



THE GAMING MARKET IN FINLAND

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GLOSSARY OF KEY TERMS

Lotteries and gaming

According to the Finnish Lotteries Act (1047/2001), a lottery means an activity in which participants may win a prize of monetary value based fully or partly on chance, and in which there is a charge for participation. Lotteries may take the form of money lotteries, betting, pools, slot machines, casino games, casino activities, totalisator betting, non-money lotteries, guessing games, bingos or non-money prize machines. Gaming activities are separately defined in the act as the running of a lottery in which players can win money.

Gross gaming revenue (GGR)

GGR is the sum total of all players' contributions to all games minus the winnings paid out.

Revenue

Revenue refers to the sum total of a company's income from sales, calculated in accordance with the Finnish Accounting Act. Finland's gaming operators have somewhat differing ways of reporting their revenue. For example, Finland's Slot Machine Association (RAY) separately reports its income from operations and revenue. The difference between the two is that the revenue figure is exclusive of lottery taxes paid. Veikkaus, on the other hand, reports its revenue inclusive of the tax.

Gaming and gambling

The Finnish Lotteries Act (1047/2001) defines gaming as the running of a lottery in which players can win money. The Finnish Criminal Code (39/1889), on the other hand, defines gambling as follows:

“Gambling refers to pools, bingo, tote and betting games, money and goods lotteries, casino operations and other similar games and activities where winning is completely or partially dependent on chance or events beyond the control of the participants in the game or activity and where the possible loss is clearly disproportionate to the solvency of at least one of the participants.”

Gaming and gambling are often used synonymously in colloquial language. This research applies the definition of gaming as given in the Lotteries Act.

Online gaming

Online gaming refers to gaming taking place on the Internet. Online gambling and Internet gaming are used as synonyms for online gaming in this research.

Games of skill

Games of skill differ from games of knowledge and chance in that the outcome of the game is affected by certain mental and/or physical skills of the player. Usually, players can improve their techniques over time through practice. Usually playing a game of skill requires no more knowledge than the rules of the game, but achieving a good outcome often requires a more refined technique. This places a more skilled player at an advantage over a less experienced one (cf. e.g. Alho 1981). Typically, the various forms of sports betting are considered games of skill. Poker, on the other hand, is not always defined as a game of skill, as the national definitions of games of skill vary.

Integrity in sports

Integrity in sports refers to incorruptibility. In practice the term means that if the sports betting market is to have integrity, it will not include dishonest operators who seek to manipulate sporting events for their own financial gain.

1 INTRODUCTION

Gaming has grown steadily in Finland since the early 1990s. Gaming now forms a significant sector, which has been subjected to little financial research in Finland. The Finnish gaming system is currently run by three legal monopolies. Veikkaus Oy has a licence to conduct money lotteries, betting and pools. Finland's Slot Machine Association (RAY) has the exclusive right to carry out slot machine and casino activities in Finland. Fintoto Oy (i.e. horse racing) has a licence for totalisator betting.

National monopoly systems have historic traditions in Europe. Gaming monopolies have been justified under the protection of consumers, the prevention of social disadvantages, the funding of charities and the prevention of crime (Cisneros Örnberg & Tammi 2011). European Union legislation places an emphasis on the free movement of services, however, which is a significant challenge for the future of monopolies. By now, many EU member states have had to reform and re-regulate their gaming and gambling policies and legislation. Changes in national legislation have also been brought about by rapid technological development in the sector, the entry of new international operators onto the market and the resulting increased competition. Controlling gaming through a government monopoly is difficult in the modern world, because consumers have easy access to online gaming through websites run by international companies.

There have been two opposite trends in the changes in EU states' gaming systems in recent years. While Spain, Italy, Denmark and France, for example, have dissolved their monopolies and shifted in the direction of open licensing, Finland and Sweden have striven to further reinforce the status of their government monopolies. Compared to Sweden, the debates conducted in Finland concerning the rights of gaming monopolies have been moderate. Thus far, there has been little constructive or objective examination of alternative models in Finland.

The purpose of this study is to examine Finland's current gaming system from different points of view. The gaming system is seen in a broad context comprising issues such as problem gambling, the connections between the current gaming system and the funding of Finnish team sports, the links between integrity in sports and gaming, and the economic perspective on all of these areas. The study also considers alternative models for the arrangement of gaming in Finland.

The authors hope that the study will form a basis for dispassionate and analytical debate on the needs for improvement and future scenarios of the Finnish gaming system. Such debate is needed, because the EU gaming market will most likely continue to change in the coming years. This means that sooner or later the Finnish gaming system will face strong pressure to change. Now is the right time to think about the sorts of changes for which Finland should be prepared. In considering alternative systems, we must begin by scrutinising the European states that have begun to dismantle their gaming monopolies.

In conducting the research, the authors have referred to secondary materials, such as studies and reports related to gaming and regulation in different countries. Additionally, they have interviewed numerous experts, including representatives of gaming operators and sports club managers.¹

The structure of the research report is as follows. Section 1 is an introduction to recent developments in the Finnish gaming market. Section 2 examines the general characteristics of the Finnish gaming system, from the points of view of marketing and taxation procedures, for example. The section also introduces the main Finnish operators in the sector. Section 3 focuses on problem gambling, especially in light of recent research outcomes, because prevention of the social problems related to gaming is one of the most common justifications for governmental regulation of gaming. Section 4 looks at the connections between the gaming monopolies and competitive sports in Finland, through interviews with representatives from Veikkaus Oy and sports clubs. Section 5 examines the links between integrity and gambling in sports. Section 6 comprises economic analyses of the Finnish gaming system. Section 7 introduces and compares European systems that differ from the Finnish gaming system. Particular attention is paid to the systems of Denmark, the United Kingdom, Italy, France and Germany. Section 8 comprises a summary of the earlier sections and presents some alternative models for the arrangement of gaming in Finland.

The study was financed by international gaming operators.

¹ The names and job titles of the interviewees were left out of this report for the sake of anonymity.

