even changes to existing jackpots and games [...] A substantial part of the gambling market is online. We need to renew our offer to stay relevant and drive traffic away from unlicensed operators."

⁸ Source:H2. The average payout was also confirmed in a conversation with a Swedish market expert with intimate knowledge of Svenska Spel. Maximum payouts differ by type of game for example the maximum payout for stryktipset and europatipset is 65%, whereas the maximum payout for oddset is 80%.

⁹ ATG annual report 2011, p9.

¹⁰ National regulators: ARJEL (France), AAMS (Italy). The payout level is a weighted average payout for the whole period of regulation for which there is publicly available data. In France Q2 2010-Q2 2012 and in Italy 2010 and 2011.

¹¹ Institute for the World Economy (IFW) "The monopoly for sporting bets in Germany: Status Quo and Reform approaches. IFW researchers analysed the pricing behaviour of the monopolist ODDSET and found that typical pricing inefficiencies on betting markets were reinforced under the monopoly. A comparison of the odds of private providers with those of state provider ODDSET showed that the degree of bias at ODDSET was significantly more defined. The fact that ODDSET offers almost exclusively combination betting (which in unfair bets leads to higher prices) and the exploitation of the bettor's betting habits with inefficient odds, confirms that there are fiscal interests in maintaining the state monopoly.

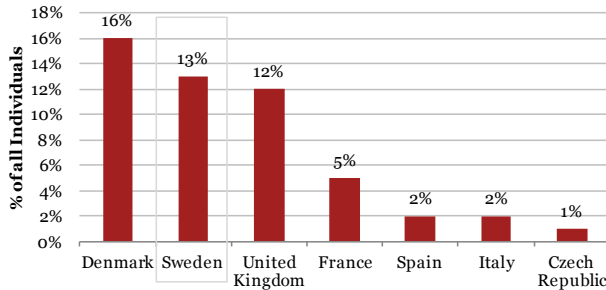
The study further found that: 'when bettors put a bet on at ODDSET at 16.6 per cent they have to expect a significantly greater loss than with private providers...the bookmakers have on average paid out a larger share of the stakes for main games, the higher the occurrence probability of the betting result was, based on the odds, on which the bettors placed the bets.'

¹² High level overview of Svenska Spel website and discussion with Svenska Spel customer services.

¹³ Sweden has some of the highest levels of internet and e-commerce penetration with 91% of households having internet access, compared to 83% in the UK and a EU27 average of 73% (2011, Eurostat). Its e-commerce penetration is also very high with 71% of individuals stating that they have made an online purchase in the past 12 months compared to a EU 27 average of 43% (2011, Eurostat).

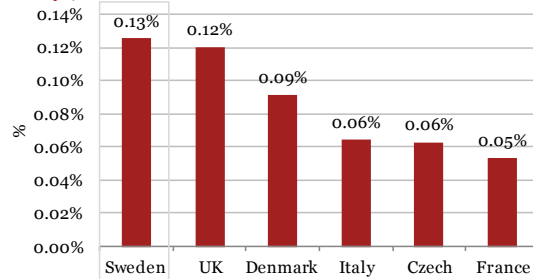
Figure 2.3 – Comparing the popularity of online gambling in Sweden vs. other European jurisdictions, 2011

% of individuals who placed a bet or play gambling or lotto over the internet in the last 12 months, 2011



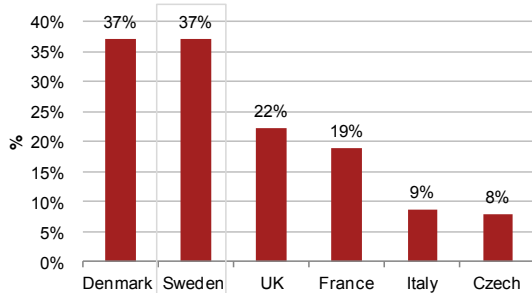
Source: Eurostat

Online gambling GGR as % of GDP (excluding lottery), 2011



Source: H2, IMF

Online gambling as % of total gambling market (excluding lottery), 2011



Source: H2, Svenska Spel, PwC analysis

The popularity of online gambling activities among Swedish players, coupled with the restrictions placed on the regulated online offering and the inability, due to the lack of legislative clarity,¹⁴ of the national regulator (Lotteriinspektionen) to prevent non-Swedish regulated operators from advertising in Sweden, has led to a large portion of the online gambling market in Sweden falling outside the control of the Swedish regulator and government as Swedish players have responded to the superior offerings of not-locally regulated operators.¹⁵ This trend is most clearly seen by considering Svenska Spel's declining share of the online poker market. Svenska Spel was first allowed to offer online poker in March 2006. After its initial capture of a proportion of the Swedish online poker market (c.38% in 2007, the first full year after Svenska Spel was permitted to offer online poker) its online revenues from poker and consequently its share of online poker gradually declined (Svenska Spel's share of online poker in Sweden was estimated at c.30% in 2011) as players have gradually been drawn away to more attractive poker offerings.¹⁶¹⁷ The chart below represents the evolution of the online gambling market in Sweden.

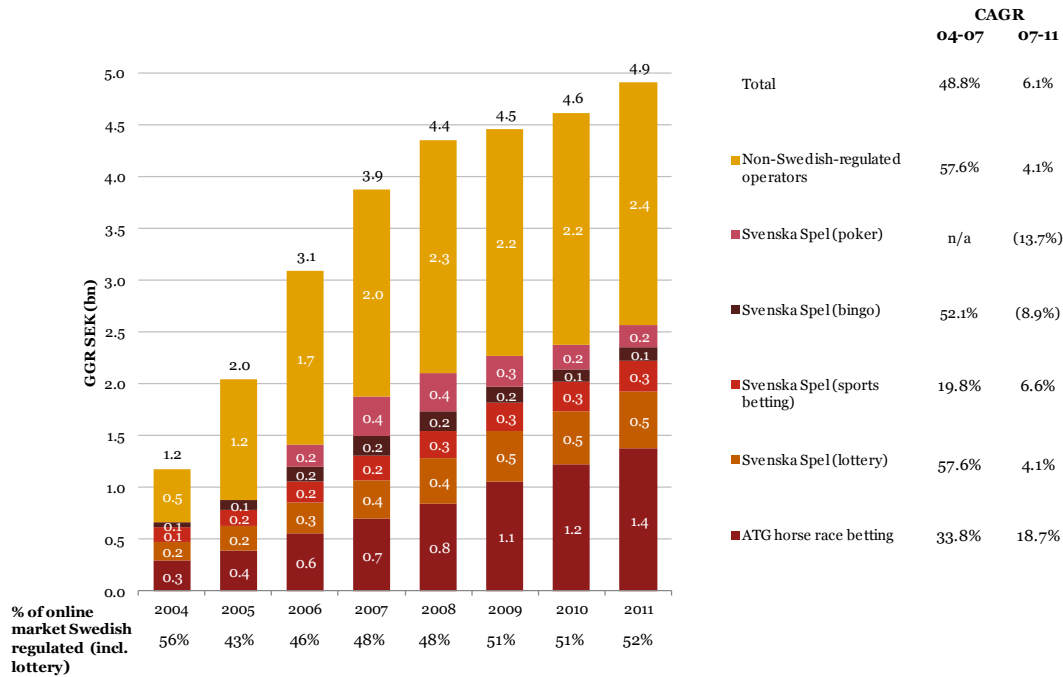
¹⁴ The question of whether non-Swedish operators can advertise in Sweden has been marred by a lack of legislative clarity following the well-publicised prosecution of the former editors of two popular newspapers, the Expressen and the Aftonbladet, found guilty in 2004 of violating the advertising provisions of the Lotteries Act (main act regulating gambling in Sweden) by allowing non-Swedish regulated operators to advertise in their newspapers. A Swedish Court of Appeal, however, went on to acquit both editors in June 2011 (Svea Hovrätt, judgment dated 22 June 2011, mål nr B 1016-08 and B 1103-08) on the grounds that the lottery act treats illegal games differently depending on whether they are organised in Sweden or abroad and consequently contravenes EC Article 12 which prohibits discrimination on grounds of nationality. This case currently continues.

¹⁵ This also seems to be supported by reported Svenska Spel statements: "Since we are losing market share, managing our current games does not suffice." "In this respect I hope that the government is a little more daring and permits us to develop fun games that appeal to many people. This is where we see possibilities". Source: Gambling Compliance, 4th May 2011, "Swedish Monopolist Seeks More Fun".

¹⁶ H2.



Figure 2.4 – Swedish online gambling market, 2004-2011



Source: H2, Svenska Spel annual reports, Loteriinspektionen, PwC analysis

Note: Estimates of the size of the non-Swedish regulated market vary as none of this data is publicly available. Estimates from Svenska Spel place the non-Swedish regulated market size at c. 2.2bn (SEK) in 2011 (CAGR 07-11, c.9%). Above we present data from H2 in order to preserve a consistent methodology with our case study chapter. Having reviewed available public sources we believe that H2 estimates are reliable working assumptions in the case of Sweden.

As the chart above illustrates, nearly half the online gambling market in Sweden falls outside Swedish regulatory control. In terms of the profiles of non-Swedish regulated operators providing services to Swedish players we estimate that operators accounting for most of the non-Swedish regulated market in GGR terms are licensed elsewhere in the EU, with a small proportion of market GGR accounted for by Asian operators (e.g. Pinnacle and SBOBet). Non-EU licensed operators experience a competitive disadvantage relative to their European counterparts since Swedish players are required to pay a winnings tax of 30% if they wish to bring their winnings into Sweden, whereas they are not subject to this tax in the case of EU-licensed operators.¹⁸ We estimate that major EU operators (i.e. publicly listed operators or operators with a visible public profile in Sweden) account for c.20-30% on the market in GGR terms, with remainder of the non-Swedish regulated market accounted for by smaller EU and non-EU licensed operators.¹⁹ Overall a large number of non-Swedish regulated operators offer their services to Swedish players, with Svenska Spel estimating that at least 150 non-Swedish regulated companies offer their services to Swedish players.²⁰ This is confirmed by a quick search on online gambling review sites which suggests that a very large number of operators offer services to Swedish

¹⁷ In its annual report 2011 Svenska Spel attributes its declining revenues to intense competition from non-Swedish regulated operators.

¹⁸ Gambling Compliance: “Pokerstars.eu To Bypass Nordic Winnings Tax”, 16th February 2012, confirmed by a PwC interview with a Swedish market expert September 2012.

¹⁹ This is confirmed by the Swedish Tax Authority in their “opinion” (Ställningstagande) no. 131 514337-09/111, 16th June 2009.

²⁰ Gambling Compliance: “Not Beginning of the End for Monopoly, Says Svenska Spel President”, 4th July 2012.



players.²¹ We note that a large proportion of these operators whilst not Swedish regulated are regulated in other jurisdictions and thus already face similar regulatory controls and requirements than what we expect to be in place in Sweden on re-regulation and/or subscribe to voluntary agreements on measures to control problem gambling (e.g. CEN workshop standards).²²

Recently there have been increasing calls for a re-consideration of the current online gambling regulation.²³ This trend has been given further impetus by the publication of a recent report by the National Audit office in June 2012 which has criticised the current system for failing to meet its current aims in terms of consumer protection and failing to effectively address problem gambling,²⁴ with Claes Norgen, Sweden’s Auditor’s General, stating that: “Within the present system we think there are short-comings and inefficiencies which might lead to an increase, in the long run in addiction among consumers.”²⁵

At present it is not clear when reform of the Swedish online gambling market might take place with Sweden’s minister for financial markets stating that the finance ministry will announce its position before the general elections in September 2014.²⁶

In this report we seek to provide a rigorous and quantified perspective on the potential impacts of regulating online gambling in Sweden which we hope will positively contribute to the debate regarding the best regulatory system to adopt for online gambling in Sweden.

2.4 Terms of reference

In this study, we will use a number of terms for which the following definitions should be assumed:

Table 2.1 – Glossary

Term (or common variants)	Definition
Absorption:	<i>The proportion of the online market in Sweden that is Swedish regulated (and therefore taxable)</i>
Betting Exchange:	<i>No-risk sports betting business model. A betting exchange matches customer bets (with customers offering odds to each other) and charges commission on customer winnings</i>
Black market:	<i>Online or offline gambling activity supplied by operators not licensed or regulated in any jurisdiction</i>
Cannibalisation:	<i>The decrease in market growth in one gambling market as a result of the introduction or growth of another</i>

²¹ A review of gamingzion.com suggests that 252 sites offer services to Swedish players. A review of onlinecasinocity.com suggests that over 2,000 sites offer services to Swedish players accounting for 647 gambling site-owners who accept play from Sweden. Both sites were accessed on the 02 of October 2012

²² <http://www.ecogra.org/pressroom/PressReleases/PressReleasesView.aspx?ID=700adaff-3336-4972-a55f-6f3704e73f8a>, <http://www.ecogra.org/pressroom/PressReleases/PressReleasesView.aspx?ID=a58eadf7-e76c-4da8-9c4b-4f2d237c4099>

²³ PwC interviews with Swedish market participants.

²⁴ National Audit Office: “The Government’s role on the gambling market – are targets achieved?”, June 2012

²⁵ Gambling Compliance: “New Swedish Gambling Law by 2014, Says Finance Ministry”, 2th July 2012.

²⁶ Interview with Sveriges Radio, <http://sverigesradio.se/sida/artikel.aspx?programid=83&artikel=5173803>.



Cash poker:	<i>Non-tournament poker games where player stakes vary for every hand played (see 'tournament poker')</i>
Gambling (or Gaming):	<i>Placing money on the outcome of an uncertain event (includes sports betting and other gambling activities)</i>
Gross gambling revenue - GGR:	<i>For games in which the operator accepts risk GGR is defined as stakes less winnings less marketing bonuses; for games in which the operator accepts no risk GGR is defined as the revenue that accrues to the operator (e.g. commission or equivalent charges)</i>
Gross gambling revenue percentage - GGR % (or take-out rate):	<i>Gross gambling revenue divided by stakes. This represents the 'price' of gambling to the customer</i>
In-play betting:	<i>Placing money on the outcome of a sporting event (including horse racing) during the event itself. Also referred to as 'bet-in-play' or 'live-betting'</i>
Locally regulated:	<i>Online or offline gambling supplied by operators that are licensed to operate within Sweden or the relevant local jurisdiction. Often referred to as 'onshore' or 'Swedish regulated' (when referring to Sweden)</i>
Non-Swedish regulated / Not-locally regulated:	<i>Online or offline gambling activity supplied by operators not licensed within Sweden (in the case of online, typically licensed in another jurisdiction in the EU or EEA but also includes operators not licensed in any jurisdiction also referred to as 'black market operators'). This is also often referred to as unregulated or offshore. The majority of not-locally regulated operators in a jurisdiction (in GGR terms) will be regulated in other jurisdictions and will not belong to the 'black market'</i>
Offline:	<i>Retail gambling activity in betting shops, casinos, gambling or bingo halls, lottery or other gambling outlets</i>
Online:	<i>Gambling activity through non land-based channels (i.e. the internet, mobile phones and other interactive devices). Unless otherwise specified this excludes direct telephone betting over terrestrial lines</i>
Operator margin (or GGR margin):	<i>Gross gambling revenue s, as a percentage of stakes</i>
Payout:	<i>The total amount (winnings) received by the customer in prizes from successful bets or gambling games (also referred to as pay-back)</i>
Problem gambling:	<i>Gambling activity by customers which causes harmful consequences or which occurs despite their desire to stop</i>
Re-regulated market:	<i>Where the process of regulation (or re-regulation) has loosened the restrictions on the supply of gambling services thus enabling a more competitive market</i>
Retail:	<i>See 'Offline'</i>
Sports betting:	<i>Placing money on the outcome of a sporting event (including horse racing) or performance of a contestant</i>
Stakes (or 'turnover'):	<i>Total (gross) amount of money spent by customers on gambling activities</i>
Swedish-regulated	<i>See 'locally-regulated'</i>
Tournament poker:	<i>Poker game where a customer pays a fee to enter a tournament with the prizes being allocated according to the final finishing position of that tournament (see 'cash poker')</i>
Turnover tax	<i>Tax applied on the basis of an operator's turnover. Often referred to as 'stakes tax' or a 'tax on stakes'</i>



3 Different approaches to taxing online gambling

There are a number of different choices available to government in designing the online gambling regulatory regime in a country. In this chapter we will provide an overview of the range of choices available both in terms of what products to regulate, the level of tax and the base on which tax is applied and outline the main results of economic theory with respect to these choices.

Our analysis in this chapter leads to three main conclusions:

First, restricting the range of regulated products holds back online regulated market growth, limits absorption, and consequently limits the proportion of the online gambling market which falls under local regulatory control, a precondition for effective consumer protection and achievement of wider public policy considerations.

Second, given a competitive market with no limit on the number of operators, a lower tax will likely enable operators to provide an improved product offering to customers, and will therefore incentivise customers to use locally regulated operators, encouraging higher absorption, and reducing the size of the not-locally regulated market.

Third, economic theory and empirical evidence suggests that a tax on GGR has a number of advantages over a tax on stakes. For example a tax on GGR is likely to lead to stronger market growth in the regulated market and consequently to higher absorption than a tax on stakes. In addition, a GGR tax is more compatible with a broader range of online gambling products than a stakes tax.²⁷ As the online gambling market develops and matures, a tax on GGR is better able in general to accommodate product innovation.

3.1 Effects of the range of permitted gambling products

The market size of online gambling in a jurisdiction is the result of the intersection of demand and supply for online gambling in that jurisdiction. These are affected both by the price of gambling and the range of permitted gambling products. In an open and competitive market we would expect that competition among operators seeking to retain and acquire new customers would lead to continuous improvements in the range of available products as well as contributing to the increase in the level of player protection. This is in line with what has been observed in the UK where the variety of available products has increased over time (e.g. mobile betting, live betting, variety of online slot games) and where operators regularly contribute to charitable bodies (e.g. the Responsible gambling trust) in order to help address problem gambling, both in terms of better understanding the problem but also by contributing to its treatment.²⁸

²⁷ For example, traditional roulette would not be offered by operators at a stakes tax above 2.7% because the game would become unprofitable due to its low takeout rate. Also live betting could become very unattractive to players with a stakes tax. Since bets can be turned over very quickly, a turnover tax could mean that a 100 SEK bill put into play could vanish almost entirely in taxes during a day's betting thus weakening the attractiveness of the regulated product.

²⁸ Press, operator annual reports, interviews with market experts.

Increasing the range of regulated products in the Swedish online gambling market would be expected, in general, to lead to an increase in regulated market growth, and an increase in absorption. The reason for this is that allowing Swedish-regulated operators to offer a comparable product offering enables them to compete more effectively with non-Swedish regulated operators and reduces incentives for customers to seek out not-locally-licensed operators. This is in line with the conclusion reached in the recent EC communication on online gambling which states that:

“It is important for authorised operators to be able to offer sufficiently attractive products, because in the absence of credible and sustainable offers consumers will continue to turn to unregulated gambling websites, with the ensuing potentially harmful effects”²⁹

The increase in Swedish-regulated market growth and market ‘absorption’ is likely to be higher the wider the range of and the more attractive the permitted products are. The reason for this is that there are strong indications that online gambling products are complementary (i.e. a reasonably large proportion of online gambling customers (c.40%) use more than one gambling product).³⁰ This means that introducing an incremental product will have a larger effect than the increase in spending on that product alone as new online gambling customers for a newly regulated product will also play on other existing products.³¹ From an operator point of view, entry into a newly regulated online market typically has a number of associated fixed and semi-fixed costs for operators, such as the costs of regulatory compliance (e.g. legal fees), technical compliance with secondary regulations, the opportunity costs associated with the need to reallocate resources, and in some cases the development of a new team to service the market. Therefore operators will only consider entering the regulated market if the benefits (i.e. profits) they expect to receive from market entry outweigh the costs. Since the majority of online operators (and in particular large, well established operators) offer a wide range of different gambling products (with many covering all of sports betting, poker, casino and bingo), the benefits of entry into a market are driven in large part by the range of products permitted, with a more restrictive market driving lower potential profits. Hence, any restriction on the range of products permitted in the market will have the impact of reducing the incentives for an operator to seek a local license and therefore limit absorption. Economic theory thus suggests that opening up the range of online gambling products in the market, other things being equal, promotes absorption and leads to a larger proportion of the market being under regulatory and state supervision. See chapter 4 for supporting evidence from the experiences of other jurisdictions.