2 GAMING IN FINLAND

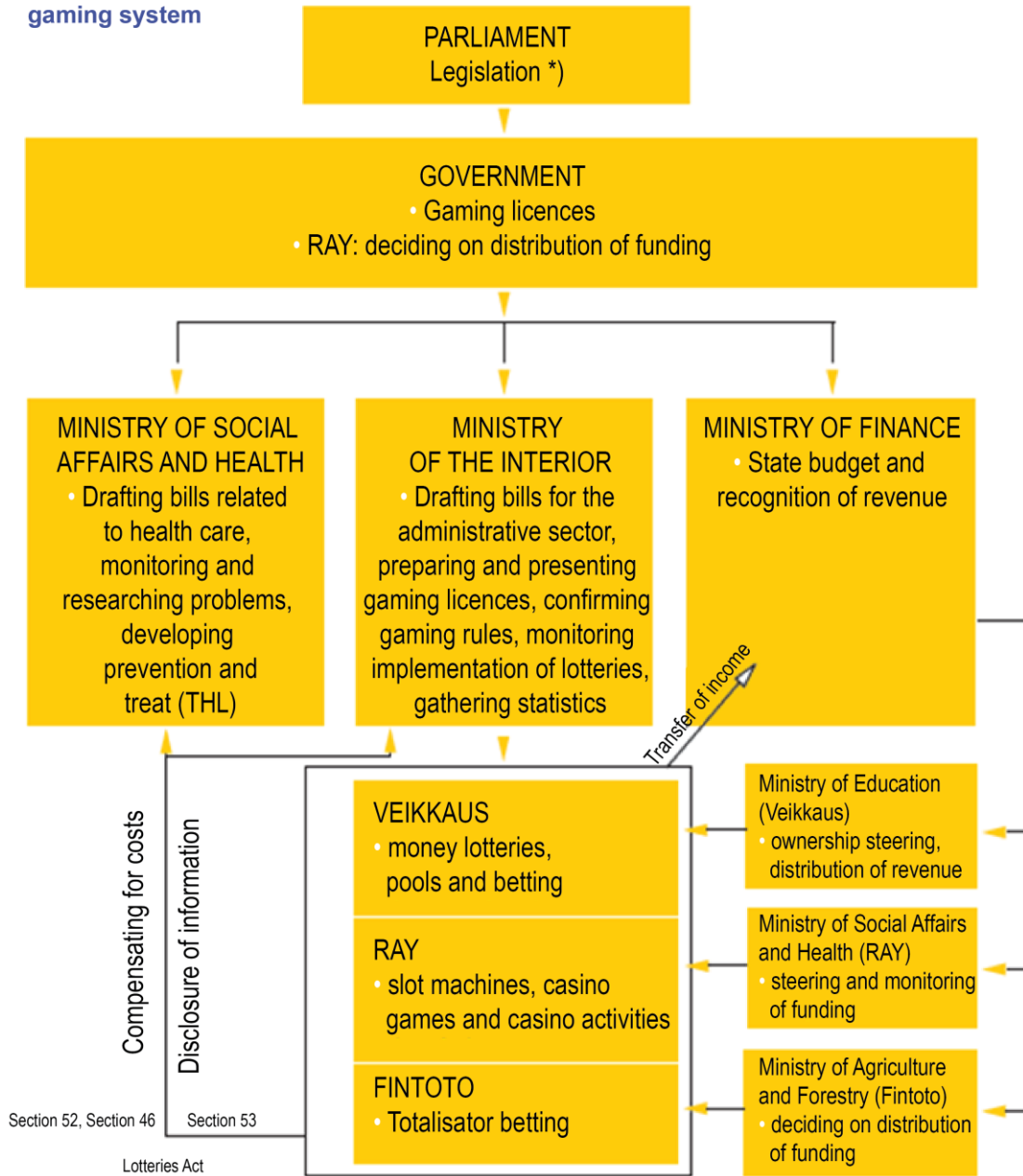
2.1 The gaming system

Gaming activities in Finland are directed by the Lotteries Act. The first law on lotteries was passed in Finland in 1965, compiling together basic regulations concerning gaming activities, which had previously been scattered and fragmentary. The new law was based on the principles that the organisation of gaming activities always required a licence from the authorities and that the exploitation of people's compulsion for gaming was forbidden. However, it was viewed more leniently when the gaming activities were used to raise funds for charity or other philanthropic enterprise. (cf. e.g. Kortelainen 1988, Pollari 2011). Although the Lotteries Act has been revised over the years, the basic principles have remained unchanged.

Finland's gaming system is a licence system based on exclusivity, within which Veikkaus Oy, Finland's Slot Machine Association (RAY) and Fintoto Oy may operate as legal monopolies (Varvio 2007). A legal monopoly can be described as a dominating market position held by an exclusive right based on law (cf. Finnish Competition Authority 2012). Veikkaus Oy has a licence to conduct money lotteries, betting and pools. RAY has the exclusive right to carry out slot machine and casino activities in Finland. Fintoto Oy has a licence for totalisator betting.

The Finnish gaming system is illustrated in Figure 1. This study focuses on analysing the operations of Veikkaus Oy and RAY, with lesser attention paid to Fintoto Oy.

Finland's gaming system



*) Based on the Act on the Autonomy of Åland (1144/1991), the Lotteries Act comes under the region's legislative power. The local Lotteries Act (Landskapslag om lotterier 1966:10) regulates gaming. Exclusive rights to run slot machines, casino games and betting activities have been granted to the association Ålands Penningautomatförening (PAF).

Figure 1 The Finnish gaming system (*Suomalaisen rahapelaamisen vuosikirja 2009, 14*)

In spring 2011, reviewers from the Ministry of Education and Culture initiated a public debate on whether Veikkaus, RAY and Fintoto should be merged into a single entity to increase efficiency. The Ministry's analysis estimated that such a merger could bring about savings of around EUR 50 million (Skog & Mattlin 2011). Interviews with representatives from Veikkaus indicated that the EU has expressed concern over the competition between Finland's three gaming operators in relation to the exclusive licences granted. The Finnish gaming system as a whole was called into question by the European Court of Justice in the so-called Läärä Case in the late 1990s. A statement by the Advocate General of the court expressed the opinion that Finland's slot machine operations are in contravention of EU regulations. The Advocate General called for the replacement of Finland's government monopoly with a non-exclusive licensing system, but the decision of the Court of Justice did not follow this recommendation. The court justified its decision by stating that the restrictions that are in place prevent some of the problems caused by gambling. After the case, more attention has been paid to age limits and corporate responsibility in the Finnish gaming system, however (Cisneros Örnberg & Tammi 2011).

2.2 Marketing of gaming

In recent years there has been extensive debate in Finland concerning factors related to the advertising of gaming. Amendments to the Lotteries Act came into effect on 1 October 2010, mainly concerning marketing. Advertising of illegal games is still forbidden, but the new law also set boundaries for the marketing of licensed gaming. By law, marketing may not be used to encourage underage gaming or to glamourize frequent gaming. The act also lists the games that are considered to involve specific risks: online scratch cards, betting games, casino games, some slot machines and some totalisator betting games. These added risk games may not be marketed outside of game arcades, casinos or horse-racing tracks. The new law increased the possibilities of the authorities to intervene with unlawful marketing using methods such as marketing bans and conditional fines. A new offence, "lottery offence" was added to the Criminal Code (Lotteries Act 2001/1047, National Research and Development Centre for Welfare and Health 2010). The advertising-related legislation is open to interpretation. Warnings have been given by the Lottery Administration of the National Police Board to some foreign gaming companies, Veikkaus Oy and RAY. For example, the National Police Board has cautioned RAY for marketing which has evoked experiences and imagery instead of only providing the permitted information.

After the amendments to the Lotteries Act, private gambling providers significantly reduced their presence in the Finnish media. This is clear for instance in the fact that the poker programmes that were a familiar sight on TV a few years ago and numerous poker-related publications have almost entirely disappeared from the market.

We were fairly worried, because the sanctions were pretty harsh. Editors-in-chief were made personally liable for any publications that violated the Lotteries Act. For a while our marketing stopped almost completely, but since then we have found quite a few so-called legal loopholes... The media have gradually moved their offices abroad in order to operate from there. Now that the media have been encumbered with 23% VAT, the added income would be very welcome. We have noticed a great interest on their part towards it. (Interviewee, International gaming operator)

In practice, gaming operators can avoid the advertising bans of the Lotteries Act relatively easily. In Finland, they advertise on commercial TV channels that operate from abroad and are thereby not covered by Finnish legislation.

According to representatives of Veikkaus Oy, the new Lotteries Act had no great impact on the company's operations. The main changes were related to marketing.

No sports clubs or other business partners may put our logo anywhere without informing us. That was the main effect. We cannot market the content of sports-related betting through them, but we have many other messages we can use. (Interviewee A, Veikkaus Oy)

We are equally liable to be imprisoned if our marketing violates the Lotteries Act, and that is as it should be. Although the new law did give the authorities very powerful tools against marketing violations by foreign companies. They include conditional fines and the concept of financing; if we are caught financing someone, the strictest interpretation will put it down as a lottery offence, whose maximum penalty is imprisonment. (Interviewee B, Veikkaus Oy)

According to information on its website, Veikkaus Oy spent EUR 14.7 million on product advertising in 2010. This included EUR 10.1 million on buying media space and EUR 0.1 million on sharing product information, as well as EUR 3.6 million in sponsorship costs. This represented approximately a 10% increase in product advertising costs from the previous year.

Peltonen (2010, pp. 101–102) analysed Veikkaus Oy's external communications in 2007. Of a total of sixty information bulletins, seven were directly related to the company's corporate responsibility, while most of them contained news about the company's games. These included profiles of lottery winners as well as information on new and changed games. Peltonen considered most of the bulletins to represent advertisements for the purpose of creating the impression that it is possible to get rich playing the company's games. For example, descriptions of lottery winners often contained colourful stories related to personal experiences of playing and winning. Peltonen says (2010, p. 102): "Veikkaus makes ample use of emotional language in its communications".

2.3 Consumers' gaming frequency and market development

Finns are active gamers. The most popular forms of gaming in Finland have usually been the national lottery, slot machines and scratch cards. According to the *Yearbook of Finnish Gambling (Suomalaisen rahapelaamisen vuosikirja 2009)*, in 2008 Finns spent an average of EUR 1,615.75 per person on gaming in 2008. (Cisneros Örnberg & Tammi 2011). Gaming has increased among the Finnish population in recent years. According to a survey conducted by the Finnish Ministry of Social Affairs and Health (*Suomalaisten rahapelaaminen 2011*), 78 per cent of Finns had participated in some form of gaming in the previous 12 months. In 2007, the corresponding figure was 74 per cent (Turja et al. 2012).

In 2010, the Finnish monopoly gaming market was worth EUR 1.53 billion, calculated according to the gaming margin². In that year, Veikkaus Oy had a market share of 52.6%, compared to 44.1% for RAY and 3.3% for Fintoto (Cisneros Örnberg & Tammi 2011). The growth of the sector is reflected in the growth of RAY's gaming revenue from around EUR 246 million in 1990 to around EUR 658 million in 2008. Even the recession of the last few years has not had any significant impact on this trend, despite a slight slowing down of the growth.

Looking at the last few years' growth in millions of euros, you will see that there has been a marked growth in the Finnish gaming market. One question is when will the market become saturated?... How long can the sector continue to grow in Finland? (Interviewee B, Veikkaus Oy)

Finns gamble relatively large sums of money on the grey market, meaning foreign gaming websites. According to the interviews conducted for this research, the estimates made by RAY and Veikkaus Oy of the amounts used in gaming outside of the national borders range between EUR 100 million and EUR 150 million. A representative from an international gaming operator made a much higher estimate than that. It is probably impossible to calculate an exact figure, and the estimates of RAY and Veikkaus are largely based on statistics from the website pokerscout.com.

As for the amounts gambled by Finns abroad, they make up roughly a similar sum to that made by Paf [a gaming operator from Åland] in mainland Finland. All in all, these amounts are not really significant. (Interviewee B, Veikkaus Oy)

Of the respondents to the Finnish gambling survey for 2011 (*Suomalaisten rahapelaaminen 2011*), 21% had participated in online gaming. Internet gambling was most common among consumers aged 35–49. By far the most popular site was the Veikkaus website, which had received visits from 90% of those who had tried online gaming. Meanwhile, 16% had visited foreign gaming

² The gaming margin is the revenue from the games minus the winnings paid out to players.

websites, 15% the RAY website, 11% the PAF website and 7% the Fintoto website (Turja et al. 2012).

2.4 Financial performance of gaming monopolies

The financial performance of the gaming monopolies has developed in line with the growth in demand. In February 2012, Veikkaus Oy reported record profits of 2011 EUR 514.5 million for the 2011 financial year. The company's revenue for the year grew to EUR 1.79 billion. This represented a growth of 6.1 per cent over 2010 (Veikkaus website 2012). The development of the revenues of the Finnish gaming operators between 2006 and 2010 is shown in Table 1. The figures are taken from the operators' own websites.

Table 1 Revenues of Finnish gaming operators, 2006–2010 (EUR million)

| OPERATOR | 2010 | 2009 | 2008 | 2007 | 2006 |
|------------------|------|------|------|------|------|
| VEIKKAUS OY | 1690 | 1558 | 1475 | 1391 | 1361 |
| RAY ³ | 619 | 597 | 619 | 599 | 604 |
| FINTOTO OY | 210 | 199 | 220 | 208 | 205 |
| | | | | | |
| TOTAL | 2519 | 2354 | 2314 | 2198 | 2170 |

The table indicates a steady growth of the operations of Veikkaus Oy between 2006 and 2010. Meanwhile, the revenues of RAY and Fintoto remained fairly constant. The total revenue of the monopolies grew by EUR 349 million during the period under review.

Table 2 shows that of the Finnish gaming operators, Veikkaus and RAY have long been making excellent financial results. The figures in Table 2 are based on figures provided by a representative of Veikkaus Oy in interview. Since 2005, the total operating profit of the monopolies has grown by around 16%. The main growth driver among them was Veikkaus.

³ RAY's revenue is expressed as the gaming revenue minus lottery taxes.

Table 2 Operating profit of Finnish gaming operators, 2005–2011 (EUR million)

| Year | Veikkaus Oy | RAY | Fintoto Oy | Total | Growth | Growth % |
|--------------------|-------------|-----|------------|-------|--------|----------|
| 2005 | 397 | 402 | 2.1 | 801 | + 17 | 2.1% |
| 2006 | 403 | 413 | 1.2 | 817 | + 16 | 2.0% |
| 2007 | 421 | 401 | 0 | 822 | + 5 | 0.6% |
| 2008 | 441 | 397 | -0.2 | 838 | + 16 | 1.9% |
| 2009 | 465 | 374 | 0.3 | 839 | + 2 | 0.2% |
| 2010 | 501 | 381 | - 0.4 | 882 | + 42 | 4.8% |
| 2011 (estimate) | 510 | 418 | 0.3 | 928 | + 46 | 5.0% |

2.5 Taxation and government tax revenue

Taxation of the gaming sector is regulated by the Finnish Income Tax Act (1535/1992) and the Lottery Tax Act (552/1922). According to the Income Tax Act, any income received by a taxpayer in the form of money or benefits of monetary value constitutes taxable income. In the case of lotteries, the lottery organiser is liable to pay a lottery tax, which also covers the necessary income tax. The Income Tax Act restricts the taxability of lotteries such that winnings from lotteries organised in accordance with the law in Finland or in any state of the European Economic Area do not constitute taxable income.