3.2 The effects of the tax level

If gambling regulations are introduced which increase operator costs, such as an increase in the level of gambling tax, all other factors being equal in a competitive market we would expect this to constrain growth in the market due to demand and supply-side effects. The precise impact of these effects will vary depending on the market context and the specific demand and supply characteristics of each

²⁹ European Commission: “Communication from the Commission to the European Parliament, the Council, the economic and social committee and the committee of the regions, Towards a comprehensive framework for online gambling”, Strasbourg 23.10.2012.

³⁰ Based on operator interviews. According to the UK Gambling prevalence survey for gambling as whole in 2010 c.48% of respondents were reported to have engaged in two or more gambling activities in the past year and according to a 2011 William Hill investor presentation c.33% of UK players use more than one gambling product (Based on Kantar Retail Gambling Tracker Apr-Jun 11).

³¹ A further practical reason of why this may be the case is that allowing Swedish-regulated operators to offer a comparable product offering to that of the non-Swedish regulated competition would limit the need for players to hold multiple accounts to play additional non-regulated games. This can re-present a significant convenience to them and further encourage them to use Swedish-regulated operators.



market; however the mechanisms through which these levers affect market growth, absorption and ultimately the tax take remain the same. We describe these mechanisms below.

From an operator perspective operating in a market is only viable if the benefits (i.e. profits) they receive from operating in the market outweigh the costs. As a result the product offering operators provide in the market (in terms of quality, price, customer service etc.) will be directly affected by the costs and benefits of operating in the market. If the costs faced by an operator in a market rise, for example due to an increase in the level of tax, then this will consequently put pressure on operators' product offering as they will have to adjust the offering to maintain profitability (e.g. by reducing the level of customer service provided, reducing offers to customers). A less attractive regulated product offering could consequently incentivise customers to use not-locally regulated offerings, which would not be similarly affected by changes in tax, reducing demand for the regulated offering and ultimately negatively impacting absorption. As already mentioned this is in line with conclusions reached in the EC communication regarding the need for an attractive local offering as a way to maximise absorption.

³²

The degree to which higher costs will lead to a weaker regulated product offering depends on the precise supply-side characteristics of the market. For example, reductions in tax may not be fully reflected in improvements in customer value, but instead be taken by operators as additional profit. On the other hand an increase in tax may not lead to a worsening in the regulated product offerings in markets where operators actively compete to offer customers better products and prices, especially when customers actively compare operators' offers. In general, we would expect that the more restricted the market (i.e. less competitive), the more likely it would be that the regulated product offering would deteriorate as a result of tax increases, and the more competitive the market the less likely that the regulated product offering would deteriorate.

The regulatory costs associated with operating in a market also influence supplier incentives, as they directly influence the attractiveness of the market for operators. For newly regulated (or re-regulated) gambling markets, a higher tax level (or other significant market restrictions) can act as a barrier to entry, as it may make market entry appear unappealing relative to other market opportunities, or it may encourage operators to remain not-locally regulated and operate outside of the scope of a particular jurisdiction's regime. Higher costs can also lead to lower investment in gambling due to the poorer return on investment for operators (e.g. as has been the case in France),³³ and therefore reduce levels of gambling activity in the locally regulated market. As a result, regulation which controls the total cost burden faced by operators is a crucial factor in determining the expected level of 'absorption' in a market. Higher costs, in general, will encourage a lower rate of 'absorption' and a larger not-locally regulated market.

3.3 The effects of the chosen tax base

In addition to the effects of the online gambling effective tax level the tax base is also an important determinant of overall market size. In this section, we will focus on the merits of a tax on GGR, which on the basis of our prior work in this area is the most appropriate tax regime to use in regulating online

³² European Commission: "Communication from the Commission to the European Parliament, the Council, the economic and social committee and the committee of the regions, Towards a comprehensive framework for online gambling", Strasbourg 23.10.2012.

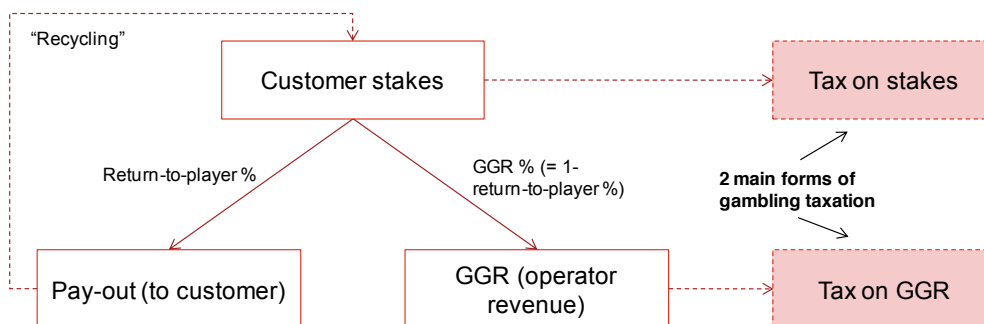
³³ ARJEL's market report (30 June 2012, p30) highlights the decline in marketing expenditure in 2011 and 2012 compared to the levels of marketing expenditure on market openings in 2010.

gambling. Tax can be applied to the gambling industry in a number of different ways, the most common of which are:

- a tax on gross gambling revenue (GGR) - for games in which the operator accepts risk GGR is defined as stakes less winnings less marketing bonuses; for games in which the operator accepts no risk GGR is defined as the revenue that accrues to the operator (e.g. commission or equivalent charges)
- a tax on stakes, i.e. the total monies gambled

Figure 3.1 demonstrates how gambling tax can be applied in different ways to an operator’s business:

Figure 3.1 – Tax on stakes vs. tax on GGR



From an economic theory perspective, a GGR tax is essentially an ad valorem tax (levied as a proportion of the price charged to the customer). Academic literature, in general, concludes that an ad valorem tax (such as a tax on GGR) results in lower prices and higher demand than a commodity tax (levied as a proportion of stakes, or quantity). This is the expected result in almost all markets where operators have greater than zero pricing power, i.e. they have some ability to set prices in the market.

A tax on GGR encourages operators with a degree of price setting ability to pursue a low margin, high turnover strategy, as this lowers the amount of tax paid as a proportion of stakes. In contrast, a tax on stakes does not incentivise operators to lower prices (i.e. reduce the take-out percentage) as this will increase the effective tax rate paid. Operators are thus encouraged to pursue a high-margin low turnover strategy. This difference in operator incentives as a result of a tax on GGR as opposed to a tax on stakes suggests that a tax on GGR is better at aligning the interests of government and operators than a tax on stakes.

Furthermore, a tax on stakes restricts the product range that can be offered by operators, unlike a tax on GGR which is product neutral. Applying a stakes tax on games with a high return to player, or low take-out percentage, dramatically decreases the operator margin. If the stakes tax is higher than take-out percentage (e.g. if a takes tax of >2.7% is applied to a game of roulette or >2-3% to cash poker) then the game, in its traditional form, becomes unprofitable for the operator, and it will not be offered. Even at a lower rate of turnover tax (e.g. 1%) the tax burden facing operators (c.33-50% in GGR terms, assuming average prices (GGR margins of 2-3%) would be expected to reduce the attractiveness of the locally-regulated cash poker market for operators, which may decide not to become locally-regulated or not to offer cash-poker. As a result of its greater flexibility to accommodate the different pay-out models of different games, a tax on GGR not only avoids restricting the products an operator is able to offer in today’s market but also helps to future proof the tax regime against product innovation. For this reason, a tax on GGR can lead to a higher rate of ‘absorption’ than a turnover tax, leading to a smaller not-locally regulated market.



3.4 Conclusion

In this chapter we have examined some of the theoretical considerations relating to the choices governments have when regulating gambling. We conclude here that establishing an effective regulatory regime with a tax on GGR at a viable rate, and with a full range of gambling products permitted, would enable Swedish regulated operators to provide customers with a service offer which could effectively compete with that of non-Swedish regulated operators. This would reduce incentives for customers to seek non-Swedish regulated operators, as it would minimise the potential product offering gap between locally regulated and not-locally regulated offerings, leading to better capture of the market supporting greater control of potential ‘problem gambling’ and player protection.

In the next chapter we examine the experiences of Denmark, the UK, Italy, France and the Czech Republic, to examine lessons that can be learned, and how this can be applied to our evaluation of the impact of re-regulating online gambling in Sweden. In general, the conclusions from economic theory explored here are well supported by the lessons of reality.



4 Lessons from online regulation in other jurisdictions

Comparing the experience of other countries in regulating their online gambling markets is a useful tool in evaluating the potential effectiveness of regulation. However, caution needs to be exercised in drawing conclusions from such comparisons as there are a number of other variables affecting the performance of gambling markets aside from regulatory changes. The effects of these other factors such as the macroeconomic environment, shifting customer demographics and attitudes, and the maturity of the online gambling market, amongst others, cannot always be reliably stripped out in evaluating the impact of regulatory change. This complication makes it difficult to judge the performance of regulatory regimes between countries. A tax rate or regime which may be competitive (and stimulate absorption) in one country may not be appropriate for another – this could, for example, be due to different levels of market maturity and customer sophistication (e.g. in a more mature market a lower level of tax would be required in order to make the locally regulated market appear attractive to operators). Bearing these difficulties in mind we can nonetheless try and learn as much as we can from the experience of other countries.

In what follows we principally lay out the experience of five countries. Overall, three key points emerge from the experiences of the UK, Italy, France, the Czech Republic and Denmark.³⁴

First, restricting the range of regulated products holds back online regulated market growth, limits absorption (defined as the % of the online gambling market which is locally-regulated) and consequently the size of the online gambling market which falls under state authority and supervision.

Second, the viability of tax rates will be dependent to a large extent on the maturity of the online gambling market in a particular country. For example, the higher market entry tax rates we are seeing being introduced by EU countries such as Italy, Spain and Greece reflect the fact that these are not mature markets and the majority of operators are willing to manage the additional tax burden to secure of the benefits of first mover advantage. The sustainability of these rates as the markets mature is questionable as seems to be borne out by the recent slowing down of the locally regulated sports betting market in Italy, which suggests that as the Italian market continues to mature its current tax rates for online sports betting may not be sustainable.

Third, comparing different tax regimes suggests that higher tax regimes (e.g. France compared to Italy and Denmark which have lower rates of tax compared to France) appear to encourage lower rates of absorption (defined as the % of the online market which is locally regulated) and slower rates of regulated online gambling market growth, as the locally regulated offering becomes less attractive compared to that of not-locally regulated competition, both from an operator and a customer perspective. We note that in its decision to the Danish State Aid case in September 2011 the European Commission highlights that conclusions reached by the Danish legislator confirmed by studies and the evidence from other European markets is that a 20 per cent tax on GGR “is the highest rate economically feasible” and that a higher rate would be the “rate of no return” at which operators would not be sufficiently incentivised to enter the locally licensed market.³⁵

³⁴ The UK, Italy, France the Czech Republic, and to some extent Denmark, have been selected both because they have recently regulated but also because they provide sufficient post-regulation data so that learnings can be taken from their experiences and applied to Sweden.

³⁵ EUROPEAN COMMISSION DECISION OF 20 SEPTEMBER 2011 (C 35 /2010), paragraphs 133-136.



Fourth, an examination of the experience of the UK, Italy, France and Denmark provides no evidence to suggest that online cannibalisation is a more significant, and thus material, influence on the growth of the local land-based market than the range of other factors which impact the growth of the land-based market such as economic growth. In fact a review of market participants' views suggests that online and land-based gambling propositions are complementary and suggests that local land-based incumbents tend to benefit more strongly than foreign operators as a result of regulation or re-regulation of online gambling in a jurisdiction.

The conclusions above are arrived at by the following procedure: in each of the case studies we commence by providing an outline of the key online gambling regulatory changes in each of the countries under examination, we then highlight the impact of regulation in terms of online gambling market growth and absorption.³⁶ We note that due to the nature of the not –locally regulated offering (for which by definition no official regulatory data can exist) it is difficult to offer a precise estimate of the size of the not-locally regulated market and thus absorption. Our approach in this chapter has been to use a consistent source in comparing across case study countries (H2) so that we can effectively compare estimated absorption levels based on the same methodology. We then examine, where appropriate, the impact of opening the online gambling market on the offline market including the impact on incumbent land-based operators. Unless otherwise specified all or country comparisons exclude lottery. The reason for this is that online lottery products have tended to remain the domain of local monopolies when markets regulate or re-regulate, and also, because the success of online lotteries has varied significantly from country to country. Excluding lottery thus enables to better compare the case study countries examined.

4.1 UK

4.1.1 Regulatory background

The UK has been at the forefront of online gambling regulatory developments in Europe for over ten years. The most recent significant change to the UK gambling tax system has been the change of the sports betting tax base in October 2001 from a 6.75% tax on turnover to a 15% tax on GGR. In addition to this, the remote gambling bill of 2005 introduced regulation for online casino gambling setting the same tax base and rate as that for sports betting (15% on GGR).

The UK currently operates a system whereby EEA (non-UK) based operators and a 'white list' of operators licensed in certain non-EEA countries can provide and advertise their services to UK citizens without being subject to the UK gambling regulations or tax regime.³⁷ Operators licensed in the UK are subject to the UK tax regime for all their online gambling operations and to local tax regimes in other countries in which they are also licensed (e.g. in Italy).^{38,39}

³⁶ It should be noted that online market values below exclude online lotteries in order to avoid introducing an artificially higher 'absorption rate'. In addition note that estimates of the not-locally regulated online market represent gambling through operators licensed either in the EU, EEA, or elsewhere in the world (e.g. the Alderney and the other Channel islands) but not operators which are not licensed in any jurisdiction. As a result estimated absorption will be overestimated to a degree as the total online market size will not include operators not licensed in any jurisdiction (i.e. black market operators). However given such operators are expected to have a very low market share we do not believe that the estimated absorption figures in this chapter represent a material overestimate, nor would they change the conclusions drawn.

³⁷ As a result UK player spend is split between UK-licensed, EU, white list jurisdiction and black market operators.

³⁸ In certain instances this can lead to a double taxation burden for operators.

³⁹ We note that the UK has recently announced its intention to move to a licensing system where operators offering services to UK residents need to be licensed in the UK, and therefore be subject to UK gambling tax. The UK Treasury currently estimates



4.1.2 Market impact of regulation

4.1.2.1 Impact of regulation on UK player online gambling spend

The openness of the UK online gambling market and the large variety of games allowed has led to high annual GGR growth in terms of UK online player spend of c.28% (2003-11).⁴⁰ Part of the reason for this is that the relative openness of the UK market meant that online gambling broadly developed in line with technology and the penetration of the internet, unlike the case of Italy and France. The white list regime operated in the UK has allowed operators to locate themselves in more tax efficient jurisdictions than the UK but continue to provide services and advertise to UK players without being subject to UK tax. This has led to a highly competitive market both amongst UK-regulated operators and non-UK regulated operators which service the UK player market. Customers have benefited from this competitiveness both in terms of lower prices (in line with the expectations set up by our theoretical discussion in section 3.2),⁴¹ and by the high levels of product innovation observed (e.g. live-betting, mobile betting).

4.1.2.2 Impact of regulation on UK online licensed operators

As we have already mentioned the UK situation is complicated by the fact that under the current UK system operators licensed in certain jurisdictions outside the UK can provide and advertise their services to UK citizens without being subject to the UK tax regime. This creates a competitive disadvantage for UK based operators compared to operators licensed in white-listed (and some EEA) jurisdictions with lower taxes and has resulted in some UK based operators moving their online operations to more favourable tax regimes to ensure they are able to compete on a level playing field with operators in white listed jurisdictions, thus negatively affecting the locally regulated market GGR growth rate. An example of this is Ladbrokes and William Hill moving to Gibraltar in 2009, and which can be seen as the drop in GGR in the graph below. This illustrates that it is not only important to set tax at what in isolation seems a competitive rate, but also to create conditions which enable licensed operators in a country to effectively compete with operators which are not licensed in that jurisdiction but operate in the same global marketplace.

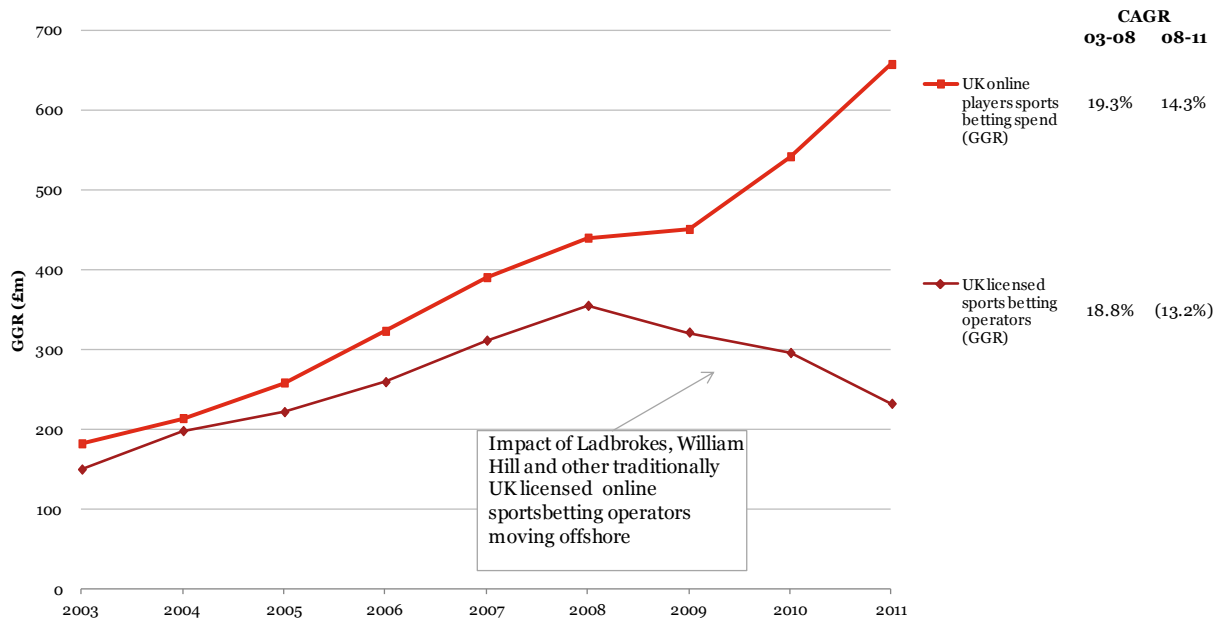
that this will come into force in December 2014. HM Treasury: “Taxing remote gambling on a place of consumption basis: consultation on policy design”, April 2012.

⁴⁰ H2 data is financial year data running from Apr2002-Mar03-April10-Mar11. Whilst all products could be legally provided in the UK from operators based in white listed jurisdiction, local UK license holders were only able to provide online casino to UK players from 2007 when the Gambling Commission licensed online casino games.

⁴¹ H2, UK national data set.



Figure 4.1– UK licensed sports betting operators GGR from UK players vs. UK online player sports betting GGR, 2003-2011*



Source: H2⁴²

Note: *H2 data is financial year data running from Apr2002-Mar03-April10-Mar11

4.1.3 Cannibalisation

The growth of UK online player activity does not seem to have had a significant impact on land based gambling, which has remained broadly stable, growing by 2.7% p.a. (2003-2011).⁴³ Consequently, this example provides no clear evidence of a material cannibalisation effect. This is also supported by the fact that based on our knowledge and experience of working with major sports betting operators in the UK, most consider their online offerings to be additive rather than cannibalistic to their retail offerings, with a different customer demographic targeted in each channel. In fact a recent presentation to analysts by William Hill suggests that a retail presence can be a significant benefit to an operator's online proposition. According to the data presented a higher percentage of customers used UK bookmakers' online and land-based propositions in the last year (c.16%) than customers who only used UK bookmakers online (c.13%).⁴⁴ This is also supported by a recent Ladbrokes investor presentation which shows that an increasing proportion of their customers use both their land-based and online propositions. According to Ladbrokes' report the proportion of Ladbrokes' monthly online customers who had also use a Ladbrokes betting shop in the past month rose from c.35% (Feb-10) to c.44% in March 2011 and to c.52% in February 2012. This suggests that Ladbrokes has been successful at using its land-based presence in order to drive traffic online, a point which is also highlighted by Ladbrokes'

⁴² Operators who have recently moved offshore include Sportingbet (2007), William Hill, Ladbrokes, Skybet (2009) and Betfair (2011). The impact of Betfair's move is not reflected in H2 data as it is only accounted for from 2012 onwards as H2 data presented here is financial year data and not calendar year data.

⁴³ Market growth was 0.6% p.a. when the effect of the introduction of a large number of Fixed Odds Betting Terminals is stripped out (Source: H2). H2 data is financial year data running from Apr2002-Mar03-April10-Mar11.

⁴⁴ William Hill analyst and investor day presentation, September 2011, p4. Citing: TGI 2010 (January 2010 –December 2010) Based on all individuals in UK over the age of 15.



2010 interim annual report which states that Ladbrokes' low online marketing costs as a percentage of net revenues (some of the lowest in the industry)⁴⁵ is explained by its high street presence which creates strong brand awareness and makes it relatively easier to attract online customers. Within the context of the UK we estimate that operators with a significant land-based presence have been able to capture c. 30-40% of the online gambling market in the UK,⁴⁶ which given the competitiveness of the UK market, testifies to the benefits a land-based presence can provide an operator with.

Overall the situation in the UK leads to three main conclusions:

1. Regulating in a way that enables a market to be competitive leads to a greater degree of product innovation, market growth and lower prices for customers;
2. It is important to regulate in a way which does not significantly disadvantage locally regulated operators relative to their not-locally regulated competition if the aim of regulation is to encourage absorption
3. Cannibalisation does not have a material impact on offline market growth and does not appear to be more significant than other influences and land-based incumbents seem to be successful at using their land-based presence in order to capture a significant share of the online market.

4.2 Italy

4.2.1 The regulatory background

The most important stage in the regulation of online gambling in Italy came with the Bersani law of 2006 which allowed for the first pure online sports betting licences (not including horse race betting) to be introduced (coming into effect in 2007).⁴⁷ This was followed by the introduction of online horse racing (both fixed odds and pool betting) in March 2008 and online tournament poker in September 2008. The Communitaria law of 2008 and the Abruzzo Decree of 2009 also expanded the range of games to include new casino, bingo, and cash poker games. Online lottery games (superenalotto and superstar) were introduced in July 2009 and online bingo in December 2009. Although cash poker and casino games were initially expected at the end of 2010, legislation delayed this. These games were launched in July 2011. Most recently it has been announced that online slots will also be permitted from December 2012,⁴⁸ with betting exchanges also expected to become regulated though the precise launch date has not yet been announced. Whilst gambling products first regulated in Italy were taxed on a turnover basis (2-5% on turnover),⁴⁹ new products including casino games, cash poker and online slots are all taxed on a GGR basis (at 20%).

4.2.2 Market impact of regulation

Regulation of the online gambling market has led to an annualised growth rate of c.24%p.a. (CAGR 07-11) compared to the historical rate of c.54% p.a. (CAGR 03-06). Absorption rates are estimated to have increased from 0% prior to regulation in 2006 to c.36% in 2008 and to c.71% in 2011. The locally

⁴⁵ Ladbrokes interim annual report 2010, p5.

⁴⁶ PwC analysis of operator annual reports, Gambling Data: "UK Data Report Update: William Hill Closes Gap On Betfair", September 2012

⁴⁷ Fixed odds sports betting and horse race betting were also allowed prior to this in 2001 and 2002 respectively but they could only be provided by Italian Olympic Committee (CONI) and the National Horse Breeders Enhancement Society.

⁴⁸ AAMS, Gazzetta Ufficiale 3 febbraio 2011, n. 27

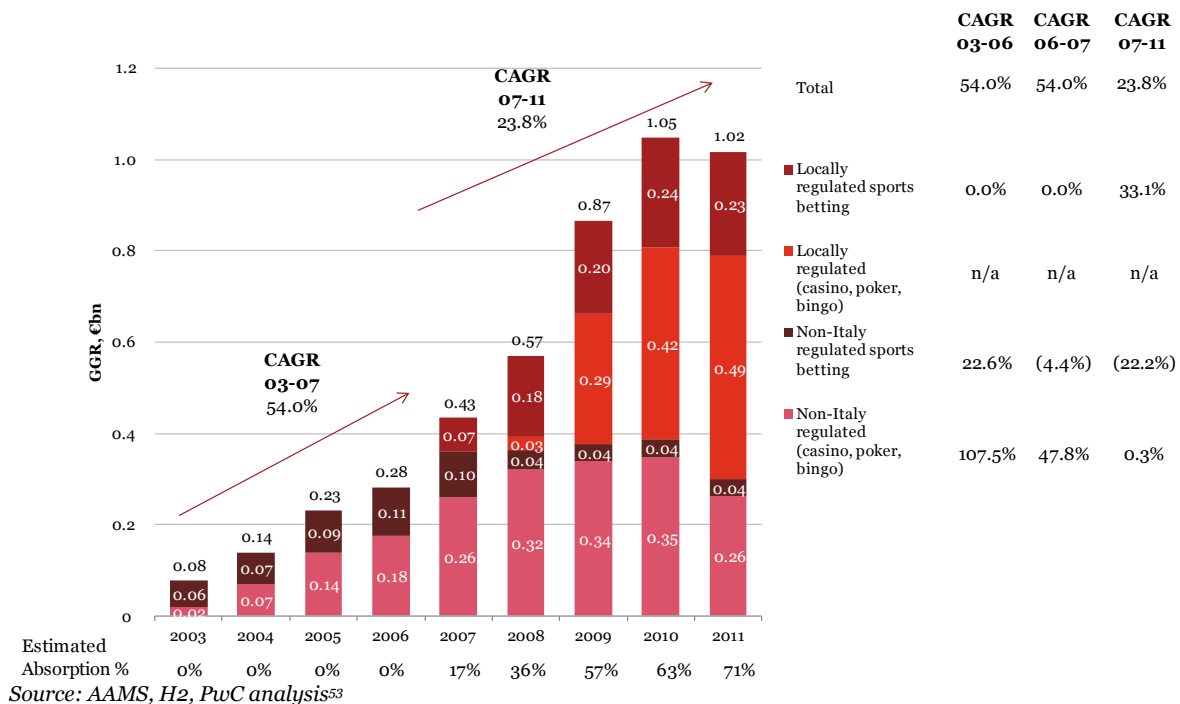
⁴⁹ The rate varies between bets for contests with up to 7 events (2% of turnover) and bets for contests with 7 events and above (5% of turnover).



regulated market has been boosted in 2011 by the introduction of new casino and cash poker games in July 2011 with GGR from launch until the end of 2011 (July-Dec 2011) of €177.1m translating to tax revenue of €35.4m (out of an estimated total online tax take of c.€192m for 2011).⁵⁰ We estimate that had casino games (including online slots) been introduced in 2007 (when the online gambling market started to re-regulate) the state could have gained an additional cumulative c. €100-115m from 2007 to 2011 in tax revenues,⁵¹ and would have promoted absorption at a faster rate than was observed historically.

The fact that online games in Italy have been introduced iteratively, with 1-2 products launched per annum since 2007, has meant the proportion of the online market under state authority and supervision has increased more gradually than we would expect to have been the case if a full suite of gambling products were introduced at the outset of market opening. For example press reports and research companies suggest that c.70-75% of all spend on online casino (including slots) is being made with non-Italy regulated operators rather than Italian-regulated operators, due to the fact that Italian operators are not yet able to offer online slots as part of their casino offering.⁵² Figure 4.2 below presents the historical evolution of the online gambling market in Italy.

Figure 4.2 – Evolution of Italian online gambling market 2003-11



⁵⁰ AAMS report 'Il Gioco a distanza: Analisi di dati', 30/12/11. The tax figure is based on PwC analysis.

⁵¹ On the basis of the weighted estimated absorption rate over 2007-2011 of c.59% and assuming the current rate of tax for casino games at 20% on GGR.

⁵² H2 Italian national data set, 2011 estimates and Gambling Compliance: Online Slot Launch Boosts Italian Operators", 8th June 2012

⁵³ 2011 figures for locally regulated online gambling are AAMS actual but non-Italy regulated market are H2 estimates. It should be

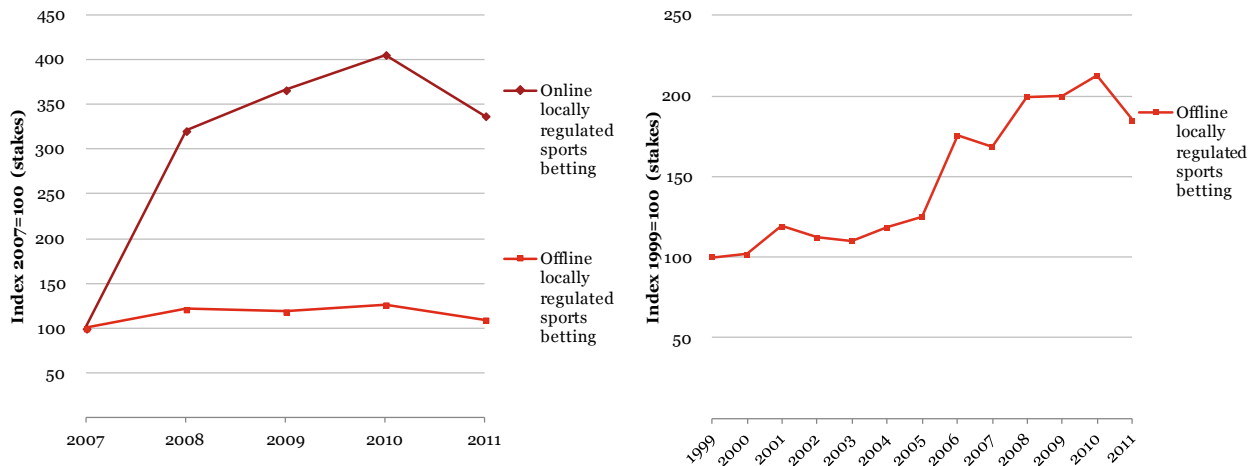
noted that 2007 represents a part in the regulation of online gambling with most operators estimated to have commenced operations in the last quarter of 2007. Online figures include telephone sports betting.

It is worth considering the case of online sports betting in isolation. Online sports betting had post-regulation annualised growth of c.17% p.a. (CAGR 07-10) compared to pre-regulation growth of c.23% p.a. (CAGR 03-06). However, Italian sports betting has declined since 2010 with annualised growth between Jan-Aug 2010 and Jan-Aug 2012 of -63.4%.⁵⁴ Part of the reason for this slow-down in growth reflects the increasing maturity of online sports betting in Italy, as well as the structural problems facing Italian horse racing. This suggests that in the long term, as the market continues to mature and players become more sophisticated (e.g. by increasing their use of odds comparison websites), negative pressure may be exerted on operator margins, and therefore the locally-regulated sports betting segment may not be able to sustain growth at the current turnover tax rate of 2-5% as is suggested by the recent declines in sports betting GGR (see section 4.5 for further discussion of the rates of tax chosen by different European jurisdictions).

4.2.3 Cannibalisation

The growth in the online gambling offer in Italy does not seem to have had a material impact on the offline segments of the market. Tracking the growth (in terms of stakes) of locally regulated sports betting (excluding horse-race betting) from the first year in which online sports betting was regulated (2007) shows that offline sports betting has continued to grow by c.8% p.a. (2007-10).⁵⁵ This is similar to the long term trend for offline sports betting stakes of c.8% (1999-2006), which would have been artificially boosted between 2005-2006 by legal changes which allowed for a significant increase in the retail sports betting supply (c.6,000 betting shop locations and corners were licensed in 2006) and by the occurrence of the World cup in 2006 which would have also boosted betting GGR as Italy remained a contender throughout the World Cup (and in fact won the Cup).⁵⁶ The stability of offline market growth despite the introduction of an online proposition suggests that there has not been a material cannibalisation effect in Italy (see Figure 4.3).

Figure 4.3 – Evolution of Italian online and offline sports betting market (excl. horserace betting), 1999-2011



Source: AAMS, H2

⁵⁴ 2007,-2009 data from H2, 2010,2011, 2012 AAMS actuals.

⁵⁵ Source: AAMS, H2, PwC analysis. Where there have been discrepancies between H2 data and AAMS available data we have used AAMS data. Sports betting does not include horse race betting in this case.

⁵⁶ In addition in 2005 betting shops were allowed to operate as a hub for a network of internet terminals located in cafes and kiosks.



The case of Italy thus teaches us some important lessons for our evaluation of the regulation of online gambling:

1. It is important to regulate online gambling with a tax rate which is competitive within the context of a particular country at different stages of market maturity, and with legislation that accounts for the pay-out profiles of different products. The case of sports betting suggests that whilst a 20% tax on GGR may have been appropriate and stimulated good levels of absorption whilst the market was less mature, this may not be the case as the market matures;
2. Higher levels of absorption can be achieved by introducing a wider range of regulated products
3. There appears to be no significant evidence of online growth cannibalising offline

4.3 France

4.3.1 Regulatory background

France regulated its online gambling market in June 2010 by licensing sports betting (including fixed odds horse race betting) and cash and tournament poker.⁵⁷ Prior to this, online gambling services were only provided by Pari Mutuel Urbain (PMU), the horse betting retail monopolist which retains its legally entrenched retail monopoly, and Française des Jeux (FDJ), the state lottery monopoly.⁵⁸

4.3.2 Market impact of regulation

The evolution of the French online gambling market has two distinct stages. The first stage, the period pre-regulation, was characterised by the declining dominance of PMU as non-French regulated competition provided gambling products of a more varied nature and at more attractive prices. This led the online non-French regulated market sector to grow at an annualised rate of 47.2% (2003-09, in GGR terms) compared to PMU's online annualised GGR growth of 16.7% during the same period. This meant that potential government tax revenue was not captured and the proportion of the market under state regulatory control and supervision gradually declined. The second stage of evolution of the market occurred post the partial opening of 2010, leading the market to grow at 39.0% (2009-10), as a result of new entrants into the locally regulated market and the positive impact of the football World Cup in 2010 on locally-regulated market growth. Growth in the market has been held back however by the high tax rate and by the partial regulation of products (with only sports betting and poker regulated, but no online casino). We estimate that in the two full years of regulation ending June 2012 the state has forfeited a cumulative c. €35-€40m in tax revenues by not regulating online casino games, and has held back absorption which we estimate could have risen to c.72% by 2011.⁵⁹ Figure 4.4 provides an illustration of the historical evolution of the French online gambling market.

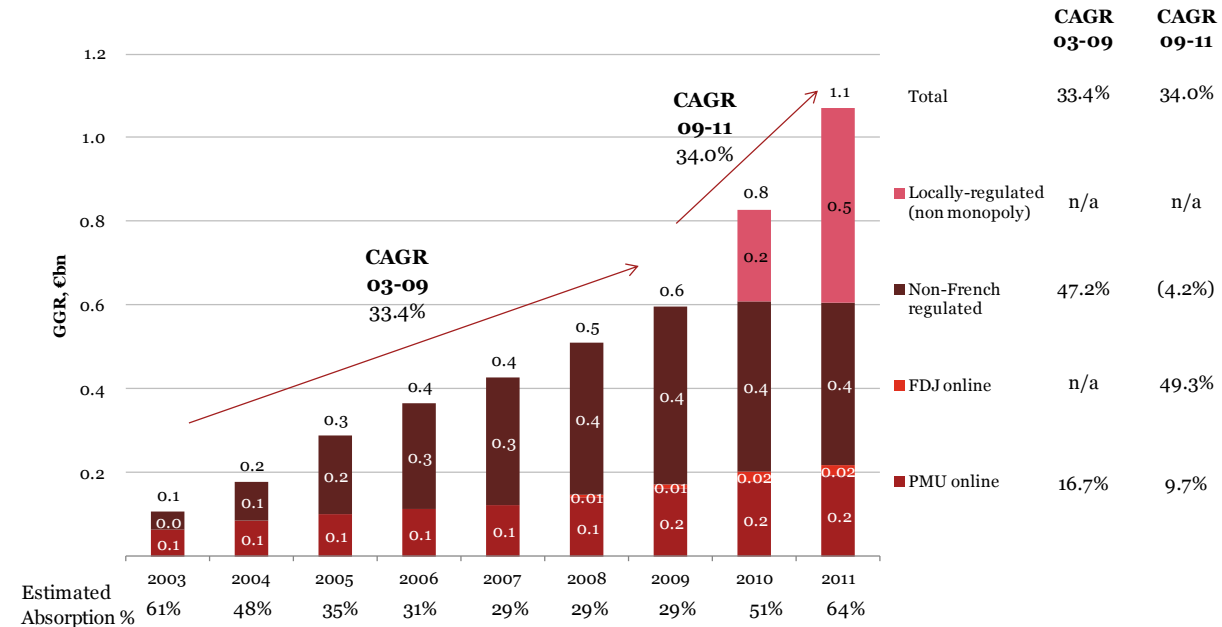
⁵⁷ No other games were licensed.

⁵⁸ FDJ started offering its lottery products online in 2001 and sports betting products in 2008.

⁵⁹ Assuming a weighted annualised absorption level of c.63% (in line with the estimated weighted absorption of the French market since market opening in June 2010) and a tax on GGR of 20% (same tax rate as in Italy for newly launched only casino games). The same assumptions are used to estimate absorption but they are applied to the 2011 calendar year to correspond to the graph above.



Figure 4.4 – Evolution of the French online gambling market, 2003-2011



Source: ARJEL, H2, PwC analysis⁶⁰

Note: H2's estimates of the level of absorption achieved in France in 2010 appears to conflict with other lower estimates of absorption provided in a study by MAG in February 2011⁶¹

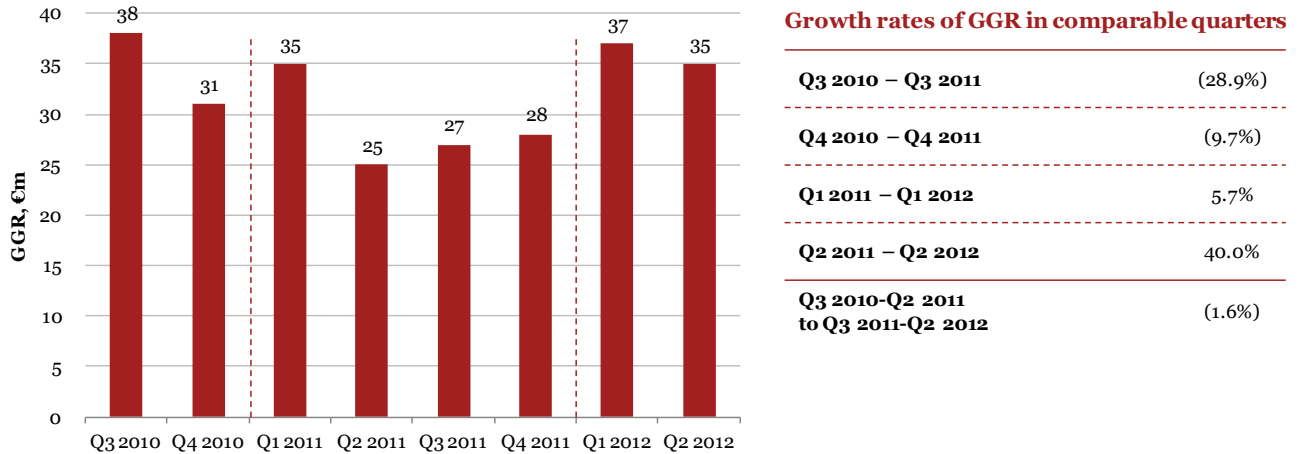
Regulation of certain online games in France has led to an increase in market growth and an increase in the estimated absorption rate from c.29% in 2009 to c.51% in 2010 (with new entrants accounting for c.26% of estimated absorption and incumbents accounting for c.25%, bringing the total to c.51%). However, this only represents an increase in absorption of 22ppts (2009-2010), a smaller increase than that seen in Italy's first equivalent year of 2008 (36ppts). It is our view that the positive impact from regulation on market growth and absorption has been dampened by the use of a turnover tax, and furthermore, at a high rate. This supported by declines in regulated online sports betting (excluding horse race betting) since market launch, statements by market participants and the exit of a number of operators from the regulated market.

Let us start by considering the evolution of French-regulated online sports betting GGR (excluding horse race betting) in the first eight quarters since regulation (see Figure 4.5).

⁶⁰ Total online includes telephone sports betting.

⁶¹ MAG, "Jeux en ligne" in the French Market: Key Features, Strengths and Weaknesses of the French Legal Gaming Offer, February 2011.