The Lottery Tax Act stipulates that gaming operators must pay lottery tax to the government for the lotteries they organise. From 2012 onwards, Veikkaus Oy and RAY are liable to pay 12% of their gross gaming revenue (i.e. the difference between total player contributions and winnings paid out) in lottery tax. Previously the tax rate was 10%. Research interviews made it clear that it is expected that the government will raise the lottery tax rate again in the near future.

The increase in the lottery tax rate [from ten to twelve per cent] meant a loss of 17 million euros from the beneficiaries to the Ministry of Finance. We must increase our profits by 17 million euros in order to redress the difference. (Interviewee B, Veikkaus Oy)

The lottery tax is a significant source of revenue for the Finnish government. In 2009, it received EUR 131 million in total from all the gaming operators in lottery tax. (Hippos 2010; RAY 2009,

2010; Veikkaus 2010.) The lottery tax is channelled to the government's expenditure without any specific allocations (*Suomalaisen rahapelaamisen vuosikirja* 2009).

2.6 Veikkaus Oy

Veikkaus Oy is a limited company wholly owned by the Finnish government. The distribution of its income is decided on by the Parliament implemented by the Ministry of Education and Culture. Its operations are monitored by the Ministry of the Interior. Having operated long as a state-owned enterprise, Veikkaus Oy is somewhat comparable to other state-owned enterprises with specific remits, such as Finnair, Alko or the Finnish Broadcasting Corporation YLE. The state-owned gaming operators are not strictly speaking monopolies, as they run the gaming operations under licence from the government. RAY is an association run by a number of non-profit sub-associations. Fintoto is a company managed by the equestrian sporting sector. This means that of the gaming operators, Veikkaus Oy is the only actual state-owned enterprise (Peltonen 2010).

The licence granted to Veikkaus allows it to organise lotteries, pools and betting games in accordance with Section 1, subsection 2, paragraph 1 of the Lotteries Act. Having started from its first product, Vakioveikkaus, Veikkaus Oy now offers some 30 different gaming products. Its products are divided into the following groups: dreaming (Lotto and Jokeri games), recreational pursuits (sports and equestrian games), excitement (Keno and scratch cards) and community (Veikkausbingo and Luontoarpa) (cf. Veikkaus Annual Report for 2009; Pollari 2010). It is worth noting that with the reforms of the Lotteries Act, Veikkaus lost its equestrian games to Fintoto as of the start of 2012. In 2010 they had accounted for around 3% of Veikkaus's revenues.

The transfer of the equestrian betting caused us a gaming margin loss of 17 million euros. On the other hand we are getting the Eurojackpot in March. We have brought in new products to make up for the loss. (Interviewee B, Veikkaus Oy)

Looking at the distribution of Veikkaus Oy's revenue by type of game it is clear that lotto games make up by far the most significant source of income for the company. This was also indicated by the interviewed representatives of Veikkaus.

Lotto still brings in one third of our revenue. It also has a good margin, with one half of all the player contributions being retained as gaming margins. It is a game with a good margin to say the least...In practice it leads to almost no gambling problems, and as a lottery of the people, played with small stakes but a wide player base, it is an optimal game. (Interviewee B, Veikkaus Oy)

In 2010, the dreaming segment brought in 45.1% of the company's revenue, excitement brought in 32.3% and recreational pursuits 22.6% (Veikkaus Oy 2010).

Financially, Veikkaus is one of Finland's most profitable companies. According to a distribution ratio dictated by law, the Ministry of Education and Culture distributes 38.5% of the Veikkaus revenue towards the promotion of art, 25% towards sports and physical education, 17.5% towards science and 9% towards youth work. The distribution of the final 10% is determined annually. Beneficiaries within the field of art include museums, opera houses and diverse cultural events. In sports and physical education, the revenues promote activities such as the construction of sporting venues, sports clubs, sports research, fitness for children and adolescents, and sports education. The major beneficiary within science is the Academy of Finland. Most of the youth work funds are directed at supporting young people's civic organisations and pastimes (e.g. youth associations) (*Suomalaisen rahapelaamisen vuosikirja* 2009).

The experts from Veikkaus often emphasised in their interviews the fact that Veikkaus is tasked with generating funds for its beneficiaries through its gaming activities. Sports and fitness make up a large proportion of the beneficiaries, while elite athletics form only a small – but attention-grabbing – part of this segment. According to the Veikkaus experts interviewed, as much as 99.6% of the government subsidies given to sports and fitness come from Veikkaus's customers.

In 2010, the number of registered Veikkaus customers exceeded 1,223,000 (Veikkaus website 2012). The size of its business is also reflected in the fact that the contributions made by players to its games in 2008 were equivalent to EUR 333.61 per Finnish citizen aged over 15.

Despite increases to its return rates, Veikkaus Oy has often been criticised on active gambling enthusiasts' online forums for its low returns to players in comparison with international gaming companies. The return rate is the proportion of the revenue from the games that is paid back to players in the form of winnings. Veikkaus's return rates vary by game. The highest target-specific return rate is in the fixed-rate Pitkäveto (88%). In the variable rate betting games the return rate is 70–85% of the revenue. For equestrian betting games the return rate is 65% and for Vakioveikkaus it is 55%. The games of chance offered by Veikkaus (Lotto, Viking Lotto and Jokeri) pay back an average of 40% to players. The daily number lotteries such as Keno have return rates of 45–65%, and the scratch cards, 45–60% (Veikkaus website 2012).

When competition increases, companies compete on the return rates. Companies that sell lotteries from Malta to any part of the world, for example, can have return rates of 97–98%. They can cope with a very small portion of the revenue because their volumes are so large. In order for us to have some income to transfer to the beneficiaries, we cannot raise our rates as high. Of course if the market is re-regulated and we're allowed to sell to anyone, then we'll be able to raise our payback too. (Interviewee B, Veikkaus Oy)

Veikkaus overhauled its entire online gaming platform in 2010 in partnership with the IT company GTECH. Interviews with the company's representatives showed that this overhaul (in combination with game changes, new products and a new CRM system) was a significant factor in the sharp growth in revenue experienced by the company.

In 2011, Veikkaus established a subsidiary named Veikkaus Solutions to explore the company's international business opportunities. The objective is to find partners with whom to obtain gaming licences and thereby to develop gaming operations beyond the European Economic Area. Legal analyses have shown that due to competition legislation Veikkaus Oy cannot in itself operate beyond Finnish borders, but that operations through a separate affiliated company are legal. However, due to judicial arrangements in the EU's internal market, the operations would have to be outside of the EEA (Veikkaus website 2012). According to Veikkaus's representatives, the company is particularly interested in the non-EEA markets of Brazil and Russia, among others.

2.7 RAY

Finland's Slot Machine Association (RAY) consists of nearly one hundred organisations in the social services and health care sector. RAY is a public association whose duty is to raise funds to support voluntary social service and health care organisations through gaming activities. RAY distributes funds from its gaming revenue to around one thousand social service and health care sector organisations. The association's products include slot machines and casino games. Its slot machines are placed in supermarkets, kiosks, service stations, restaurants, hotels, bars and cafés. In addition, RAY runs its own games arcades and currently the only casino in Finland (Grand Casino Helsinki), which has been in operation since 1991 (Jaakkola 2009; RAY website 2012).

The scope of RAY's operations is illustrated by the fact that at the end of 2010 the association had slot machines in 7,747 locations through partnerships with 5,000 corporate customers. It had a total of 17,070 slot machines on business premises. Additionally it had 76 games arcades containing 2,380 machines and 64 casino tables. It ran casino game operations in hundreds of restaurants. Over 90% of RAY's gaming income is collected from slot machines. An average of EUR 1,296.85 per Finnish citizen was played in RAY games in 2008. This equals EUR 1,558.79 per citizen over the age of 15 per year. (*Suomalaisen rahapelaamisen vuosikirja* 2009). RAY's operations are clearly profitable, with profits of EUR 382.2 million in 2010, for example. In that year, the association employed 897 full-time employees (RAY Financial Statements 2010).

According to the RAY representative interviewed, the company's typical customer is male and under 30 years of age. This was a finding of surveys commissioned by RAY, which disproves the myth that the main slot machine users in Finland are pensioners.

Many people think that grannies gamble the most on slot machines. Which is interesting because, demographically speaking, women over the age of sixty have always been those who spend the least money and time on gaming... The most typical place where the under-thirties play is a bar. Most Finns do not go to bars, especially at night. But everyone goes to the grocery store. Where do elderly people meet? In the supermarket lobby, where they are most visible. That is why they attract attention. (Interviewee, RAY)

In recent years, RAY has invested heavily into facilitating card payments, leading to a marked increase in cards as a form of payment. In 2010, RAY had more than two million card transactions made with 139,140 separate cards (RAY Financial Statements 2010). In 2011, the popularity of card payments was still clearly growing (approx. 86% growth). When using a card to play, customers must set daily limits for their spending, which they cannot exceed. The default daily limit is EUR 50, but it may be adjusted according to personal preference between zero and 100. This means that at most players can lose EUR 100 per card per day, and they cannot play on credit. By the end of 2011 there were around 11,000 slot machines with card slots, representing an increase of 4,000 machines in one year. (RAY website 2012.) RAY's motives for investing into card payments are practical: people tend to pay more by card as the use of cash decreases.

These days over 70% of grocery shopping is paid for by card. We realised that it was unsustainable for us. It's hard for people to play the slot machines if they have no cash. ... This is especially true in the fact that young men typically play in bars. They go there with just their debit card in their back pocket, they don't take cash. The change was dictated by practice, ... Everyone's first impression was that we were out to get even the last bits of their money. ...The debit card system is built so that you have to set a maximum limit that you can lose in a day.... If you want to raise the limit you can do so, but it doesn't take effect until the next day. (Interviewee, RAY)

Card payments cannot be considered to contribute radically new methods for controlling problem gambling. Because the slot machines also accept cash, gambling addicts can easily find ways of avoiding the restrictions. In other words, having reached the limit on their debit card, players can go and take out cash from an ATM to continue playing.

RAY has recently initiated comprehensive online gaming services. RAY's online casino and poker service officially opened on 29 November 2010. In just over a month the service generated revenues of around EUR 2.4 million, with some 60,000 registered customers. One year after the launch of the service it already had around 139,000 registered users. In December 2011, RAY announced that the target revenue of EUR 28 million would be met for the year. It also announced a near 10% growth in revenue from the previous year (RAY website 2012).

RAY works to control problem gambling in its online services, for example with the gaming account. The maximum gaming account balance is EUR 5,000, and money cannot be deposited in it

between midnight and 6 am. In addition, RAY has set a daily spending limit of EUR 500 on its online slot machines and single-player online casino games. Multi-player online casino games have no daily limits. RAY's expert says that the online casino games are much more popular than online poker.

RAY bought its online gaming platform from Playtech Limited, which is also used by many (private) international gaming operators. According to RAY's expert, the reason for buying a foreign IT solution was that the sector has highly specialised requirements, for example in relation to online security, which the global company was considered to be able to fulfil.

One would be justified in saying that RAY was very late in joining the online gaming market. The association had long been aware of the growth in popularity of online poker, for example, but it was taken by surprise by the explosion in online gaming. Even in 2008, RAY's president said that the association had reservations concerning the start of online services. At the time he cited as the reasons the fear that the social problems related to gambling would increase through online gaming, and the fact that online gaming could endanger RAY's status as a monopoly from the perspective of EU legislation (Mönkäre 2008).

In launching its online gaming environment RAY followed the example of Svenska Spel in Sweden, which had opened its own online poker site a few years before. There was extensive social debate around the issue in Sweden. It is worth noting that the Swedish National Institute for Public Health (SNIPH) and the Gaming Board for Sweden both recommended that the government reject Svenska Spel's online poker licence application. SNIPH based this recommendation on the detrimental side-effects of increased gaming, while the Gaming Board considered the licence to endanger the status of Sweden's existing gaming system from the point of view of EU legislation. The Swedish government granted Svenska Spel the licence on the grounds that Swedish players were increasingly playing on foreign websites. Svenska Spel's online poker rapidly became very popular and clearly increased the number of Swedish poker players. It was estimated that in 2007 there were 200,000 online poker players in Sweden, of whom around 70,000 had started playing through Svenska Spel. It is worth noting, however, that only one half of these new players continued playing exclusively on Svenska Spel's platform. In other words, the licence caused around 35,000 new players to start using international sites as well (cf. also Jonsson 2009). In contrast, around 20,000 Swedish players transferred from other sites to Svenska Spel. At the same time, phone calls to Swedish gambling problem helplines in relation to Internet poker problems increased. Cisneros Örnberg and Tammi (2011) consider the launch of the state-run online poker to have been a questionable move in terms of Swedish public health (SOU 2006:11; SOU 2008:36; Cisneros Örnberg & Tammi 2011).

In 2007, there were estimated to be some 125,000 online poker players in Finland (Tammi 2007). Discussions concerning Finnish online poker began heating up quite soon after the launch of the Swedish model. The Finnish National Institute for Health and Welfare (THL), in particular, took a critical stance towards RAY's online poker and Internet casino plans. THL used some of the same

arguments as SNIPH and the Gaming Board for Sweden had used. As in Sweden, however, the Finnish government decided to grant RAY licences for both online poker and an Internet casino. Cisneros Örnberg & Tammi (2011) estimate that although Finland entered the online gaming market later than Sweden, the Finnish gaming monopoly managed to expand its operations more sharply than its Swedish counterpart thanks to the Internet.

RAY's representatives consider the association's competitive advantages to be its Finnishness, reliability and good reputation. Challenges, especially on the poker side, arise from the fact that poker demands large player volumes and lots of tables in order to attract enthusiasts from international sites. One way to increase the player volume would be to set up partnerships with international poker operators. This would require legal reforms and instigate extensive political debate, however.