Figure 4.5– Quarterly evolution of the French online sports betting market since launch⁶²



Source: ARJEL

As we can see from the figure above locally-regulated sports betting GGR (excluding horse race betting) actually declined by c.2% when we consider the four quarters of available, comparable data. This decline cannot be attributed to the fact that 2010 was a World Cup year, as the main impact of this event would have been in the second quarter of 2010, especially as France was knocked out of the tournament at an early stage. With regards to the apparent recovery of sports betting GGR in Q1 and Q2 2012, it should be considered that this has been driven by a large increase in the number of smart phone users and subsequent increases in mobile betting, combined with an increase in bonuses offered by operators to drive customer traffic. In addition, two tournaments occurred in Q1 2012 but not in Q1 2011 (European Handball Championships and the African Cup of Nations) which, if stripped out would suggest roughly flat GGR from Q1 2011 to Q1 2012 and the Euro Cup and the Olympics took place in Q2 2012, with Euro 2012 boosting GGR by €7.6m in Q2 2012 compared to Q2 2011;⁶³ and the Olympics further boosting GGR by €3.3m in Q2 2012 compared to Q1 2012. Stripping these effects out would suggest that GGR has actually declined by 3.6% between Q1 2011 and Q2 2012 and would indicate that the actual decline in the regulated sports betting market in the four quarters with comparable data has been closer to -12% rather than -2%.⁶⁴

The problems faced by the sports betting segment are also highlighted by the low level of estimated absorption of locally regulated sports betting GGR (excluding PMU and FDJ)⁶⁵ at c.30% (2011).⁶⁶ The negative impact of the high turnover tax of 7.5% (excluding the sports betting right which on average adds 1-2% on stakes on locally regulated market growth and consequently on absorption is also supported by the reaction of market participants (see Table 4.1).

⁶² Excludes horse race betting.

⁶³ ARJEL, Regulatory return on the French market to the end of June 2012.

⁶⁴ Source: ARJEL “Données de supervision Jeux Olympiques Londres 2012”, August 2012.

⁶⁵ Includes horse racing but due to dominance of PMU on online horse racing the majority of this absorption will be accounted for by locally regulated sports betting excluding horse racing.

⁶⁶ H2.

Table 4.1 – Market participants’ views of the online regulation regime in France

Market participant	Date	Comment
Investor in Chiligaming in France Iliad partner Alexandre Dreyfus	July 2012	Chilipari.fr, its sports-betting site, shut on July 3, and Chilipoker.fr will close by the end of the summer, said Iliad’s partner Alexandre Dreyfus, owner of the Chiligaming brand. <i>“Where you pay so much tax, you can’t make a business,”</i> Dreyfus told Gambling Compliance. <i>“It doesn’t make sense. We are not a philanthropy company.”</i> Iliad Gaming lost €4m (£3.17m) in two years, according to Iliad’s chief financial officer Thomas Reynaud. <i>“This is not the heart of our business,”</i> he told French newspaper La Tribune. <i>“The competitive environment and the tax on online games does not leave space for new entrants or to operate viably.”</i> ⁶⁷
Betclic- Online marketing director for Betclic, Pierre Barbe	April 2012	<i>“It’s a difficult market for all the competitors,”</i> said, online marketing director for Betclic in France, <i>“2011 has been a very difficult year. We lost money; we are struggling to be profitable.”</i> ⁶⁸
Paris365.fr- CEO	January 2012	Gambling compliance reports that when Paris365.fr went offline in January 2012, its CEO specifically blamed the failure to turn a profit on <i>“an inadequate taxation system which not only discouraged growth but also challenged the survival of the company.”</i> ⁶⁹
PokerStars – MD Alexandre Balkany	June 2011	PokerStars France <i>“will be forced to withdraw from the market”</i> if the mode of taxation is not changed, claimed Alexandre Balkany, in the online gambling segment of the GESTE ⁷⁰ conference
Bwin.party – CEO Norbert Teufelberger	May 2011	Speaking at a Bwin-party annual presentation Mr Teufelberger said he believed that only a third of online sports betting activity in France is locally regulated due to the high taxation levied by French authorities: <i>“We don’t have any official numbers, but I would tend to believe that maybe 85-90% of business [in Italy] is done by regulated operators, whereas in France, on the sports betting side, we would believe [that] not more than 30% is run by French-facing business run by licence holders. French regulator ARJEL is aware of that.”</i>
Unibet – CEO Henrik Tjärnström	March 2011	<i>“As we said in the communication around our Q4s in February, we apply for licences based on profitability, and France does not look good. We have many things we can put our resources into from a development point of view, and unless terms and conditions improve there, we can’t make any money. The opening is looking like a failure.”</i>
Betclic – Chairman Mr Courbit	December 2010	Talking to the Figaro Mr Courbit said that France’s <i>“absurd”</i> execution of its liberalization scheme means that even a native French company like Betclic <i>“cannot afford to live in its home market.”</i> Operators are <i>“overtaxed”</i> and <i>“the rate of return to players is too low.”</i>
Betclic – Vice Chairwoman Ms Parize	November 2010	In talking of the French sports betting right, Isabelle Parize, vice chairwoman of the sports betting and poker operator of Betclic Everest, told Gambling Compliance: <i>“This tax comes on top of an already too heavy burden in terms of gambling taxes, leading us to non- profitable business in France.”</i>
Remote Gambling Association – Chief Exec Clive Hawkwood	November 2010	<i>“French consumers have access to a limited online gambling marketplace, with very few new operators deciding to enter the French market due to the excessive fiscal burden on operators. This is especially true in relation to sports betting where conditions make it extremely difficult to operate a viable business. The RGA predicted in October 2009 that France’s proposed regulatory and taxation regime would be unattractive and that has unfortunately proved to be the case.”</i>

⁶⁷ Gambling Compliance: “Itechsoft Take Over Iliad’s French Poker Site”, July 17th 2012.

⁶⁸ Gambling Compliance: “‘Frozen’ French Market Sees Operators Look Elsewhere for Profit”, April 17th 2012

⁶⁹ Gambling Compliance: France Regulatory report May 2012.

⁷⁰ Groupement des Editeurs de Services en Ligne (GESTE) conference held on the 29th of June 2011.

Lastly, in addition to statements by market participants regarding the perceived failures of the French tax regime the recent exit from the market of a number of licensed operators from France French also illustrates the negative effects of a high turnover tax on absorption (this includes the well publicised exit of SNAI, Illiad gaming and jeux365 among others).⁷¹

Overall it appears that the choice of a high turnover tax in France has restricted market growth and absorption. The regulator has acknowledged this as evidenced in a statement by the chairman of ARJEL: “Regarding taxes, we have now realised that the taxation model where a percentage of stakes is levied does not work”.⁷² In September 2011 ARJEL also submitted a recommendation to the government believed to have been suggesting a move to a GGR base.⁷³ Further change in the regulation of online gambling seems to have stalled with a report evaluating a potential switch from a turnover to a GGR tax which was expected in April 2012 not looking like it will be published and the regulator providing no indication on when change might be forthcoming, if at all.⁷⁴

4.3.3 Cannibalisation

The French experience also supports the lessons learned in Italy regarding the effects of online gambling on the offline market. Considering the period 2004-2010, during which PMU offered both online and offline horse race betting products, one would have expected, if there were a material cannibalisation impact, that PMU customers would switch from its offline offering to its online offering, and consequently that the size of its offline stakes and GGR would have been gradually eroded. However, PMU’s offline horse race betting stakes have continued to grow steadily from 2004 to 2010, albeit not at the high rate of the new online products, which started from a lower base and are also supported by increases in online penetration (Figure 4.6).⁷⁵

⁷¹ The following operators have withdrawn their French licenses and exited the market according to official decisions on Arjel’s website: (i)Iliad (sportbook + poker), (ii)Poker Leaders (poker), (iii)Winga (poker), (iv) Casino du golfe (sportbook), (v)Full Fun (poker), (vi) The Nation Traffic (poker), (vii) Electraworks SAS (sportbook), (viii) SNAI FRANCE (sportbook), (ix) Tranchant Interactive Gaming (poker), (x) Jeux 365 (sportbook), (xi) Microgame France (sportbook), (xii) Betnet (horse betting), (xiii) The Nation Traffic (sportbook), (xiv) Intralot (sportbook), (xv) Unibet France (sportbook, poker, horsebetting), (xvi) Lil Managers (sportbook), (xvii) 200%Poker (poker), (xviii) Sajoo (poker, sportbook), (xix) Canalwin (sportbook).

We note that Unibet re-entered the French market through the acquisition of eurosportbet.fr and that some of these exits relate to consolidation in the market.

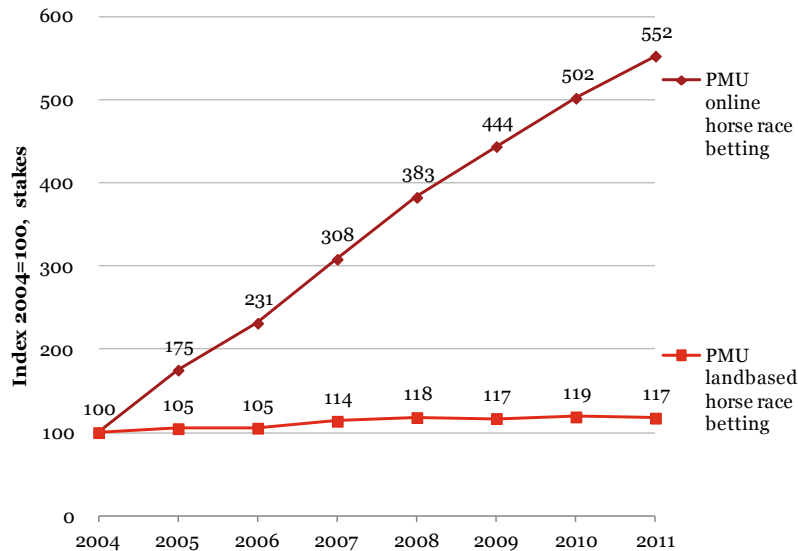
⁷²Gambling Compliance, “Arjel concedes tax failings in France” which reports that in an interview with Le Monde the chairman of ARJEL said: “Regarding taxes, we have now realised that the taxation model where a percentage of stakes is levied does not work, 28 July 2011.

⁷³ Arjel’s activity report 2011. More recently in an interview dated 22/10/2012 and published on clubpoker’s website the chairman of ARJEL was asked whether the move of the taxation base to the GGR is still a proposal which is considered and his answer was that: “we have indicated that the most logical tax base is the GGR and we have insisted that it was even more logical in the context of fixed odd bets. This does not mean that it should not be done for poker but it has even stronger economic logic for fixed odd bets. The question of the taxable base is part of the thoughts of ARJEL and is one of its proposals of review, without prejudice to regulations purposes.” And to the question “did you get any feedback from the legislator on this proposal?” Vilotte answered “As of today no. The question should therefore be raised to the authorities, who are now in charge of deepening this issue” <http://www.clubpoker.net/jean-francois-vilotte-interview-president-arjel/n-6810>.

⁷⁴ Gambling Compliance: “French Regulator Speeds Up Enforcement, But Tax Reforms May Stall Again” June 2012, Gambling Compliance: “Too Soon To Change ‘Perverse’ Taxes, Says France’s Gambling Tsar” July 6th 2012.

⁷⁵ France has experienced a rapid increase in the percentage of individuals who state that they have made an online purchase in the last 12 months, from c.22% in 2006 to c.53% in 2011 (Eurostat, 2011, percentage of individuals who have made a purchase online in the past 12 months).

Figure 4.6 – PMU evolution of stakes components, 2004-2011



Source: H2, PwC analysis⁷⁶

This suggests that customers of PMU’s online products are largely different to the customers for their offline products. This is also supported by European demographic trends, which suggest that a younger, better educated demographic is more likely to shop online.⁷⁷ In fact it seems reasonable to expect that a land-based presence can be a significant benefit to an operator, as PMUs success in the online regulated market would seem to suggest.⁷⁸ The complementary nature of land-based and online propositions is also supported by the views of a number of market participants in other jurisdictions.⁷⁹ In addition anecdotal evidence from online market participants operating in a number of jurisdictions suggests that most high yield players (in terms of operator GGR) would tend to focus on either offline or online propositions, making online and offline propositions complementary due to the limited overlap between customers who exclusively use land-based propositions and customers who use online propositions in conjunction with land-based gambling.

The case of France thus teaches us some important lessons for our evaluation of the regulation of online gambling:

1. A limited regulated product offering limits absorption and consequently the proportion of the market over which the state has regulatory control. Regulation of online gambling coupled with a high turnover tax does not appear to stimulate high levels of absorption
2. There appears to be no evidence that online offerings cannibalise offline offerings, and there appear to be tangible benefits to a land-based presence as evidenced by PMU’s dominance of the online sports betting market in France

⁷⁶ Online includes internet betting only and excludes telephone and minitel betting.

⁷⁷ Eurostat, 2011, percentage of individuals who have made a purchase online in the past 12 months by age and education level.

⁷⁸ PMU Annual report. <http://www.pmu.fr/entreprise/rapport/>

⁷⁹ PwC prior work in the sector.



4.4 The Czech Republic

4.4.1 Regulatory background

Although online gambling is not expressly regulated in the Czech Republic, in January 2009, the Ministry of Finance granted permission to five major domestic operators to offer online sports betting (effective from the 1st of January 2009) and there are currently nine operators licensed to provide online sports betting services in the Czech Republic (as at June 2012).⁸⁰ On the basis of tax regime up to the end of 2011 retail operators faced the same rate of tax for their offline and online operations at bands of 6-20% of net profit (GGR after licence, administration and other fees) leading to an effective tax on GGR of c.14% across online operators (2011).⁸¹ This has increased to a 20% tax on GGR, as per the amendment to the Lotteries Act, which came into force on January 1st 2012.⁸² Whilst amendments to the Lotteries Act also introduced online card games, a draft bill notified to the European Commission on August 16, 2012 only covered online betting, which means that it is not yet clear when further expansion in the range of regulated online games beyond sports betting is likely to take place.⁸³

4.4.2 Market impact of regulation

The partial regulation of the online market through the licensing of five operators led to strong growth in the first year of regulation of c.178% (2009) driven by the locally regulated online sports betting offering and to an estimated absorption of c.50%. However the rate of growth slowed down to c.32% in the following year (2010) and to c.23% in 2011, whilst estimated absorption only increased by 5ppts between 2009 and 2011, potentially reflecting the restrictiveness of the regime (with requirements for operators to have a land-based presence and a limited range of regulated products) (see Figure 4.7).

⁸⁰Czech Ministry of Finance, list of operators at end of June 2012

http://www.mfcr.cz/cps/rde/xchg/mfcr/xsl/seznam_provozovatelu_71343.html

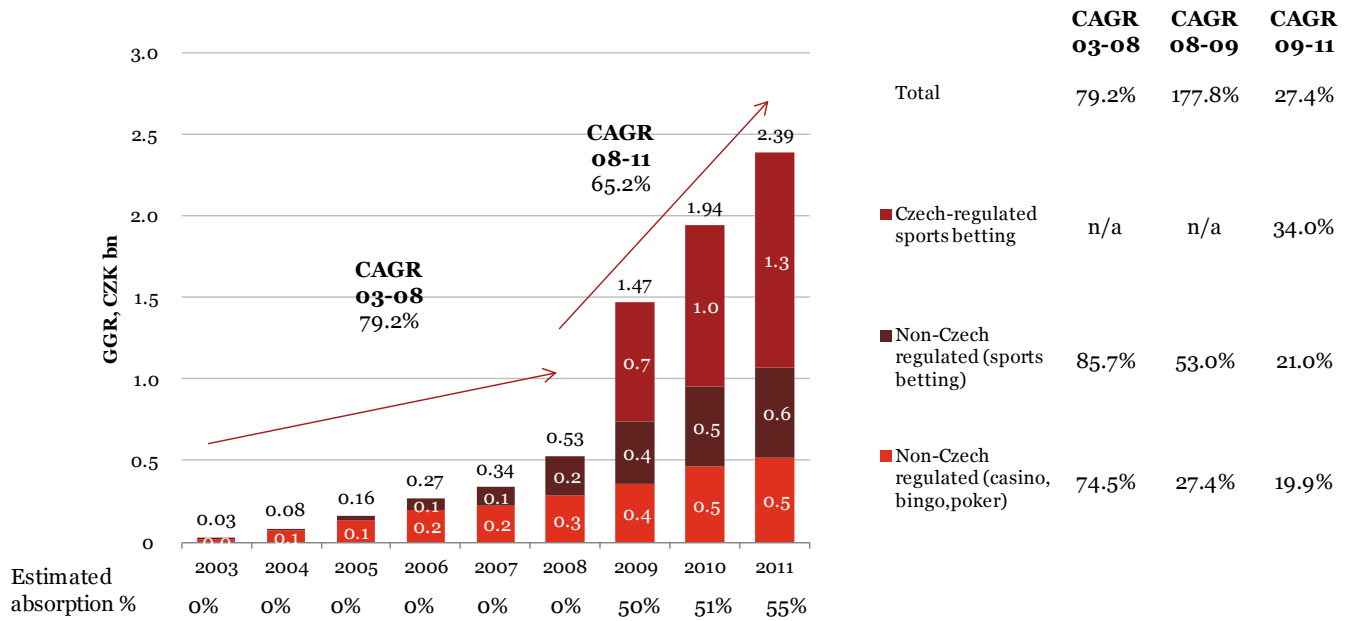
⁸¹ Czech Ministry of Finance online sports betting 2011 data on online sports betting GGR and tax take.

⁸² Gambling Compliance: "Czech Gambling Industry Faces Lean Future Under New Tax Regime", Jan 10th 2012.

⁸³ The most significant change in the draft would enable foreign companies to participate in regulated forms of gambling, with the standstill period on the current bill ending on November 19th 2012, press reports suggest that the intended commencement date for the new bill is unlikely to be met. Gambling Compliance, Czech Republic regulatory report, September 21st 2012.



Figure 4.7 – Evolution of Czech online gambling market, 2003-11



Source: Czech Ministry of Finance, H2, PwC analysis

Despite this, the tax rates currently used in the Czech Republic have led to a greater increase in estimated absorption than the case of France in its first year after regulation

The current Czech regulatory regime provides us with two lessons:

1. A relatively lower tax rate is likely to lead to a higher absorption than under a higher tax rate regime (such as that in France);
2. However, the impact in terms of absorption depends on the degree of re-regulation, in terms of the number of granted licences, the range of permitted products and other requirements (e.g. land based presence), with a more restrictive regime (such as that currently in place in the Czech Republic) likely to constrain the locally regulated market.

4.5 Denmark

4.5.1 Regulatory context

Denmark has recently re-regulated its gambling market, with regulation becoming effective from January 2012.⁸⁴ Under the current regulation, Danske Spil, the incumbent monopoly, retains its monopoly for lottery, horse race betting and bingo (both online and land-based) whilst sports betting

⁸⁴ This was delayed by one year from an initial expected launch on the 1st of January 2011, due to a state-aid case brought against the law by the land based casino industry which is taxed at much higher rates than the 20% on GGR that online gambling operators are subject to. The ECJ ruled in September 2011 that whilst the proposed dual taxation system did constitute state-aid, nonetheless this was permissible in order to ensure that a significant proportion of the market became regulated in Denmark



(both online and land-based), online casino (including poker) can also be provided by other Danish-licensed operators.⁸⁵

4.5.2 Market impact of regulation

The market opening in Denmark is very recent and it is too soon to draw any firm conclusions from the Danish regulation experience with at least a full year of data needed before a clearer picture emerges.

At market launch the Danish Gambling Authority had granted licenses to 38 operators.⁸⁶ Initial market revenues from the first quarter of operation of the re-regulated Danish market came in at DKK 470m,⁸⁷ with the second quarter broadly continuing this trend with DKK 500m of reported regulated market GGR for sports betting (online and land-based) and online casino and poker.⁸⁸

We note that these initial levels of growth in the regulated market do not guarantee the viability of the regulated online market and thus do not ensure that high levels of absorption will be achieved in future. However, initial indications suggest that Danske Spil has been particularly successful in what has quickly become a very competitive operator market.⁸⁹ With Morten Rønne, director of the operator group and the Danish Online Gambling association, reported to have stated that: *“the one operator which is doing much better than the rest of the market is Danske Spil”*, he continued, *“The biggest operators are doing OK too, but no-one has done as well as Danske Spil.”* In the figure below we present an illustration of the growth in the online Danish market only, this being the focus of this study.

⁸⁵ Private operators can also offer casino services but the procedure for slightly different license in this case means that land-based casino revenues is not reported in the re-regulated market returns from the Danish regulator (SKAT)

⁸⁶ These were more than the 25 licenses the regulator had initially expected to receive. Gambling Compliance: Denmark regulatory report, August 2012

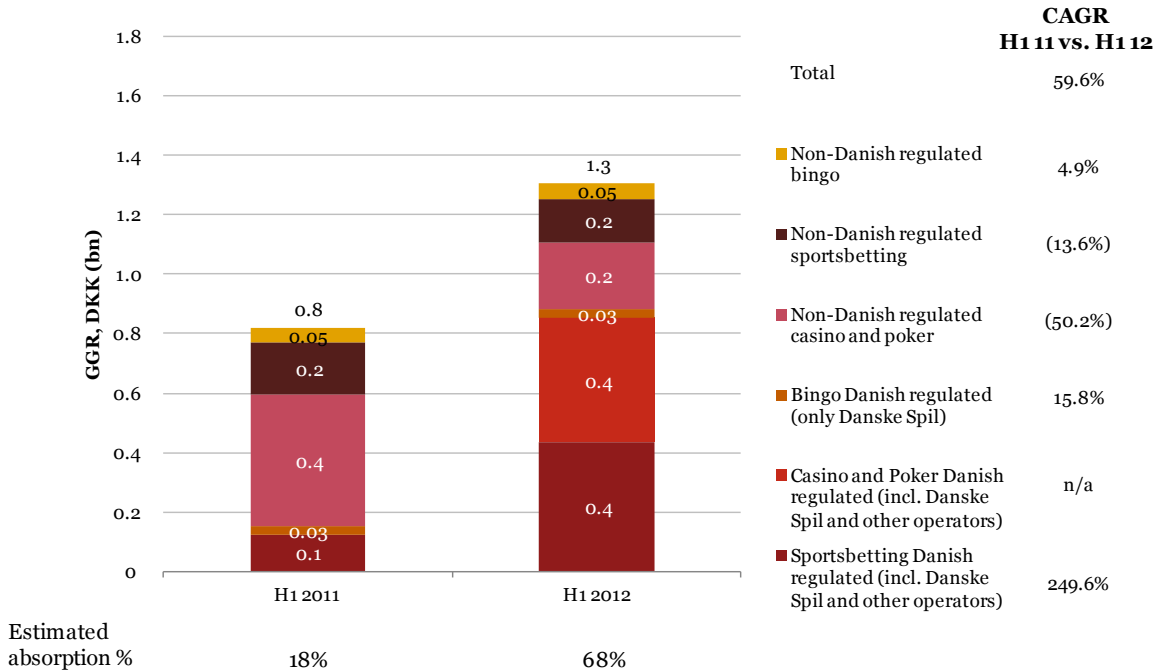
⁸⁷ These revenues were reported to be c.20% higher than the regulator’s estimates. Source: Gambling Compliance: “First Danish Market Figures Indicate Revenue Up 20 Percent On Estimates”, April 2012.

⁸⁸ These Regulatory returns do not include online bingo, horse-race betting and lottery which remain a Danske Spil monopoly.

⁸⁹ Gambling Compliance: “Danske Spil Has Unfair Advantage, Say Competitors”, September 19th 2012.



Figure 4.8– Evolution of the Danish online gambling market, H1 2011 vs. H1 2012



Source: SKAT, H2, PwC analysis

Note: Danske Spil’s land-based sports betting GGR has been filtered out of regulator returns for sports betting (using H2 estimates). We have not been able to filter out any other sports betting operators land-based GGR but we expect this will have a minor impact on the figures above

We note that Danske Spil’s success in the online market is an illustration of the advantage a land-based incumbent has in the case of market regulation, and has led to complaints by other operators.⁹⁰ According to the latest half-year report Danske Spil’s GGR has grown by 17% (H1 2012 vs. H1 2011) mainly due to growth in regulated new games.⁹¹ And we estimate that Danske Spil currently accounts for c.57% of the online Danish regulated market.⁹²

4.5.3 Cannibalisation

Considering the gambling market as a whole, and similar to what we see in the cases of Italy, the UK and France, there is also no clear historical evidence in Denmark of an online proposition cannibalising an offline proposition.

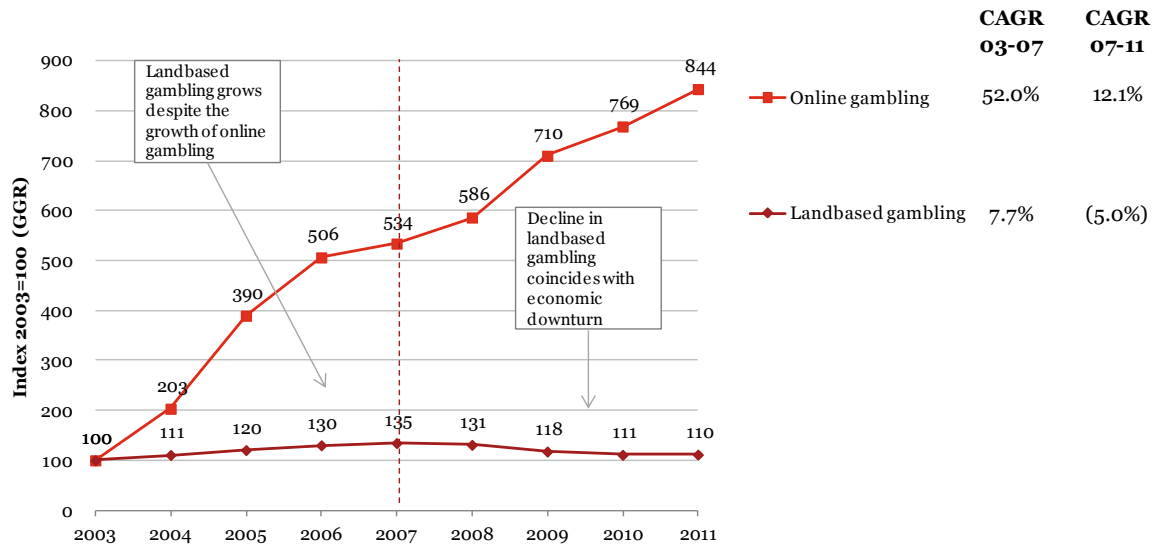
⁹⁰ Gambling Compliance: “Danske Spil Has Unfair Advantage, Say Competitors”, September 19th 2012.

⁹¹ Danske Spil press release August 2012: https://danskespil.dk/om/presse/nyheder/2012-08-0164-danske_spil_kom_godt_i_gang_paa_det_liberaliserede_marked.html.

⁹² Sources: Danske Spil press release August 2012. Danish regulator market size for the re-regulated market, H2, PwC analysis. This rises to 62% if its sports betting land-based GGR is included and divided by the regulator returns for sports betting and online casino and poker.



Figure 4.9– Evolution of the Danish gambling market, 2003-2011



Source: H2

As we can see from the graph above land-based gambling continued to grow in Denmark at an annualised rate of c.8% (2003-2007) at the same time as significant growth in the online gambling market (which started from a lower level of maturity), with the offline market then declining at the same time as a significant growth slowdown of the online gambling market, from an annualised growth of c.52% (pre-recession) to an annualised growth of c.12% post-recession. This illustrates that the case of Denmark does not provide us with any clear evidence of online cannibalising offline.

Overall the case of Denmark provides us with two lessons:

1. A market opening without significant restrictions on the type of products permitted or the number of licenses appears to support a significant proportion of the market becoming locally regulated and encourages growth of the locally regulated market
2. There is no clear evidence that online products cannibalise land-based products and in fact Danske Spil’s success in the market seems to suggest that there are significant advantages to a substantial land-based presence

4.6 Tax choices made by selected other jurisdictions

In what follows we present the regulatory choices made by a number of jurisdictions which have either recently re-regulated or are in the process of re-regulating online gambling:

Table 4.2– Online gambling tax rates in selected jurisdictions

	Tax base	Online gambling tax rates	Comments
Belgium	GGR	11%	Only grants permits to operators with land-based presence or

			those partnered with a local licensee (1 st of January 2011).
Cyprus	GGR	13% Sports betting only (10% tax and an additional 3% charitable levy (2% for the Cypriot National Sports Organisation KOA and 1% for the protection young people and to address problem gambling , includes betting on non-sports events)	New law passed by parliament in July 2012. The same law expressly bans online casinos and betting exchanges. There is currently a complaint filed with the European Commission with regards to betting exchange ban, but no decision has been issued as yet
Czech Republic	GGR*	20%* Sports betting only	Has granted sports betting licences to land based operators only (1 st of January 2009). New legislation has recently been passed increasing tax from an effective rate of c.14% on GGR to a 20% tax on GGR
Denmark	GGR	20%	Denmark has opened up its online gambling market as of the 1 st of January 2012, with 38 operators granted the first set of licences.
Estonia	GGR	5%	Licences granted 1 st of January 2010, currently 4 operators with Pokerstars obtaining a licence in Oct 2010 and Stanleybet obtaining the first betting licence in April 2011. Locally regulated market growth is estimated to have been held back by the requirement to locate servers in the country. As of 1 st June 2012 this requirement was abolished. Operators now only need to give regulators unobstructed access to servers wherever located
France	Stakes	7.5% turnover on sports betting (excl. horse race betting), (with additional sports betting levy of 1-2%) 4.6% turnover on horse race betting with an additional 8% levy ⁹³ 2% turnover on tournament poker €0.9 per deal for cash poker	Online licences operational June 2010. Authorities now considering changes to the taxation regime, including regulating some casino games. Tax changes are unlikely to be implemented before the 2013 budget, with the process currently appearing to have stalled
Germany	Mixed stakes and GGR*	5%* turnover (16 Lander including Schleswig-Holstein) Sports betting only)	Tax rate set at 5% of turnover with a maximum number of 20 licenses. This came into force on the 1 st of July 2012 and the deadline for phase 1 of the licensing was Sep 12 th 2012 with licensing procedures not expected to be finalised before the end of the year. Although Schleswig-Holstein passed its own bill aiming to offer more types of games and to tax these at 20% GGR there is currently legislative uncertainty with respect to this.
Greece	GGR* and	30% GGR* 10% winnings tax*	Legislation pushed through in early August 2011 but no clarity has been reached on when the first online licences might be

⁹³ The taxation of sports betting and horse race betting also includes an additional 1.8% social security contribution.

	winnings tax		granted
Ireland	Mixed stakes & GGR*	1% turnover for bookmakers*, 15% GGRGGR for betting exchanges*	Tax regime draft bill published in July 2012 but is not expected to come into effect until 2013)
Italy	Mixed stakes & GGR*	2-5% turnover for bookmakers 3% turnover on tournament poker 20% GGR* on betting exchanges and online slots 20% GGR on casino games and cash poker	Online licensing commenced 2007. It has been announced that online slot games will be launched in December 2012. Betting exchanges have also been approved but the regulator has yet to announce a launch date
Latvia	GGR	10%	Tax rate applicable from the 1 st of Jan 2012
Nevada	GGR	6.75% Internet poker only	Internet poker to be provided by landbased incumbents. The Nevada Gaming Control Board is currently accepting license applications
New Jersey	GGR*	15-25%* Internet poker, casino and bingo	Currently two different bills pending with varying tax rates and different levels of restrictions on supplier licensing
Poland	Stakes	12% all sports betting, 2.5% animal race betting	Regulation entered into force in July 2011, with 10 operators thus far applying for online sports betting licences. The first licence was granted to Fortuna in January 2012, with two other licenses issued during February 2012
Romania	Stakes	1.5-5%	Current regulatory uncertainty
Slovakia	GGR	27%	Current discrepancy between land-based betting tax at 5% of turnover and an online 27% GGR. No regulatory change currently expected
Spain	GGR	25% (autonomous regions are able to add an additional tax)	Introduced a 25% GGR having moved away from an initial consideration of a 5% turnover tax. Pool betting to be taxed on a turnover basis. Market opened in June 5 th , 2012 with 53 operators being granted licenses
UK	GGR	15%	Regulatory change expected regarding the regulation of not-locally regulated companies allowed to operate in UK

*Note: * indicates that regulation has not yet come into effect*

Where different tax rates apply for different products the different tax rates have been provided



5 Modelling the impact of re-regulating online gambling in Sweden

5.1 Overview of scenarios and modelling assumptions

We have built a model to evaluate what the potential impact of re-regulating online gambling is on the proportion of the market which is locally-regulated. We have also analysed what the regulated market size and the tax take could be of re-regulating the Swedish online gambling market with three different tax scenarios (with rates of tax on GGR of 10%, 15% and 20%) with reference to the status quo.

In order to make reasoned assumptions which drive the outputs above, one must consider operator and customer incentives (and therefore likely behaviours) resulting from each scenario. Different regulatory regimes will result in different operator and customer behaviours; ultimately, this is the reason that market growth rates and 'absorption' rates will vary in different regulatory scenarios.

The approach we have used to come up with our assumptions is broadly as follows:

- Analysis of any relevant historical data or trends from the Swedish gambling market
- Use of case studies, where appropriate, with regards to how other European gambling markets have reacted to different forms of regulation and taxation
- Qualitative information and opinions from trade associations and market participants
- A critical review of third party sources and academic publications
- Experience based on PwC's extensive work in this sector
- Sense checks of metrics against other similar European jurisdictions (e.g. implied online GGR per capita, online GGR as % of total GGR)

In this study, we have modelled four different regulatory scenarios:

0. Status quo. Regulation of online gambling remains 'as is'
1. Online gambling re-regulated with a 20% tax on GGR
2. Online gambling re-regulated with a 15% tax on GGR
3. Online gambling re-regulated with a 10% tax on GGR

The scope of this study is confined to all online gambling in Sweden, including sports betting (including horse-race betting), casino, poker, bingo and lottery. We have not explicitly modelled the offline (retail) market under different scenarios, as (see Chapter 4) we have concluded that there is limited evidence to support the existence of material cannibalisation of offline gambling from online growth.

In modelling the potential tax take from re-regulating online gambling in Sweden we have looked to the historical experiences of other countries who have recently regulated (or re-regulated) online gambling in their jurisdictions. We have excluded online lottery from these comparisons as online lottery products have tended to remain the domain of local monopolies when markets regulate or re-regulate, and also, because the success of online lotteries has varied significantly from country to country. This is different from the case of Sweden where only lottery is provided by Svenska Spel and NGOs as discussed in Chapter 1.



Excluding lottery from our comparison of Sweden with other countries enables us to build a more accurate picture of the impact of re-regulation in Sweden when considering online gambling products other than lottery.

In the case of lottery we have relied on the historical experience of Sweden and have applied sensible simplifying assumptions in order to estimate the potential growth and absorption of online lottery in Sweden. As a result of this we model lottery separately from other online products. In our analysis of taxation scenarios we always start by commenting on the online gambling market excluding lottery and then close each section with our discussion of the particular case of online lottery.

For modelling purposes, we have assumed that the tax regime detailed in the scenarios above is applied from 1st January 2013, in order to work with complete year data. With regards to regulation of online gambling, we assume that it would not be possible for the regulator to significantly prevent non-Swedish regulated online gambling, reflective of the situation in other regulated European online markets, and Sweden's historical experience. The level of Swedish regulated versus non-Swedish regulated online gambling activity (i.e. the 'absorption' rate, defined here as the proportion of total gambling activity accounted for by locally licensed operators), is a function of the range of online products permitted, license conditions (e.g. local server requirements) and the tax regime, as well as the extent to which the regulator is able to enforce regulation (i.e. block illegal sites, enforce advertising restrictions etc) hence the rate will differ between scenarios; we discuss this in detail in this chapter.

We make a number of other key assumptions as follows, which relate to scenarios 1-3:⁹⁴

- No mandatory stakes limits or deposit limits for customers
- No restrictions on the number of operator licenses
- No restrictions on the types of games permitted (e.g. in-play betting, casino games)
- Operators which obtain Swedish online gambling licenses will be allowed to advertise, however, those without licenses will not be permitted to advertise in Sweden. We assume that advertising bans are effectively enforced (in particular in the case of Above-the-line advertising) and thus contrary to the historical situation in Sweden there will be a benefit (in terms of advertising benefits) for operators from being regulated in Sweden
- Enforcement measures, (such as ISP blocking and payment blocking) are not truly effective

Our model includes gambling taxes (on GGR), but excludes VAT taxes incurred and corporation tax, as well as potential government revenue derived from licensing (including processing and application fees). This implies that the revenues to the state presented in this report will be lower than potential revenues to the state from re-regulating online gambling as a result of the exclusions already discussed.⁹⁵ In addition to our model we have included an estimate of the state's share of Svenska Spel's online revenue.

We now discuss the key conclusions and underlying assumptions of the model, with discussion of the market, operator and customer dynamics that occur in each scenario.

⁹⁴ These assumptions represent competitive market conditions, which evidence from other European jurisdictions suggests would be likely to result in higher absorption than restrictive market conditions, and would be consistent with the conditions in the majority of European jurisdictions.

⁹⁵ We note that according to EU law member states are expected to treat licensing fees as a way of covering their costs of auditing and supervising regulated operators rather than as a way to raise revenue from the regulation of online gambling.



5.2 Overview of model output

Our model suggests that maintaining the current status quo leads to the worst outcome both in terms of absorption and in terms of revenues to the state. On the other hand, regulating online gambling market in Sweden with a 10% tax on GGR would result in the highest rate of absorption, and thus afford the state with the highest level of regulatory control over the market. In the long term and outside the time horizon of our model, all other things being equal we would expect that a 10% tax on GGR would lead to the highest tax revenues since we believe that this rate will ultimately sustain higher levels of locally regulated market growth than the other three higher tax scenarios (see chapter 3). We note that a 10% GGR tax scenario is thus better in line with the Swedish government’s primary objective in gambling regulation (i.e. consumer protection), whereas receiving the greater short term tax revenue under the 20% GGR tax scenario is not in line with the government’s primary objective in gambling regulation. Having the maximisation of tax revenue as a primary objective in gambling regulation would also contradict guidance provided by the European Commission and the ECJ.⁹⁶

The table below presents the main absorption outputs from our modelling exercise.

Table 5.1- Scenario summary

	Absorption (including lottery) 2013	Absorption (including lottery) 2016
Scenario 0_ status quo	51%	48%
Scenario 1_20% GGR	69%	72%
Scenario 2_15% GGR	75%	82%
Scenario 3_10% GGR	86%	94%

In the sections that follow, we discuss the underlying rationale behind the output of each scenario, and the key assumptions we have made in each case.

5.3 Scenario 0: Status quo: regulation of online gambling remains ‘as is’

5.3.1 Summary of Scenario 0

Absorption levels decline over time as the Swedish regulated offering (provided by Svenska Spel and ATG) continues to lose share to non-Swedish regulated operators who are able to offer a more attractive product proposition and are able to advertise with limited restrictions. This leads to a declining proportion of the online gambling market under regulatory control and weakens the ability of the state to protect consumers and to effectively address problem gambling concerns.

⁹⁶ This is referred to in the following ECJ case rulings C-275/92 Schindler and C-243/01 Gambelli and in the EC’s staff working paper, “Online gambling in the Internal Market”, Strasbourg, 23.10.2012



5.3.2 Discussion of Scenario o

5.3.2.1 Online gambling products excluding lottery

Under this scenario we believe the more limited product offering provided by Svenska Spel and ATG (both in terms of products and payout levels) compared to the relatively more attractive product offerings of non-Swedish regulated operators (which for example offer online casino games and better payouts) coupled with the continued ability of non-Swedish regulated operators to advertise fairly freely in Sweden will lead to a decline in the level of absorption as customers continue to use non-Swedish regulated offerings. This trend may also be accelerated by non-Swedish regulated operators' superior use of new technologies such as mobile gambling. Given the historical strength of ATG's online proposition which has grown above market since 2007 we would expect the majority of the decline in absorption to come from a decline in Svenska Spel's market share. This is in line with the historical experience of Svenska Spel which has seen its online market share (excluding lottery) decline by 8-12 ppts between 2007 and 2011, as well as recent reports of a declining market share for Svenska Spel in 2012.⁹⁷

As a result we have assumed absorption will decline by 4.4ppts from its current level of c.46% in 2011 to c.42% by 2016, in line with the annual decline in Svenska Spel's online share between 2010 and 2011 (0.9ppts). The level of this decline is smaller than that experienced by Svenska Spel between 2007 and 2011 because a significant proportion of Swedish players have already shifted to non-Swedish regulated operators in the past few years. A smaller decline between 2011 and 2016 compared to 2007-2011 is also supported by the fact that the annual quantum of the decline in Svenska Spel's market share has been getting smaller over time. Nonetheless, we expect that non-Swedish regulated operators' superior use of mobile gambling technologies would maintain this decline at least at its 2010-2011 level. Similar declines in absorption were also experienced in France pre-regulation where online absorption declined by 6ppts between 2005 and 2009, mainly as a result of share loss by PMU (the French horse-race monopolist).⁹⁸

With regards to our expectations for future market growth of online gambling in this scenario, we would expect the online gambling market to continue growing at its recent historical growth level of c.5-6%,⁹⁹ driven mainly by growth in new offerings and the use of mobile phones in online gambling. This growth rate is in line with our expected growth rate for the relatively developed online markets in the UK and Ireland and reflects the relative maturity of online gambling in Sweden,¹⁰⁰ already discussed in Chapter two (see section 2.3).