Looking at Veikkaus, they have had Viking Lotto for a long time. It's not completely impossible. They have the same idea of getting more players in order to have larger jackpots.... We have thought about it... First we have to gain some experience of how the market will develop here. (Interviewee, RAY)

3 PROBLEM GAMBLING AND REGULATION OF THE GAMING MARKET

3.1 Definition of problem gambling

The existence of gaming monopolies is usually justified in terms of the prevention of social problems. For example, in restricting the number of online games available to consumers, the authorities refer to the need to protect players and prevent problem gambling. Problem gambling is described as “an urge to gamble despite harmful negative consequences or a need to stop” (European Commission 2011). Accurately defining problem gambling has proven difficult, but certain general outlines have been accepted for the term. Beside the aforementioned, these are that problem gambling is gaming which repeatedly interferes with or damages the player’s family relationships, work or finances, or gaming which causes either physical or mental problems to the player (cf. e.g. Taskinen 2007; Griffiths 2008, p. 127). Perhaps due to the difficulty of defining problem gambling, previous researchers have provided somewhat conflicting information on the number of problem gamblers. Closer analysis reveals that different studies define and assess problem gambling in different ways. The most common gambling problem screening methods are DSM-IV (Diagnostic and Statistical Manual of Mental Disorders; cf. American Psychiatric Association 1994) and SOGS (the South Oaks Gambling Screen; cf. Lesieur & Blume 1987).

It depends entirely on how you define it. There are different indicators. We probably have five different acronyms [referring to different screening methods]. (Interviewee, RAY)

As Pollari (2011) states, problem gambling and gambling problems are usually defined as having two to four different levels. The most serious level is usually designated as gambling addiction, i.e. people for whom gambling is compulsive or pathological.

3.2 Extent and background factors of problem gambling

According to the European Commission Green Paper (2011), prior research has shown that the proportion of problem gamblers in the population varies by country. In 2009, problem gambling only affected 0.5%⁴ of the British population, whereas the corresponding figure in Estonia was as high as 6.5% (Griffiths 2009). The European Commission (2011) estimates that 0.3-3.1% of the (EU’s) entire population could be defined as gambling addicts. The Commission considers it difficult to draw a straight connection between distance gaming (online gaming) and gambling addiction. Experts have fairly differing views on the matter. Several studies⁵ have proven that people with gambling problems often also suffer from other problems, such as substance abuse or

⁴ In 2010 this figure was estimated at 0.7-0.9% of British citizens aged over 16 (Wardle et al. 2011).

⁵ Usually these studies have not made a distinction between online- and offline gambling.

mental health issues (cf. e.g. Jonsson 2007; Olason 2007; Kessler et al. 2008; Mäkelä et al. 2010). In addition, certain correlations have been found between gambling problems, low education levels and low socioeconomic status (cf. e.g. Kessler et al. 2008; Heiskanen 2011).

European Commission (2011) suggests that the main factors that influence problem gambling are the following:

1. *Event frequency*. The briefer the time between the game taking place and the opportunity to place a stake the greater the risk from the point of view of problem gambling.
2. *Payout interval*. The time between placing of the stake and the result. The shorter this is the greater the risk.
3. *Accessibility and social environment*. Easy access to gaming is linked to problem gambling.
4. *Chasing losses or being close to winning*. The greater the payout and probability of winning, the greater the delusion that lost stakes can be won back. Therefore the risk is increased.
5. *Perceived skills and “involvement”*. The possibility of getting involved in the event being gambled on and of using one’s own skills to assess the chances of winning provide evidence of the “near-miss” psychology. This strengthens the feeling that one is in control of the game, thus increasing the risk. This includes variation of the stake. Note that this effect may be enhanced when some element of skill rather than purely chance is perceived to be a characteristic of the game.
6. *Commercial communications* that could trigger vulnerable groups (e.g. children and the elderly).

From the point of view of the present study, the crucial point is number 5 (*perceived skills and involvement*) and its links with the gambling problem that could be associated with by sports betting and poker. Betting on live sporting events also bears the first risk factor (*event frequency*) (European Commission 2011). However, extensive longitudinal research has demonstrated that online gaming poses no greater risks of problem gambling than other types of gaming. This is particularly true in relation to online sports betting (LaBrie et al. 2007 & LaPlante et al 2008). The Division on Addiction of the Harvard Medical School has analysed individual players’ long-term gambling behaviour using extensive international research data. According to analyses of data provided by the private gaming company Bwin Group, 99% of online sports gamblers showed no signs of abnormal gaming behaviour.⁶ The corresponding figure for online casino players was 95% (LaBrie et al. 2008). Research conducted in the UK found that gambling addiction was less common in online gaming environments than in certain kinds of terrestrial gaming environments (Wardle et al. 2007).

⁶ The research data consisted of nearly 50,000 casino players from 80 different countries, randomly selected from an online environment. The comparative data comprised a similar number of sports betters.

3.3 Gambling problems and their prevention in Finland

In Finland relatively little research has been conducted in the field of problem gambling, and most of it has been carried out by the Ministry of Social Affairs and Health (for summary and discussion of results see Jaakkola 2009). According to Jaakkola (2009), not enough efforts have been made in Finland to prevent and treat gambling problems. Jaakkola also says that health care professionals should have more knowledge of gambling problems and how to treat them. This view concerning the lack of know-how in treating problem gamblers was also expressed in this study's interviews. This is somewhat surprising, considering that a population survey (Aho & Turja 2007) and surveys of young people (Ilkas & Aho 2006) have estimated that about 3 % of Finns (over the age of 15) can be considered to be problem gamblers. The number of gambling addicts is estimated to be about 1% of Finns aged over 15. People with serious gambling addictions requiring urgent assistance are estimated to be around 0.1% of citizens aged over 15 (Pollari 2011). A gambling survey conducted in 2011 (*Suomalaisten rahapelaaminen 2011*) produced similar figures (cf. Turja et al. 2012).

Measuring gambling problems is methodologically challenging. RAY's long-term research samples (taken since 1994) indicate that the number of people with gambling problems is at least not growing in Finland. This is interesting in the light of the significant increase in the forms of online gaming available to Finnish gamblers in the last decade. It is also worth mentioning that the proportion of people with gambling problems does not seem to correlate with the degree of regulation of the gaming market in the country in question. For example, the UK's licence-based gaming market has been shown to have fewer problem gamblers than the tightly regulated market in Finland. In fact, according to research by Griffiths (2009), Finland seems to have one of the highest proportions of problem gamblers in Europe.⁷

The best-known body assisting people with gambling problems in Finland is the national helpline Peluuri, which has recently invested into increasing its online services. The service is provided by the A-Clinic Foundation and the Finnish Blue Ribbon. The core operations of Peluuri are funded by Fintoto, RAY and Veikkaus. Peluuri keeps records of the phone calls received, which totalled 1,120 in 2010. Of these, 787 were made by players and 290 by concerned friends and family. The rest came from social service and health care professionals. Comparing Peluuri's statistics for 2010 to those for 2009, it is interesting that contacts related to online gaming fell whereas ones related to slot machines grew slightly. Only two years were included in the comparison, however, so no general conclusions can be drawn from it. Furthermore, the clientele of Peluuri do not represent the entire group of problem gamblers; only those who seek assistance. Some people with gambling problems either do not want to call or seek assistance or do not know about the service. International research has shown that only 10–20% of problem gamblers seek treatment. This means that conclusions concerning the extent of gambling problems or changes

⁷ Although the country-specific indicators often differ between studies, research by Griffiths (2009), for example, has shown that the number problem gamblers in Sweden is estimated to be significantly lower than in Finland. The indicator used for both countries was SOGS-R. The DSM-IV indicators often give lower number of problem gamblers than SOGS (cf. e.g. Griffiths 2009, p. 63).

taking place in the group cannot be drawn from the numbers of phone calls received by the helpline (Pajula & Aaltonen 2010).