5.3.2.2 Online lottery

⁹⁷ Based on H2 and Svenska Spel estimates. The estimated decline in Svenska Spel's market share including lottery is c. 6-10ppts (2007-2011) reflecting the strength of Svenska Spel's lottery proposition. Gambling Compliance: "Jobs Sacrificed As Svenska Spel Seeks To Regain Competitive Edge", October 1st 2012.

⁹⁸ PMU's online market share is estimated to have declined by 8ppts during this period.

⁹⁹ Derived by combining H2's estimate of the annualised growth rate of online gambling in Sweden between 2009 and 2011 (c.5%) and Svenska Spel's estimate of annualised growth of c.8.5% during this same period. This is also in line with the slightly higher annualised growth experienced between 2007 and 2011 of c.9% according to Svenska Spel and c.6% according to H2 and GBGC.

¹⁰⁰ Previous PwC work in the sector.



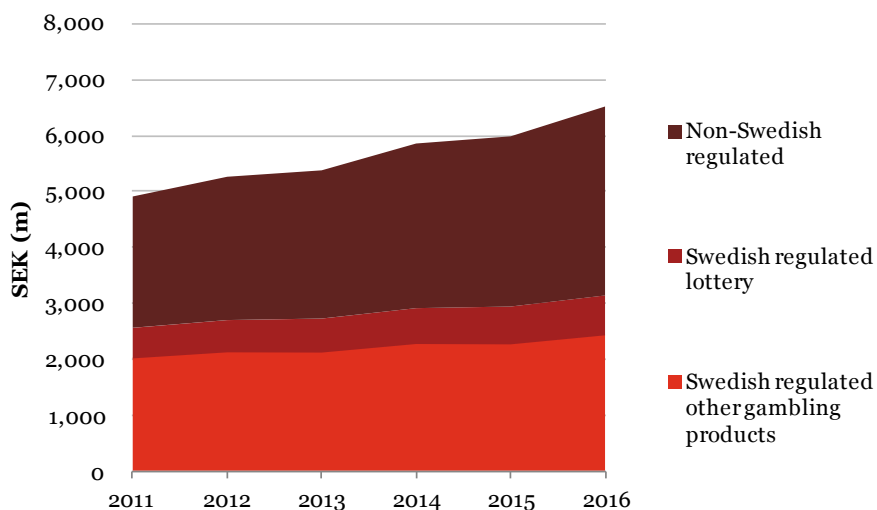
Under the status quo Svenska Spel would retain the online lottery monopoly and would not be subject to online gambling tax. We have made the simplifying assumption that Svenska Spel’s market share of the online lottery market is not materially below 100%, as there are no other operators with a material share of online lottery in Sweden.¹⁰¹ We thus assume a lottery absorption rate of c.100% and expect this to remain going forward. In terms of growth we expect that lottery products will continue to grow in line with other gambling products as this is consistent with the historical annualised growth of online lottery products between 2009 and 2011.¹⁰²

5.3.2.3 Scenario summary

We note that under this scenario online gambling tax revenues are only generated from ATG, an estimate of which is presented below.¹⁰³

A summary of the output from Scenario 0 is presented below (Figure 5.1):

Figure 5.1 – Scenario 0: Sweden online gambling GGR 2011-2016



¹⁰¹ Confirmed by PwC expert interviews.

¹⁰² H2, Svenska Spel annual reports, PwC analysis.

¹⁰³ ATG currently pays 36% of its total GGR in Sweden as a lottery tax to the state (the same rate has applied both in 2010 and 2011). We assume that this applies in the same way to its online and offline operations and hold this tax rate stable going forward.

Table 5.2- Scenario 0 summary

	2011	2012	2013	2014	2015	2016
Swedish-regulated lottery (SEK m)	545	575	606	640	675	712
Swedish-regulated market size other gambling products (SEK m)	2,022	2,130	2,126	2,279	2,272	2,434
Non-Swedish regulated market size (SEKm)	2,352	2,568	2,656	2,950	3,050	3,386
Absorption other products (excl. lottery)	46%	45%	44%	44%	43%	42%
Absorption all products (incl. lottery)	52%	51%	51%	50%	49%	48%
Online gambling tax take	492	528	538	588	598	654
Cumulative tax take	492	1,020	1,558	2,146	2,744	3,398

Source: PwC model

5.4 Scenario 1: 20% tax on GGR

5.4.1 Summary of Scenario 1

A significant increase in absorption is achieved, compared to the status quo scenario, as major operators enter the market and Svenska Spel gains market share. The market also experiences a modest first year increment in growth (compared with the experiences of our case study countries) as Svenska Spel benefits from being able to offer a comparable product offering to that of not-locally regulated competition and other operators who become licensed in the market invest further in marketing in order to gain market share and reap the benefits of being seen to be regulated.

5.4.2 Discussion of Scenario 1

5.4.2.1 Online gambling products excluding lottery

We expect that at this level of tax absorption would increase due to the combined effect of major,¹⁰⁴ currently non-Swedish regulated, operators entering the market and Svenska Spel (and/or ATG) gaining market share. We expect that Svenska Spel would gain share because it will be able to compete on a more even playing field with other operators (i.e. by offering online casino games) and because it will benefit from its land-based presence and strong brand profile, in line with our case studies of France and Denmark – see chapter 4).¹⁰⁵ Additional increases in absorption from other major operators becoming Swedish regulated will to an extent be moderated because some operators, who decide to become Swedish regulated, may lose some market share to Svenska Spel (and/or ATG) or may need to reduce their investment into the market (and/or reduce payouts) in order to maintain profitability. This will impact their ability to capture market share in the online gambling market

¹⁰⁴ We define ‘major operators’ as operators who are either publically listed and/or have a high public profile in Sweden. Under this scenario we expect all major operators to become licensed. For example we do not expect that major publicly listed companies such as Ladbrokes would continue to operate in the market without obtaining a license.

¹⁰⁵ It is not clear whether ATG would increase its range of products in the case of re-regulation, or whether it would simply retain its core horse-race betting product. As a result of this uncertainty we have not explicitly modelled increases in absorption from ATG but considered a range of possible scenarios for ATG’s share ranging from share loss (if ATG does not expand its product range) to a slight increase in market share overall (if ATG’s product range is expanded and grows above market).



(excluding lottery) and consequently limit additional increases in absorption from major operators who decide to become Swedish-regulated.

As a result of these dynamics we would expect an initial rate of absorption of c.65% rising to c.69% by 2016 as regulated operators benefit from being able to advertise in the Swedish regulated market (to the exclusion of non-Swedish regulated operators) and reap the benefits of being seen to be regulated leading to a gradual increase in market share over time. To estimate the increase in penetration we have considered the current online gambling market structure, where we estimate that c.20-30% of the market (in GGR terms) is captured by major operators, likely changes in market shares for Svenska Spel and ATG, and the competitive interaction between these operators and non-Swedish regulated operators.¹⁰⁶ Our estimated level of absorption is also in line with the initial rates of absorption seen in other European countries when they regulated their online markets. These rates range from c.64% in France (in its second year of regulation reflecting that 2010 only was a half year effect as the market opened in June 2010) to c.68% in Denmark (in its first half year of market opening) and c.71% in Italy (2011, reflective of the fact that it is only recently that the Italian online gambling market has regulated a fairly broad range of online games).¹⁰⁷

With regards to our expectations for future market growth of online gambling in this scenario, we anticipate a modest first year increase relative to recent historical growth and a subsequent return to long term growth from the second year of regulation onwards (in the first year post-regulation we estimate growth to increase by c.14 ppts over the long term estimated growth of 5-6% and we subsequently expect growth to return to its long-term rate of 5-6% from the second year of regulation onwards).¹⁰⁸ The reason we expect a growth increment in the first year of regulation is that we expect Svenska Spel and other operators, who become licensed in Sweden, to invest in the market in order to capture market share, and to also benefit from the ability to offer a product offering in-line with that of the non-Swedish regulated competition. This increase is significantly lower than increases seen in other European jurisdictions when their online markets regulated (e.g. the Czech online gambling market grew by c.178% in its first year of regulation, 99ppts above its historical growth rate of c.79%, whereas the French and Italian markets grew by c.45ppts and 28ppts above their historical pre-regulation growth rates respectively). We believe that an appreciably lower growth rate in the first year of regulation is reasonable in the case of Sweden due to the significantly higher level of maturity of the Swedish online gambling market (which we discussed in chapter 2, section 2.3) and the fact that a number of major operators, who we expect to become Swedish-regulated, already have an established brand presence, which will to an extent limit the need for significantly above norm marketing spend on market opening.¹⁰⁹ It should be noted however that at lower tax rates operators may take the opportunity of market opening to invest more on marketing in order to capture market share from other operators consequently leading to higher first year growth (we discuss this in the scenarios which follow).

5.4.2.2 Online lottery

¹⁰⁶ A 6ppt increase is in line with Svenska Spel's market share gain in 2006 when it was allowed to offer online poker. However, this share gain was gradually eroded over time and as such we believe that a more conservative estimate of market share gain for Svenska Spel may be realistic. A 2ppt share gain would imply that Svenska Spel would grow in 2013 in line with the growth rate of major Swedish –facing operators between 2010 and 2011.

¹⁰⁷ H2.

¹⁰⁸ Before the application of a tournament effect. Our growth increment is half that seen in Italy's online gambling market in its first full year of regulation.

¹⁰⁹ We note that if a large number of operators who do not already offer their services to Swedish players enter the market on re-regulation then market growth could be appreciably higher but given the relative historical openness of the Swedish market to operators due to the lack of legislative clarity described in chapter two we believe it is more likely that the vast majority of operators who will enter the Swedish-regulated market already operate in the non-Swedish regulated market.

For the purposes of our model we make the simplifying assumption that Svenska Spel will continue to lead online lottery after re-regulation with its share in this product segment not materially falling below 100%, as there are no other operators with a material share of online lottery in Sweden and we do not expect re-regulation to change this competitive dynamic.¹¹⁰ We thus assume lottery absorption at c.100% and hold this stable going forward. With respect to growth, we expect that online lottery will continue to grow in line with its long term growth of 5-6% under the status quo, as we do not expect re-regulation to lead to an increased interest in Svenska Spel's lottery products which would lead to growth above normal long-term growth.

5.4.2.2 Scenario summary

A summary of the output from Scenario 1 is presented below (Figure 5.2):

Figure 5.2 – Scenario 1 Sweden online gambling GGR 2011-2016

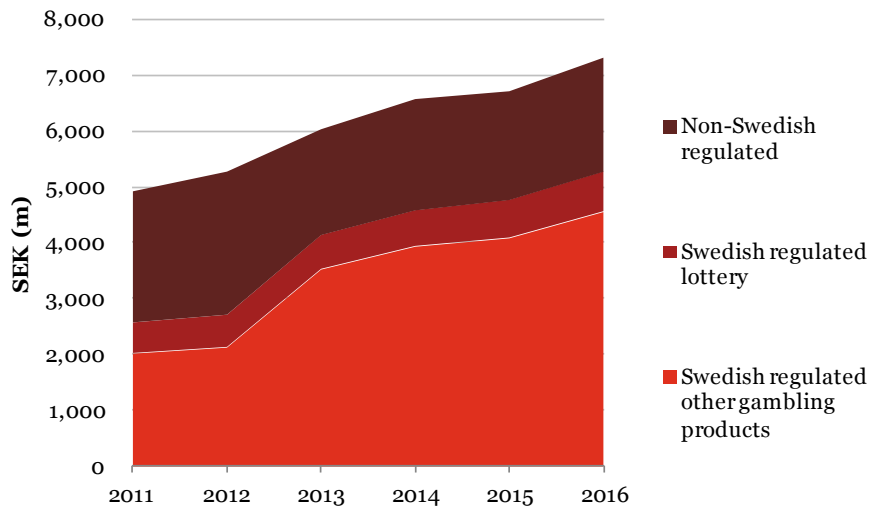


Table 5.3- Scenario 1 summary

	2011	2012	2013	2014	2015	2016
Swedish-regulated lottery (SEK m)	545	575	606	640	675	712
Swedish-regulated market size other gambling products (SEK m)	2,022	2,130	3,527	3,937	4,087	4,558
Non-Swedish regulated market size (SEK m)	2,352	2,568	1,899	1,998	1,953	2,048
Absorption other products (excl. lottery)	46%	45%	65%	66%	68%	69%
Absorption all products (incl. lottery)	52%	51%	69%	70%	71%	72%
Online gambling tax take	492	528	827	915	952	1,054
Cumulative tax take	492	1,020	1,847	2,762	3,714	4,768

Source: PwC model

¹¹⁰ Confirmed by PwC expert interviews. H2 estimates that Svenska Spel's market share of online lottery is c.98% (source: email exchange with H2).



5.5 Scenario 2: 15% tax on GGR

5.5.1 Summary of scenario 2

A significant increase in absorption is achieved under this scenario relative to scenario 1 as a larger segment of the market is incentivised to become regulated at this rate of tax. The lower tax also enables operators to invest more in the market and leads to a higher increase in absorption over time.

5.5.2 Discussion of scenario 2

5.5.2.1 Online gambling products excluding lottery

We expect absorption to be relatively higher in this scenario compared to scenario 1 as a larger number of operators find the tax rate viable (i.e. would be able to operate whilst remaining profitable), and seek to become Swedish-regulated. In addition this tax rate would better enable Swedish-regulated operators to invest in the Swedish market and/or offer better prices, leading them to capture relatively more share from operators who do not become Swedish-regulated.

We expect initial market absorption of 72.5%, increasing to 80% by 2016 as the benefits of advertising freely allow Swedish-regulated operators to increase market share relative to non-Swedish regulated competitors over time. To estimate the increase in penetration we have considered the current online gambling market structure, where we estimate that c.20-30% of the market (in GGR terms) is captured by major operators, likely changes in market shares for Svenska Spel and ATG, and the competitive interaction between these operators and non-Swedish regulated operators.¹¹¹ The increase of absorption between scenarios 1 and 2 is also broadly consistent with our analysis of case study countries at their respective tax rates which suggests that there is a correlation between lower tax rates and higher levels of absorption. Extrapolating from our case study countries suggests that absorption could be c.3-13 ppts higher at a tax rate of 15% on GGR than at a tax rate of 20% on GGR.

With regards to our expectations for future market growth, we would expect a relatively higher first year increase in growth relative to scenario 1 as the lower tax rate better incentivises operators to invest in the market. In the first year post-regulation we estimate growth to increase by 18.5 ppts over the long term estimated growth of 5-6%. We have based the quantum of the difference in the first year growth rates between scenarios 1 and 2 on our analysis of case study countries at their respective tax rates and our expectations of Svenska Spel's growth, which we expect to be a major growth driver in scenarios 1-3. Our case studies countries suggest a positive correlation between first year growth and lower tax rates and our extrapolations from them (adjusted for the higher level of maturity of the Swedish market) suggest that first year growth could be c.5-7ppts higher at a 15% rate of tax on GGR than at a 20% tax on GGR. We have moderated this growth increment downwards (to c.4ppts) on the assumption that Svenska Spel's growth rate does not vary between scenario 1 and scenario 2. We expect Svenska Spel's growth to be less sensitive to tax level changes as it is an incumbent operator with a strong brand presence, unlike a newly Swedish-regulated entrant taking marginal decisions about e.g. investment in advertising.

¹¹¹ We do not expect that this lower rate of tax will lead to greater growth for Svenska Spel (and or ATG) than scenario 1 growth and we consequently expect Svenska Spel's and ATG's market shares to be lower in scenario 2 than under scenario 1. This implies that Svenska Spel (and/or ATG) is expected to be less significant as a driver of absorption in scenario 2 relative to scenario 1, with more of the growth in absorption coming from the decisions of major operators to become Swedish regulated.

5.5.2.2 Online lottery

We expect the absorption and growth in online lottery to be the same under scenario 2 as in scenario 1, with Svenska Spel remaining the leading online lottery operator with a market share of c.100%.

5.5.2.3 Scenario summary

A summary of the output from Scenario 2 is presented below (Figure 5.3):

Figure 5.3 – Scenario 2 Sweden online gambling GGR 2011-2016

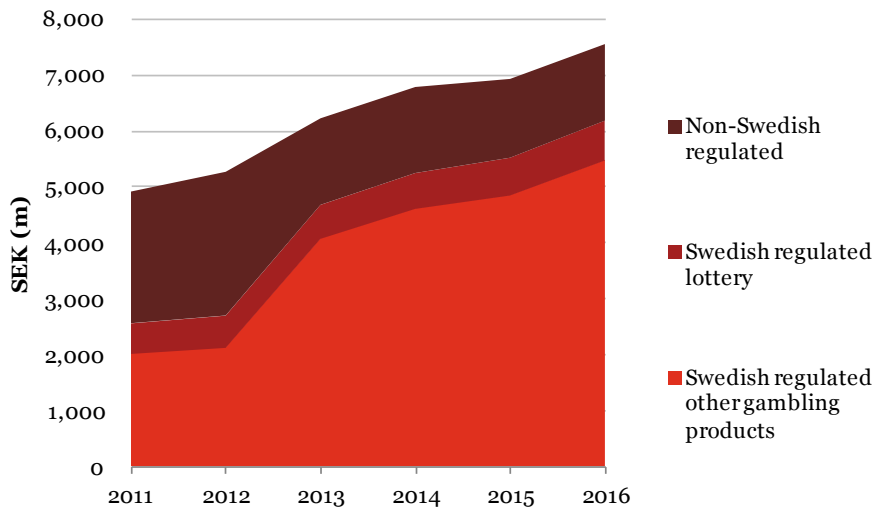


Table 5.4 - Scenario 2 summary

	2011	2012	2013	2014	2015	2016
Swedish-regulated lottery (SEK m)	545	575	606	640	675	712
Swedish-regulated market size other gambling products (SEK m)	2,022	2,130	4,076	4,611	4,849	5,474
Non -Swedish regulated market size (SEK m)	2,352	2,568	1,546	1,537	1,408	1,369
Absorption other products (excl. lottery)	46%	45%	73%	75%	78%	80%
Absorption all products (incl. lottery)	52%	51%	75%	77%	80%	82%
Online gambling tax take	492	528	702	788	829	928
Cumulative tax take	492	1,020	1,722	2,510	3,339	4,267

Source: PwC model



5.6 Scenario 3: 10% tax on GGR

5.6.1 Summary of Scenario 3

This scenario results in the highest level of absorption as at this rate of tax a larger number of operators are incentivised to become locally regulated and their consequent increased ability to invest in the market and more effectively compete with non-Swedish regulated operators leads to the greatest customer response and highest increase of absorption over time, and therefore greatest regulatory control of online gambling by the state

5.6.2 Discussion of Scenario 3

5.6.2.1 Online gambling products excluding lottery

We expect this scenario to achieve the highest level of absorption relative to the previous two scenarios as we expect the tax rate under this scenario to be attractive to a very large number of operators including some smaller operators who would not have been attracted by the tax rates under scenario 1 and 2. For example some Asian operators who currently operate in Sweden,¹¹² but have not yet made a move to obtain an EU gambling license in other jurisdictions, may be incentivised to obtain a Swedish license as in addition to the benefits of being seen to be regulated they would also additionally benefit by being able to offer a more attractive product to their customers (as by being regulated in an EU jurisdiction such as Sweden their customers would be exempt from winnings tax).¹¹³ In addition, the enhanced ability of operators who become licensed in Sweden to invest in the market and/or offer better prices would enable them to capture a greater share from non-Swedish regulated operators and would consequently lead to a faster growth in absorption than in scenarios 1 and 2.

As a result, we expect initial market absorption of 85%, increasing to 93% by 2016. We expect the benefits of being allowed to advertise and the enhanced ability to invest in the market gradually lead to increases in locally regulated operators' market share relative to non-Swedish regulated competitors. To estimate the increase in penetration we have considered the current online gambling market structure, where we estimate that c.20-30% of the market (in GGR terms) is captured by major operators, the likely changes in the market shares of Svenska Spel and ATG, and the competitive interaction between these operators and non-Swedish regulated operators.¹¹⁴ In determining the increase in absorption between scenario 2 and 3 we have also used our analysis of case study countries at their respective tax rates which suggest that absorption could be up to 13ppts higher between a tax rate of 10% on GGR and a tax rate of 15% on GGR. We believe that using this upper estimate is reasonable in light of the fact that the tax rate in this scenario would be within the lower range of GGR taxes that have been applied by other member states (ranging from 5%-27% of GGR). We note that a similar rate is also in place in Belgium (11% GGR) and Latvia (10% GGR) whilst Estonia has a lower rate at 5% of GGR.

¹¹² For example both Pinnacle and SBO Bet operate in Sweden.

¹¹³ Currently Swedish players using non-EU licensed operators have to pay a winnings tax of 30%, but not if they use EU-licensed operators. This may reduce the attractiveness of non-EU licensed operators to Swedish players.

¹¹⁴ We do not expect that this lower rate of tax will lead to materially greater growth for Svenska Spel (and or ATG) than scenario 1 growth and we consequently expect Svenska Spel's and ATG's market shares to be lower in scenario 3 than under scenario 2. This implies that Svenska Spel (and/or ATG) is expected to be less significant as a driver of absorption in scenario 3 relative to scenario 2, with more of the growth in absorption coming from the decisions of major operators to become Swedish regulated.



We have also sense checked these levels of absorption in conversations with market experts and by reviewing market estimates of recent absorption levels in other European countries.¹¹⁵

With regards to our expectations for future market growth of online gambling in this scenario, we would expect a relatively higher first year increase in growth relative to scenario 2 as the lower tax rate better incentivises operators to invest in the market. In the first year post-regulation we estimate growth to increase by c.25ppts over the long term estimated growth of 5-6% p.a. We have based the quantum of the difference in the first year growth rates between scenarios 2 and 3 on our analysis of case study countries at their respective tax rates (adjusted for the relatively higher level of attractiveness of a 10% tax on GGR).¹¹⁶ We have moderated this growth increment downwards (to c.6ppts) on the assumption that Svenska Spel's growth rate does not vary between scenario 2 and 3 as we expect Svenska Spel's growth to be less sensitive to tax level changes as it is an incumbent operator with a strong brand presence, unlike a newly Swedish-regulated entrant taking marginal decisions about e.g. investment in advertising

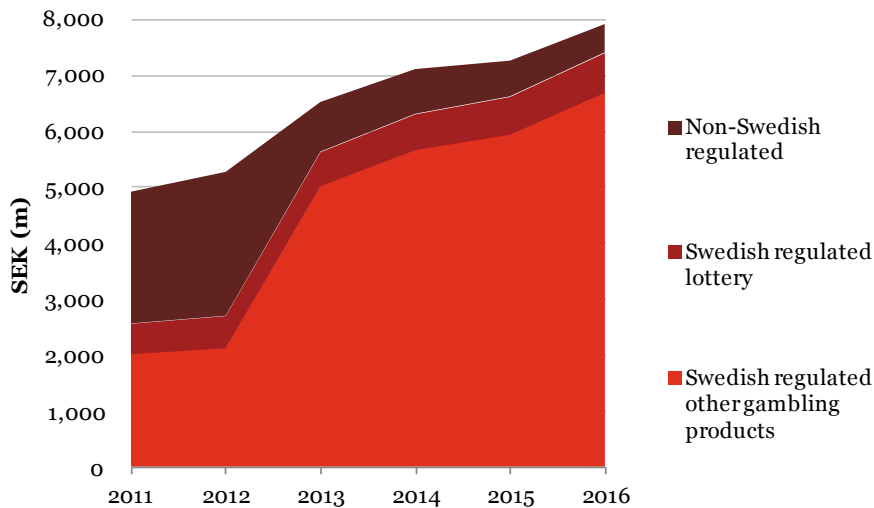
5.6.2.2 Online lottery

We expect the absorption and growth in online lottery to be the same under scenario 3 as in scenarios 1 and 2, with Svenska Spel remaining the leading online lottery operator with a market share of c.100%.

5.6.2.3 Scenario summary

A summary of the output from Scenario 3 is presented below (Figure 5.4):

Figure 5.4 – Scenario 3 Sweden online gambling GGR 2011-2016



¹¹⁵ PwC interviews with market experts.

¹¹⁶ Our case study analysis suggests that first year growth at a tax rate of 10% on GGR will be a maximum of 7ppts higher than growth at a 15% rate of tax on GGR. We have adjusted this to 7.5ppts to reflect the fact that as yet no major jurisdiction has regulated with a 10% tax rate.

Table 5.5 - Scenario 3 summary

	2011	2012	2013	2014	2015	2016
Swedish-regulated lottery (SEK m)	545	575	606	640	675	712
Swedish-regulated market size other gambling products (SEK m)	2022	2130	5,028	5,671	5,947	6,696
Non-Swedish regulated market size (SEKm)	2352	2,568	887	798	636	504
Absorption other products (excl. lottery)	46%	45%	85%	88%	90%	93%
Absorption all products (incl. lottery)	52%	51%	86%	89%	91%	94%
Online gambling tax take	492	528	563	631	662	741
Cumulative tax take	492	1,020	1,584	2,215	2,877	3,617

Source: PwC model

5.7 Factoring in Svenska Spel's profit contribution to the state

In addition to our scenario modelling, where we have estimated the online gambling tax revenues that would accrue to the state from re-regulating the online market, we provide an estimate of additional revenues to the state from its share of Svenska Spel's online revenues.

In constructing our estimate of additional revenues to the state from Svenska Spel we make the following key simplifying assumptions:

- Under the status quo (scenario 0) Svenska Spel's market share declines on an annual basis at the same rate of decline it has seen between 2010 and 2011
- We expect Svenska Spel to be less sensitive to tax level changes than more fully commercial operators which are likely to invest more in the market as a result of a lower rate of tax, and consequently grow at a faster rate. Therefore we have made the simplifying assumption that Svenska Spel's GGR is the same between scenarios 1-3, for the purposes of this model
- The state's total revenue from Svenska Spel's online gambling activities remains stable at its 2011 level, when the state captured c.52% of Svenska Spel's GGR. So for example in the case of scenario 1 (20% GGR tax) the state would capture 20% of Svenska Spel's online GGR as an online gambling tax (already included in our model) and the remaining 32% of its online GGR as a net profit contribution to the state from Svenska Spel.¹¹⁷

An illustration of the components of tax revenue to the state and a summary of the output from our high level analysis of revenues to the state under scenarios 0-3 is presented below (Figure 5.5):

¹¹⁷ Assumes that c.100% of Svenska Spel's net profit is allocated to the state as was the case in 2011. This has historically varied as in certain cases Svenska Spel has also used its net profit to contribute to other causes.



Figure 5.5 – Estimate of state revenues from online gambling (including gambling tax take and Svenska Spel’s net profit contribution)

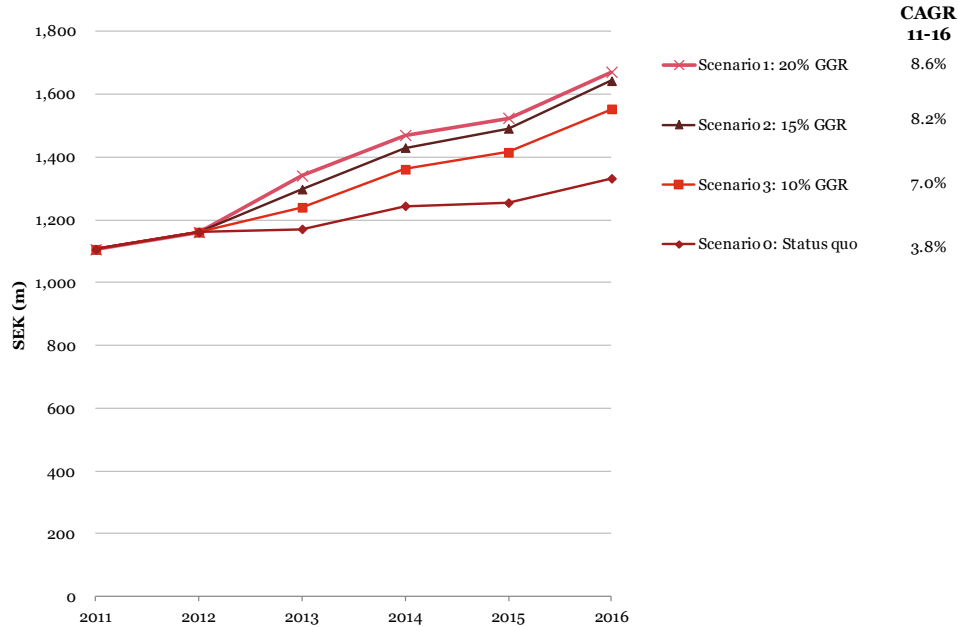


Table 5.6 – High level estimate of state revenues from online gambling (break-out of components)

	2011	2012	2013	2014	2015	2016
Scenario 0: Status quo						
Annual gambling tax receipts from re-regulated market (ATG taxation estimate only)	491.9	528.2	537.6	587.9	598.4	654.4
Svenska Spel net profit contribution to state revenues	613.9	632.6	633.1	656.4	656.1	677.5
Total revenues to state	1105.8	1160.8	1170.7	1244.3	1254.5	1331.9
Scenario 1: 20% GGR						
Annual gambling tax receipts from re-regulated market	491.9	528.2	826.7	915.2	952.4	1053.9
Svenska Spel net profit contribution to state revenues	613.9	632.6	514.1	554.8	572.2	617.5
Total revenues to state	1105.8	1160.8	1340.8	1470.0	1524.6	1671.4
Scenario 2: 15% GGR						
Annual gambling tax receipts from re-regulated market	491.9	528.2	702.3	787.6	828.6	927.9
Svenska Spel net profit contribution to state revenues	613.9	632.6	595.2	642.3	662.5	714.9
Total revenues to state	1105.8	1160.8	1297.6	1429.9	1491.1	1642.9
Scenario 3: 10% GGR						
Annual gambling tax receipts from re-regulated market	491.9	528.2	563.4	631.0	662.2	740.7
Svenska Spel net profit contribution to state revenues	613.9	632.6	676.4	729.9	752.8	812.4
Total revenues to state	1105.8	1160.8	1239.8	1360.9	1415.0	1553.2

Source: PwC model, PwC analysis



5.8 Conclusions from modelling

Our modelling suggests that maintaining the current status quo leads to the worst outcome both in terms of absorption and in terms of revenues to the state. On the other hand, regulating the online gambling market with a 10% tax on GGR (Scenario 3) would deliver the highest share of the market accounted for by locally regulated operators relative to other scenarios, and therefore enable the government to most effectively introduce social responsibility policies and protect consumers. All other things being equal, in the long term, and outside the time horizon of our model, we would also expect a 10% tax on GGR to lead to the highest tax revenues as this rate will ultimately be able to sustain the highest proportion of the market being locally regulated and encourage higher levels of growth than other higher tax scenarios.

However, it should be recognised that there is a trade-off in the short term between maximising absorption (and thus regulatory control of the market in terms of player protection and problem gambling control) and maximising short-term revenue to the state. However, it should also be considered that the non-tax benefits from a higher absorption in a lower tax rate scenario (due to increased employment, marketing spend, etc.) could mitigate the slightly lower projected tax revenues relative to a higher tax rate scenario, at the same time as delivering greater non-financial benefits associated with a higher rate of absorption (e.g. higher levels of player protection). We note that the potential non-tax benefits of lower tax rates are particularly important in the case of Sweden given its strong local online gambling industry, which includes large and globally competitive online companies. We discuss the non –tax benefits of lower rates of tax further in chapter 6.

In addition we note that a 10% GGR tax scenario is better in line with the Swedish government's primary objective in gambling regulation (i.e. consumer protection), whereas receiving the greater short term tax revenue under the 20% GGR tax scenario is not in line with the government's primary objective in gambling regulation. Having the maximisation of tax revenue as a primary objective in gambling regulation would also contradict guidance provided by the European Commission and the ECJ.¹¹⁸

¹¹⁸ This is referred to in the following ECJ case rulings C-275/92 Schindler and C-243/01 Gambelli and in the EC's staff working paper, "Online gambling in the Internal Market", Strasbourg, 23.10.2012



6 Non-tax considerations involved in re-regulating online gambling in Sweden

In this chapter, we look at some of the important non-tax factors that should be considered when evaluating the impact of regulating online gambling. We consider the ability of the regulator to enforce the conditions of regulation, ‘problem gambling’ and player protection, and other economic considerations beyond government revenue.

Regulating online in a way that encourages ‘absorption’ has the beneficial impact of better supporting ‘problem gambling’ and player protection issues. Imposing restrictions on gambling, such as mandatory limits on stakes or banning ‘in-game’ betting, are unlikely to be effective means of preventing ‘problem gambling’; rather, the primary impact is likely to be a significant shift of such gambling activity into the not-locally regulated market where customers might not be protected by regulatory measures. Regulating online gambling may also generate significant tax revenue, as well as stimulate further economic benefits such as job creation and advertising revenues.

6.1 Enforcement of gambling regulation

In order for the Government to successfully regulate online gambling, it needs to introduce regulatory enforcement measures to provide an incentive to operators to become regulated in Sweden and operate legally, and also attempt to prevent customers from accessing those operators that choose not to become locally regulated. The reason that the not-locally regulated online gambling market has grown over the last decade has been partly due to the fact that the technology that allowed governments to ring-fence their gambling revenues developed (or in some cases, was implemented) at a slower pace than the technology that allowed customers to access gambling products outside their own country.

ISP blocking, payment blocking and advertising restrictions (either in isolation or in combination) are the main methods that have been used to restrict not-locally regulated gambling activity.. In what follows we will first discuss payment and ISP blocking enforcement mechanisms before going on to discuss advertising restrictions. Blocking payments requires the gambling regulation to prevent financial institutions and other payment providers, such as PayPal or Skrill (Moneybookers), from processing payments from non-Swedish regulated operators. ISP blocking places the responsibility onto the ISPs to block a list of illegal websites.¹¹⁹ Although these have been adopted by certain other European countries and the U.S., there are legal, practical and technical limitations to both these approaches which have resulted in limited effectiveness.

The U.S. is a prominent example of this with the American Gaming Association (‘AGA’) recently stating that: *“Millions of Americans have continued to bet billions of dollars a year at offshore websites. Americans like to gamble online and have demonstrated that they will do so even if their government tells them it is illegal.”*¹²⁰ The limited success of attempts to prevent customers from using not-locally regulated sites is also testified to by the IP blocking experience of Turkey, where police estimates that more than 500,000 Turks regularly gamble with not-locally regulated online

¹¹⁹ Regulation may also make ISPs responsible for blocking any content that is available from the not-locally regulated market (e.g. advertising). Any such regulation would face similar obstacles to that of ISPs blocking not-locally regulated operator websites.

¹²⁰ American Gambling Association, May 2011.

bookmakers and identified more than 400 Turkey-facing websites which were able to circumvent IP blocking measures.¹²¹ Norway paints a similar picture: despite the payment blocking mechanisms introduced in June 2010, more than half of online players found ways to circumvent the blocks (Feb 2011).¹²² Norsk Tipping – the only legal online operator in Norway – stated that it had not “*benefited in any great way*” from the payment blocks and that highlighted that competition from unlicensed sites was still rife.¹²³ Further to this, the regulator admitted in a report in January 2012 that the online payments ban “*has not been a success*”, with 54% of gamblers saying that they bet as often now as before the prohibition and 5% stating that they actually play more often. In addition to this 51% of online gamblers said they were not aware of a payment ban.¹²⁴

Moreover, the legality of requiring ISPs to block access to unlicensed gambling sites has been brought into question by a recent ruling of the Court of Justice of the European Union (CJEU) which ruled in November 2011 that requiring an internet service provider (ISP) to monitor traffic for the purposes of stopping illegal downloading is incompatible with EU law.¹²⁵ Whilst this case did not explicitly revolve around online gambling it suggests that there may be legal limits to what ISPs can be required to do to block access to unlicensed gambling sites. In fact the recent decision by the Slovak government to drop plans for ISP blocking for unlicensed gambling sites has been attributed to precisely this CJEU ruling.¹²⁶ This in conjunction with the objections from ISPs in France, Germany and the Czech Republic (where ISP and payment blocking have been dropped from the most recent draft gambling legislation recently notified to the Commission following public outcry)¹²⁷ and the payment blocking experiences of Turkey, the U.S. and Norway have highlighted that there are so far no truly effective measures for preventing consumers from accessing and using unlicensed gambling sites. This is in line with the conclusions reached in the EC Danish State Aid decision of September 2011 where the Commission stated that:

*“it is questionable whether these blocking systems could produce the expected results, as either the online gamblers could escape the internet blocking by changing the “ports” used, or the prohibition of certain payments could block licit commercial transactions other than payments relating to stakes and prizes.”*¹²⁸

In addition, the rapid growth of gambling via mobile phones adds further complexity and challenge to blocking not-locally regulated gambling activity.

The limitations of ISP website blocking and payment blocking are also reflected in the limitations of trying to prevent not-locally regulated operators from advertising. Overall we would expect the ability of the regulator to enforce advertising bans to vary with the type of advertising. For example advertising on mass media (e.g. TV, radio, and display advertising in public locations) and sponsoring football teams, (i.e. above-the-line (ATL) marketing) are relatively easier to police than BTL marketing activities such as affiliate marketing. This means that a regulator may be able to enjoy relative success

¹²¹ Gambling Compliance: “Blocking Tactics Failing in Turkey, Say Police”, February 2012.

¹²² Norwegian Gambling Board, “Evaluation of the regulation prohibiting payment transfers for gambling purposes without a Norwegian license (FOR 2010-02-19 no. 184)”.

¹²³ Gambling Compliance: “Norway’s Payment Blocks Fail To Deliver For Norsk Tipping”, March 2011.

¹²⁴ Norwegian Gambling Board, “Evaluation of the regulation prohibiting payment transfers for gambling purposes without a Norwegian license (FOR 2010-02-19 no. 184)”, p24 and p26.

¹²⁵ Case C-70/10 Scarlet Extended SA v Société belge des auteurs, compositeurs et éditeurs SCRL (SABAM)

¹²⁶ Gambling Compliance: “Slovak Blocking U-Turn Highlights EU Concerns For ISPs”, 25th November 2011.

¹²⁷ http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?fuseaction=pisa_notif_overview&iYear=2012&inum=487&lang=EN&sNLang=EN

¹²⁸ EUROPEAN COMMISSION DECISION OF 20 SEPTEMBER 2011 (C 35 /2010), paragraph 126.

in banning not-locally regulated operators from marketing ATL. On the other hand BTL marketing tends to use the internet more intensively than ATL advertising and is in consequence subject to the same limitations of ISP blocking, both in terms of the administrative task of blocking advertising content from not-locally regulated operators but also in terms of the potential legality of requiring ISPs to perform this overseeing function. Whilst it might be in theory possible to pass the burden of not accepting advertising from not-locally regulated operators onto highly visible affiliates for example by fining them for accepting advertising by accepting not-locally regulated gambling providers (such as Facebook and Google) the sheer scale of affiliate networks and the difficulty of policing them as a whole would lead to a similarly impossible task to that of asking ISPs to police the whole of the internet.

Our conclusion is that the most effective way to increase the rate of absorption is to combine a strong attempt at limiting the ability of unlicensed operators to operate in the locally-regulated jurisdiction, including advertising bans for not-locally regulated operators, with a fair and efficient licensing system with reasonable taxation, which enables locally-regulated operators to effectively compete with non-Swedish regulated operators in terms of price and thereby minimising the incentives to operate in the not-locally regulated market.