According to Peluuri's statistics, by far the major source of problem gambling are slot machines. Slot machines were mentioned as the primary cause of problems more often in 2010 than in 2009, increasing by six percentage points to 65% (Pajula & Aaltonen 2010).

Table 3 Problem gamblers contacting Peluuri helpline; main types of games played in 2009 and 2010

| Main game type | 2010 (%) (n=790) | 2009 (%) (n=757) |
|------------------------------------|---------------------|---------------------|
| Slot machines | 65% | 59% |
| Casino and casino games | 3% | 3% |
| Online games | 13% | 16% |
| Online poker | 7% | 11% |
| Online betting | 0% | 0% |
| Veikkaus betting | 3% | 4% |
| Keno, Veikkaus | 1% | 0% |
| Others, Veikkaus | 1% | 2% |
| Equestrian and totalisator betting | 1% | 1% |
| Other gaming | 1% | 1% |
| Subtotal | 96% | 98% |
| Computer and video games | 4% | 2% |
| | | |
| GRAND TOTAL | 100% | 100% |

As mentioned above, it is difficult to draw conclusions from Peluuri's statistics, because the sample is small and highly biased. The data can be considered indicative, however.

People who contact the helpline are ones who have a problem and who have been able to take the step of contacting someone. It is a select group. Of course it can be used as an indication, but for example the information about the games that cause the most problems? Sure, slot machines probably cause the most problems globally, but Peluuri only asks about the primary cause. In other words, it ignores all the other games. Gamblers often play all sorts of games.... If you want to find a trend, then I'm sure you can also find one in how visible Peluuri is in a certain place – it affects whether people know how to contact it. (Interviewee, RAY)

The Peluuri statistics are in line with the views of the European Commission (2011), in that the Commission considers the most problematic game types to be “fast payout” slot machines, scratch cards and casino games. Weekly lotteries (such as the Finnish Lotto) are considered to pose a lower risk, although they can also be linked to the factor of “chasing losses or being close to winning”. Similar research results have been produced in the other Nordic countries. The number of calls received by Norway’s comparable gambling helpline, for example, fell significantly after the state radically restricted access to slot machines. In the first years of the twenty-first century the helpline received more than 2,000 calls per year, but by 2009 the number had fallen to 817 (Engebo 2010). Also in Germany, slot machines have been found to be the most problematic form of gaming in terms of problem gambling (Meyer & Hayer 2009). It could be generally said that slot machines are by far the most common cause of gambling problems in Europe (cf. Griffiths 2009, pp. 64–65).

Gambling problems are often linked to many other personal problems, which is why they should be examined within a broader context of people with multiple problems. Mäkelä et al. (2010) examined the use of alcohol and the development of drinking between 1968 and 2008. One of their topics of research were the links between alcohol and drug abuse and problem gambling. The results showed that two simultaneous problems were common among problem gamblers, whereas all three problems were found simultaneously only in 1% of the population (Mäkelä et al. 2010, p. 276). These results are highly analogous with other estimates of the number of gambling addicts in Finland. The research gives no indication of causal relationships among the problems, i.e. whether one problem causes the other or vice versa.

Based on this research it is impossible to say whether the multiple problems are primarily caused by the fact that one type of addiction makes the person susceptible to other types of addiction, or whether sufferers try to control one type of behaviour with another, or whether they are simply attracted to risk-taking lifestyles and the excitement they provide. Nor do the results show how the overlapping problems were developed and how they are linked to the sufferers’ socioeconomic situations. (Mäkelä et al. 2010, p. 276)

According to Mäkelä et al. (2010), the appearance of multiple simultaneous problems is a phenomenon that has not been sufficiently researched. Therefore the causes behind it cannot be reliably identified. The authors do state, however, that the health care system should pay more attention to the possible simultaneity of problems.

Responsible gaming operators have worked for years to help prevent gambling problems. The EU has made efforts to restrict the problems related to online gaming using the same methods as for other types of gaming. The most common methods are the following (European Commission 2011):

1. Age limits
2. Self-limitation (financial and time) and self-exclusion

3. Information/warnings/self-tests (more easily applied online than offline)
4. Banning the use of credit
5. Reality checks
6. Diligence obligation for the on-line operator
7. Restricting certain forms of games or bets that are considered to be the most risky
8. Other forms, such as limits on commercial communication and sign-up bonuses

In 2011, The European Committee for Standardization (CEN) published the CEN Workshop Agreement “*Responsible Remote Gambling Measures*” aimed at securing a high level of protection of online players in the European Union. The agreement is based on a workshop organised in 2010. Participants of the workshop included 27 online-gaming experts representing firms, universities, associations etc. As a result of the workshop, a report introducing 134 ways to prevent gaming-related problems was introduced (see CEN 2011).

In the Finnish gaming context, RAY and Veikkaus must naturally bear responsibility for preventing problem gambling. According to RAY’s financial statements (2010), it seeks to do this and to help people with problems by directing them to seek support and assistance, for example through the Peluuri helpline. It is noteworthy that there has been almost no public debate or critical analysis of the dual role of the government monopoly as both the cause and the preventer of problems.

In 2010, RAY spent EUR 2.9 million on its gaming responsibility programme, of which EUR 672,000 was made up of statutory expenses. Over EUR 1 million of the non-statutory responsibility expenses decided on by RAY went towards projects designed to prevent gambling problems and develop treatments (RAY Financial Statements 2010). People interviewed as part of this research did express some opinions to the effect that the funds granted by RAY are not channelled effectively enough from the perspective of treating problem gamblers, and that more RAY funding should go for example towards training health care professionals.

According to the RAY’s employees its online gaming site differs from international sites in that RAY does not reward players for volume (e.g. by giving bonuses), that RAY offers the opportunity to switch on a playing ban directly from a game, and that RAY can effectively identify its customers and check their ages, because it uses the Tupas identification service of Finnish banks and has access to the Population Register Centre’s databases. RAY will soon implement a Playscan function, which is a tool to analyse players’ gaming habits and quantities, to warn players of possible risk factors in their habits and to recommend actions. The Playscan system, which is already used e.g. by Svenska Spel in Sweden, will also react to players changing their gaming habits in a significantly more aggressive direction (Kumpulainen 2010; interviewee, RAY).