6.2 ‘Problem gambling’ and player protection

In this section we discuss the benefits of regulating the online gambling market at a lower tax rate, which as we have discussed in previous chapters we expect to lead to greater levels of absorption, both in terms of player protection and in terms of enhancing the government’s ability to control problem gambling. We first discuss player protection before moving on to discuss problem gambling control.

6.2.1 Player Protection

A high absorption rate (and in particular a relatively small not-locally regulated market) in terms of player protection, as evidenced from the requirements on operators licensed in other EU jurisdictions.

Operators licensed in EU jurisdictions are typically required by law (e.g. in Malta and Denmark) to take a number of steps to ensure player protection. In addition to this a number of EU operators subscribe the CEN workshop agreement standards regarding Responsible Remote Gambling Measures.¹²⁹ Requirements these operators are subject to include among others:

- Preventing minors from gambling
- Guaranteeing the safety of player funds and personal information
- Guarding against money laundering and other corrupt practices. We note that this is much easier to do in the case of online gambling, compared due to the highly detailed information held by operators and the ability to view information live

These are all requirements that locally regulated operators are legally subject to and can be fined, or face various penalties including, in some cases, the loss of their licence, if these requirements are not met. Having control of this the Swedish government would also be able to tailor these requirements on operators to its specifications. The recent issues regarding online poker in the U.S. (where Full Tilt customers have been unable to gain access to their funds, and Absolute Poker has been found to be

¹²⁹ CAN Workshop Agreement, CWA16259, January 2011.

involved in fraudulent activity) highlights the importance of having such measures in place, and minimising the not-locally regulated market in order to protect players.

6.2.2 Problem gambling control

Policymakers, as well as society at large, are often concerned with the incidence and impact of ‘problem gambling’. Public policy needs to be based on a rigorous understanding of the dimensions and effects of ‘problem gambling’ rather than often inaccurate ‘conventional wisdom’. As yet there is a marked lack of rigorous measurement and statistical analysis to support good public policy and regulation. Most population studies do not typically track the incidence of ‘problem gambling’ over long periods of time, but rather simply capture the prevalence of ‘problem gambling’ at a point in time. In addition studies performed in different jurisdictions often use different definitions of ‘problem gambling’ and different statistical methods for compiling their data, making inter-jurisdiction comparisons over time difficult. However, there is broad consensus amongst researchers that ‘problem gambling’ typically affects approximately 1% of populations worldwide.¹³⁰ This is also in line with Swedish experience where problem gambling levels have been stable at c.1-2% over the past ten years.¹³¹

The stability of problem gambling levels coupled with the growth in online gambling GGR in Sweden of c.23% (CAGRO4-11) suggest that the growth in online gambling in Sweden does not seem to have been coupled with an increase in the incidence of problem gambling. In addition if we assume that the income of problem gamblers (and thus the funds they have available for gambling) has not risen out of line with the rest of the population then it would also be reasonable expect that the proportion of GGR from problem gamblers would have remained stable over time given the stability of their numbers over time (in line with population growth at c.0.7% p.a. CAGRO4-11). This suggests that there is no clear historical evidence that the incidence of problem gambling in Sweden has increased as the online gambling market has grown. This is also supported by a number of studies which have found no clear correlation between the availability of gambling and problem gambling.¹³² The difficulty of drawing conclusions with regards to problem gambling has also been noted in the EC Communication on online gambling which states:

¹³⁰ Wiebe & Volberg (2007): “Problem Gambling Prevalence Research: A Critical Overview. A Report to the Canadian Gambling Association”.

¹³¹ Svenska Spel annual report 2011, p19. A report from the National Audit also confirms that problem gambling has been stable over the last 10 years. National Audit Office: “The Government’s role on the gambling market – are targets achieved?”, June 2012

¹³² Emerson, M.O. & Laudergeran, J.C. (1996). Gambling and problem gambling among adult Minnesotans: Changes 1990 to 1994. *Journal of Gambling Studies*, 12 (3), 291– 304, Wallisch, L. (1996). Gambling in Texas: 1995 Surveys of Adult and Adolescent Gambling Behavior. Report to the Texas Commission on Alcohol and Drug Abuse. Austin, TX: Texas Commission on Alcohol and Drug Abuse; Gullickson, A.R., Hartmann, D.J. & Wiersma, W. (1999). A Survey of Gambling Behaviors in Michigan, 1999. Report to the Michigan Department of Community Health. Kalamazoo, MI: Western Michigan University.; Abbott, M.W. & Volberg, R.A. (2000). Taking the Pulse on Gambling and Problem Gambling in New Zealand: Phase One of the 1999 National Prevalence Survey. Report Number Three of the New Zealand Gaming Survey. Wellington: Department of Internal Affairs; Shaffer, H.J. & Hall, M. N. (2001). Updating and refining prevalence estimates of disordered gambling behaviour in the United States and Canada. *Public Health*, 92, 68-172. In fact certain studies focusing around the concept of adaptation effects (LaPlante, D.A. & Shaffer, H.J. (2007). Understanding the Influence of Gambling Opportunities: Expanding Exposure Models to Include Adaptation. *American Journal of Orthopsychiatry*, 77 (4), 616-623) to the availability of gambling suggest that an increase in availability only leads to a short term increase in gambling related problems but to a decline in the prevalence of pathological gambling over the long run (Abbott et al., 2004) as the customer grows accustomed to gambling and learns how to handle it. In fact, a study conducted by Shaffer and Hall (2001), suggests that accessibility of gambling may evolve around adaptation effects, which may in turn lead to decreases in pathological gambling in the future.

“Evidence of both the scale and variety of gambling disorders is not readily available. Moreover, existing studies and surveys do not allow for incontestable conclusions.”¹³³

With regards to the best regulatory system for the effective control of problem gambling, the European Commission workshops on online gambling concluded that *“the regulatory system in place in a Member State, be it a licensing system or a monopoly, does not seem to have a significant impact on the degree of ‘problem gambling’ or gambling addiction.”*¹³⁴ However, the recent report by the Swedish National Audit office in June 2012 has criticised the current system for failing to effectively address problem gambling,¹³⁵ suggesting that the current Swedish system may not be fit for purpose. Whilst establishing a correlation between changes in regulation and the incidence of ‘problem gambling’ is difficult, we would expect there to be an indirect relationship between regulation of the online market, and the incidence and nature of some of the unintended ‘problem’ consequences. The reason for this is that as discussed in previous chapters, online regulation affects both the absorption rate and the size of the not-locally regulated market (including operators not licensed to operate in any jurisdiction). A high absorption rate (and in particular a relatively small not-locally regulated market) has a number of potential benefits both in terms of ‘problem gambling’ control, as suggested by the European Commission, which states that *“Online gambling provides good opportunities for close monitoring of individual gambling behaviour and early detection of problem development”*.¹³⁶ This is harder to achieve when a large proportion of the market is not-locally regulated and thus not required to monitor such behaviour by the Swedish regulator.

The statement of the European Commission above,¹³⁷ also highlights one of the key benefits of online operations in terms of effective control of problem gambling. In the case of online operations, operators have access to precise information of a customer’s behaviour on their site and are thus better able to detect signs of problematic behaviour and direct the player to potential sources of information and help (which can be specified by the regulator). On the other hand a problem gambler may visit a number of a single operator’s betting shops without the operator being able to track that the relevant bets were placed by the same individual, with the result that the operator is not able to detect the signs of problem gambling behaviour. The benefits of online operations as a tool for the effective control of problem gambling were also highlighted in a study by Haefeli et al, which conclude that early detection is: *“an effective block in the prevention of problem gambling”* and highlight that indicators that could be tracked by online operators are an effective tool in predicting gambling related problems (c.76.6% of cases, according to their analysis).¹³⁸

Further potential benefits in terms of the control of problem gambling, apart from early detection and monitoring, that could result from regulating online gambling in Sweden in a way that maximises absorption, include the effective provision of self-exclusion options to players and the provision of information to players in a targeted manner:

- For example operators licensed in other EU jurisdictions are generally required to provide facilities which allow players to either limit the amounts they bet or to self-exclude themselves

¹³³ European Commission: “Communication from the Commission to the European Parliament, the Council, the economic and social committee and the committee of the regions, Towards a comprehensive framework for online gambling”, Strasbourg 23.10.2012., p11-12.

¹³⁴ European Commission: “Workshop on online gambling: Detection and prevention of problem gambling addiction”, 25th May 2011- <http://ec.europa.eu/intemal market/services/gambling en.htm>

¹³⁵ National Audit Office: “The Government’s role on the gambling market – are targets achieved?”, June 2012

¹³⁶ European Commission: “Workshop on online gambling: Detection and prevention of problem gambling addiction”, 25th May 2011 - <http://ec.europa.eu/intemal market/services/gambling en.htm>

¹³⁷ Also, in a study by Parke, Rigbye, Parke and Williams (2007), conclude that online gambling would generally offer optimal conditions for implementing protective measures

¹³⁸ Joerg Haefelia, Suzanne Lischer and Juerg Schwarz: “Early detection items and responsible gambling features for online gambling”, International gambling studies, vol11, December 2011

from gambling. For example in Denmark the gambling authority has set a voluntary self-exclusion register where players can register to be either temporarily or permanently excluded from gambling. Danish regulated operators are then required to not permit gambling by players who have placed themselves on the register on their sites.¹³⁹ This is once again easier to enforce online than in the case of land-based operations, highlighting the benefits of online gambling in problem gambling control

- Licensed operators are also typically required to provide advice on ‘problem gambling’ on their websites and to direct players to sources of further information and assistance. This can be better tailored in an online environment, providing aid to problem gamblers at the first signs of problematic activity

Many of these benefits are already requirements on operators in other EU jurisdictions (as we have already noted operators licensed in EU jurisdiction often subscribe to voluntary codes of conduct for responsible gambling and/ or are required by law (e.g. in Malta and Denmark) to take a number of steps to address ‘problem gambling’). The development of self-regulatory approaches by the online gambling industry for socially responsible gambling has also been highlighted by the EC in its recent online gambling communication.¹⁴⁰ For example CEN workshop standards that many EU operators subscribe to include the provision of clear and accessible customer information and providing the ability for players to impose deposit limits, self-exclusion or cooling-off periods. Having control of this the Swedish government would also be able to tailor these requirements on operators to its specifications. In addition the Swedish government may choose to channel some of the tax revenues from the regulation of online gambling to research targeted to the better understanding and treatment of problem gambling. This is clearly superior to the current situation where the government’s ability to detect, monitor and prevent problem gambling is limited by the fact that the current system limits the proportion of the market which falls under its regulatory control.

6.3 Other economic considerations

In this report we have focused on the tax benefits of regulating online gambling; however there are also other economic factors to consider. Other factors to consider are, for example, job creation, sponsorship and marketing as well as driving innovation and development within the ICT sector. We would expect that a competitive tax rate would encourage Swedish-regulated operators to continue investing in the Swedish market and to consequently drive employment both in the online gambling market and in ancillary industries such as advertising and the ICT sector.

For example a larger locally-licensed market (which is best supported by the 10% tax on GGR) is also expected to lead to greater employment opportunities in the industry. We note in particular the potential role of leading ICT gambling companies in Stockholm, providing mainly highly innovative B2B solutions for B2C gambling operators across the world, in supporting employment. This Stockholm ICT cluster can be best compared to the ‘Silicon Valley’ of the global digital gambling industry, and would be expected to best be able to continue developing and to support employment in the industry under a 10% tax on GGR. The benefits of commercial gambling operations in supporting employment growth have also been highlighted in two recent studies by Henrik Jordahl (in 2011 and 2012 respectively).¹⁴¹ In addition we note that becoming regulated in Sweden may in many cases

¹³⁹ <http://www.skat.dk/SKAT.aspx?oId=1977841&lang=us>

¹⁴⁰ European Commission: “Communication from the Commission to the European Parliament, the Council, the economic and social committee and the committee of the regions, Towards a comprehensive framework for online gambling”, Strasbourg 23.10.2012., p10.

¹⁴¹ Henrik Jordahl: “Sweden’s Digital Growth Industry, New Perspectives on the Need for a Re-regulated Gaming Market”, May 2011, Research Institute of Industrial economics. Henrik Jordahl: “ The Swedish Gambling Industry Size, Growth and Importance of a Digital Phenomenon”, September 2012.



require operators to set up a local Swedish team both in terms of offering its customer service in Sweden but also to represent operators in interactions with the regulator and other Swedish bodies.¹⁴² As a result of this we would expect re-regulation to have a positive effect in terms of employment in the industry, in addition to the influence of major ICT gambling companies already discussed, an effect that would of course be greater the higher the level of absorption (as this would involve a larger number of operators becoming Swedish-regulated).

In addition to this we would expect greater regulated market growth (and subsequently greater levels of absorption) to drive revenues and employment in ancillary industries such as advertising. Based on publicly available information, major international operators typically spend in the region of 25% of their online gross profits (GGR) on marketing of online operations.¹⁴³ We therefore estimate total online gambling spend to be c.SEK 1bn based on the 2011 Swedish market size. It is interesting to consider what the impact on marketing spend would be in different scenarios, in order to inform the debate on what the most appropriate rate of tax would be. As discussed in ch5 we would expect operators to better able to invest in marketing in scenario 3 (10% tax on GGR) than in scenarios 1 and 2 (20% and 15% tax on GGR respectively). Assuming that half of the tax burden increase between the 20% GGR tax and the 10% tax scenario was funded by operators reducing their marketing costs (thereby reducing marketing spend on online operations in Sweden from 25% of Swedish-regulated GGR to c.22%), this would result in a reduction in marketing spend of c.SEK 110-140m p.a. between these two scenarios. In addition to c.SEK110-140m being taken out of the Swedish economy under these assumptions, there would also likely be a knock-on impact on the economy both in terms of job cuts in the advertising sector, and in terms of reduced tax revenues from the advertising industry (both in terms of corporation tax and income tax, assuming that there are some cuts in jobs and/or pay). This potential impact, although not directly related to online gambling, should be taken into account when considering the most appropriate rate of tax to apply to the Swedish online gambling market.

A further potential benefit to the wider economy from encouraging greater levels of absorption (and regulated market growth) could come through increased sports sponsorship from operators who choose to become Swedish regulated. This is consistent with what has been reported in the case of Denmark since market re-regulation. In 2012 the Danish Superliga will be co-sponsored by Betsafe, while the Danish first division will be renamed to Betsafe Liga 1, an overall sponsorship deal estimated to be worth c.€1m .¹⁴⁴ In addition FC København and FC Midtjylland have been reported to have signed sponsorship deals with Unibet worth c. 21mDKK and 10mDKK respectively over three years.¹⁴⁵

¹⁴² A study by HUI in November 2008, estimated that employment in the Swedish gambling industry could increase by a factor of 2 to 3 as a result of re-regulation of the gambling industry.

¹⁴³ Based on the statutory accounts of William Hill, Paddy Power, Betfair, 888, PartyGaming, Sportingbet and 32Red. Note that data typically refers to marketing spend as a proportion of global revenue. For the purposes of this exercise we have assumed that the proportion of marketing spend (as a % of GGR) is relatively consistent across global operations. Also note that while smaller operators typically spend a lower proportion of gross profits on online marketing, for the purposes of this analysis we have assumed that across the market as a whole the average is 25%.

¹⁴⁴ Gambling Compliance report, "Gambling and Sports Funding in the Nordics", April 2012, <http://www.casinoguide.dk/betsafe-sponsor-for-superligaen>

¹⁴⁵ http://avisen.dk/fcm-og-fck-i-millionsamarbejde-med-unibet_158571.aspx

7 Conclusions

- The purpose of this study is to provide an independent, robust and quantified view of the effects of re-regulating online gambling in Sweden. In particular, we consider the relative merits of regulating the market with different rates of GGR tax
- To evaluate the relative merits of regulating online gambling in Sweden we examine, in the first instance, economic theory. Overall, economic theory suggests that a lower tax rate incentivises operators to improve their product offering, with the opposite expected with a high level of tax. This reduces incentives for customers to seek non-locally regulated (or not-locally regulated) operators, as it minimises the potential product offering gap between locally regulated and other offerings, leading to better capture of the market (i.e. higher ‘absorption’) for enhanced player protection
- Economic theory also suggests that re-regulating with a wide range of products enables locally regulated operators to compete more effectively with not-locally regulated operators, and thus encourages absorption and locally regulated market growth, with the same positive effects
- We compare the experience of other countries in regulating their online markets. In this study, we draw on the experiences of the UK, Italy, France, the Czech Republic and Denmark and three key lessons emerge:
 - First, restricting the range of regulated products holds back online regulated market growth, limiting the proportion of the online gambling market which is locally-regulated and consequently the size of the online gambling market which falls under state authority and supervision
 - Second, the viability of tax rates will be dependent to a large extent on the maturity of the online gambling market in a particular country. For example, the higher market entry tax rates we are seeing being introduced by EU countries such as Italy, Spain, and Greece reflect the fact that these are not mature markets and the majority of operators are willing to manage the additional tax burden to secure of the benefits of first mover advantage. The sustainability of these rates as the markets mature is questionable as seems to be borne out by the recent slowing down of the locally regulated sports betting market in Italy, which suggests that as the Italian market continues to mature its current tax rates for online sports betting may not be sustainable
 - Third, comparing different tax regimes suggests that higher tax regimes (e.g. France compared to Italy and Denmark which have lower rates of tax compared to France) appear to encourage lower rates of absorption (defined as the % of the online market which is locally regulated) and slower rates of regulated online gambling market growth, as the locally regulated offering becomes less attractive compared to that of not-locally regulated competition, both from an operator and a customer perspective. We note that in its decision to the Danish State Aid case in September 2011 the European Commission highlights that conclusions reached by the Danish legislator confirmed by studies and the evidence from other European markets is that a 20 per cent tax on GGR “is the highest rate economically feasible” and that a higher rate would be the “rate of no return” at which operators would not be sufficiently incentivised to enter the locally licensed market ¹⁴⁶

¹⁴⁶ EUROPEAN COMMISSION DECISION OF 20 SEPTEMBER 2011 (C 35 /2010), paragraphs 133-136.

- Fourth, an examination of the experience of the UK, Italy, France and Denmark provides no evidence to suggest that online growth has a more material negative influence (i.e. cannibalisation) on the growth of the local land-based market than the range of other factors which impact the land-based market such as economic growth. In fact a review of market participants' views suggests that online and land-based gambling propositions are complementary and suggests that local land-based incumbents tend to benefit more strongly than foreign operators as a result of regulation or re-regulation of online gambling in a jurisdiction
- From an enforcement perspective, we conclude that measures such as payment blocking and ISP blocking have been shown not to be truly effective, therefore a tax rate and other licensing conditions which incentivises operators to become locally regulated is the key driver in limiting the size of the not-locally regulated market, as opposed to enforcement measures which cannot be relied upon
- In order to evaluate the potential impact on absorption, market size and tax take of different rates of tax for online gambling, we have modelled four regulatory scenarios:
 - Status quo. Regulation of online gambling remains 'as is'
 - Online gambling re-regulated with a 20% tax on GGR
 - Online gambling re-regulated with a 15% tax on GGR
 - Online gambling re-regulated with a 10% tax on GGR
- In addition to our scenario modelling where we have estimated the online gambling tax revenues from re-regulating the online market, we provide an additional estimate of the revenues that would accrue to the state from its share of Svenska Spel's online GGR
- Our assumptions suggest that regulating the online gambling market in Sweden with a 10% tax on GGR would result in the highest proportion of the market being locally regulated (i.e. highest absorption), whereas regulating with a 20% tax on GGR would result in lower absorption but more revenues to the state in the time horizon of our model. Maintaining the current status quo leads to the worst outcome both in terms of absorption and in terms of revenues to the state
- However, it should be recognised that there is a trade-off in the short term between maximising absorption (and thus regulatory control of the market in terms of player protection and problem gambling control) and maximising short-term revenue to the state. We note that the non-tax benefits from a higher absorption in a lower tax rate scenario (due to increased employment, marketing spend, etc.) could mitigate the slightly lower projected tax revenues relative to a higher tax rate scenario, at the same time as delivering greater non-financial benefits associated with a higher rate of absorption (e.g. higher levels of player protection)
- All other things being equal, in the long term we would expect a 10% tax on GGR to lead to the highest tax revenues as this rate will ultimately be able to sustain the highest proportion of the market being locally regulated and encourage higher levels of growth than our other higher tax scenarios



DOCUMENT END