Veikkaus states on its website that in 2010 it spent over EUR 3.8 million on actions to promote responsible gaming. Its actions are similar to those of RAY. The age limit for Veikkaus’s games is 18 years and it is not possible to play at night (midnight to 6 am). Partly the ban on night-time

playing is based on the fact that betting operations require the constant presence of personnel. This is one of the reasons behind the compromise by which money transfers cannot be made at night.

I think it is a very smart restriction in case people's gaming gets out of hand at night. But partly it is absurd, because after all the Internet is [open] 24/7.... People's daily lives no longer follow the agrarian timetables. (Interviewee, RAY)

The Lotteries Act (Section 10) prohibits the selling of games on credit. Veikkaus customers may register only one gaming account, whose maximum balance is EUR 5,000. The company's online scratch cards, eBingo and Syke have a maximum daily contribution limit of EUR 100. The limit on live bets is EUR 300 per day. Veikkaus also offers its customers the opportunity to self-regulate, allowing them to freeze their accounts for a specified period or to set personal monetary limits. Users may also view account statements showing each month's winnings, losses and return rates. There are also tests and information related to gaming habits and self-control (Juva 2010).

It is one indicator that the government has imposed on us – that we have to reduce the proportion of problem gamblers. ...We cannot make a profit on these people. But then you have to remember that by no means all of those who play a lot are problem gamblers ... From our customer database we can easily draw up information on the frequency of plays and the frequency of money transfers and everything else. To see who has a problem. (Interviewee B, Veikkaus Oy)

3.4 Critical analysis of slot machines: case Norway

In Norway, the problems related to slot machines have been publicly recognised. Currently, Norwegian players can only use slot machines with personal user cards. The duration of each single game was lengthened, maximum winnings were reduced and an automatic break was imposed after one hour of use. The number of slot machines was cut down. In 2008, slot machines were completely off the market.

According to Norway's gaming authorities, slot machine playing fell dramatically as a consequence of the restrictions (2005–2009). In 2005, around 22% of Norwegian said they had used slot machines in the preceding 12 months, whereas in 2010 the corresponding number was only 2%. The corresponding figures for use of foreign online gaming sites were 3% in 2005 and 4% in 2010. In other words, slot machine users did not make a major shift to using online games even when slot machines were completely removed from the Norwegian market. Studies have shown that mostly the people who had used slot machines transferred to equestrian betting and bingo. However, research by the Norwegian authorities indicated that over 90% of former slot machine users did not

take up any other form of gaming. In other words, when slot machines were removed, over 90% of the Norwegians who had used them did not increase their playing of other forms of games any more than they had before. This result debunks the rumour that the restrictions on slot machines were an action by the Norwegian government not to increase responsibility but to grow the market share of the state-owned enterprise Norsk Tipping. Norsk Tipping had lost a large number of customers between 1995 and 2004, while the numbers of slot machine users had grown significantly (Horne 2008).

The real reason behind the drastic slot machine restrictions may be that the Norwegian government had previously hardly controlled the number of slot machines at all, and that they were also operated on unregulated premises. That made them easy to access for underage players.

It was completely out of control. ... It led to their popularity plummeting in just a few years. It was a business-oriented system, trying to take in as much money as possible by any means. It crashed pretty quickly and then they closed the taps completely. These days they have the Multix machine, which is some sort of compromise.... All the most tempting games were forbidden, so of course their popularity and the income they generated plummeted.
(Interviewee, RAY)

On the other hand, a complete ban on slot machines may lead to an increase in illegal gaming. There is an example of this from Sweden, where the machines were completely removed temporarily in the late 1970s. As a result, according to one of experts interviewed, an illegal market was created which is still burgeoning: it is estimated that there are 3,000–5,000 illegal slot machines in the country. Sweden's illegal slot machines are seen to be closely linked to organised crime (the so-called Balkan Mafia).

When considering the possibility of a complete ban on slot machines in Finland, it must also be taken into account that it would mean the end of funding for certain beneficiaries (RAY funds a large number of third sector organisations with the proceeds). The links between the machines' social costs and social benefits have hardly been researched at all, however. Therefore it is currently practically impossible reliably to compare the costs caused by slot machine-related gambling problems and the benefits of the income received from the slot machines in a market such as Finland (cf. also Farrell 2008, pp. 23–53). From an economic point of view, a ban on slot machines would particularly affect the third sector, for whose funding the government would have to find other ways. One way could be the shift to a licence-based system.

Instead of a total ban, there are other restrictions available for slot machines which could be more realistic in the Finnish context. There are European countries (e.g. Cyprus) where by law slot machines cannot be placed outside of games arcades or casinos. This makes it significantly easier for example to stop children from playing.

3.5 Other social effects

One of the downsides often related to gaming is the risk of money laundering. According to Levi (2009), this risk is very low for online gaming, because the environment is under constant supervision. In the online environment, there are advanced technologies for tracing money movements and identifying customers, which means that there are easier options for criminals to launder money. Gaming operators are required to have these kinds of security-related technologies in place already at the time of applying for a gaming licence. Online gaming operators collect large amounts of data on their customers, for example in the form of IP addresses and tracking of gaming habits. This data allows the companies to profile their customers and thereby reduces risks related to problem gambling and money laundering. Naturally, there are major qualitative differences between the systems used by different operators. Levi (2009) emphasises the fact, however, that the risks of money laundering are small in a controlled environment. Therefore the possibility of criminal action must be taken into account already when granting licences for companies to operate in certain markets. In practice this means carefully investigating the ownership of licence applicants, which most countries already do.

Gaming operators operating in the EU must commit to abiding by the EU's money laundering directives. Organisations in the field, such as the European Gaming and Betting Association, have also developed standards, some of which are aimed at preventing money laundering. In practice, gaming operators must agree to check their players' ages, to securely store customer data (e.g. credit card information), to monitor their customers' gaming behaviour, to prevent terror suspects from playing, to prevent direct money transfers between customers, to block entry from countries that are not to customer's home country, to set a maximum amount for deposits and to report any observed money laundering attempt to the authorities. Typically gaming operators ask customers to create a username and password, and to provide an email address, their first and last names, date of birth, gender, address, home country, telephone, account currency, mother tongue or other preferred language, and a secret question and answer. The required data and the ways in which they are checked vary between countries and companies. Some companies verify that the given phone number belongs to the customer of that the credit card number has not previously been registered by another customer. Often gaming firms also require their clients to prove their identity with for example photocopy of passport or credit card.

The largest international gaming companies have multinational teams monitoring their customers' behaviour in different cultures and linguistic areas. Experts familiar with certain markets will be more capable of identifying abnormal behaviour or recognising false identities. The international gaming operator's representative who was interviewed pointed out that the largest gaming companies are listed on the stock exchange, meaning that they must abide by a degree of transparency. The interviewee also indicated that every employee of the largest gaming companies must undergo training aimed at preventing money laundering and identifying match-fixing.

Below are some of the measures taken by online gaming companies to prevent criminal activity (Levi 2009):

- Device “fingerprinting”. The companies collect device-specific data for example on laptop computers, in order to check if the device has been used in a prior fraud or money laundering attempt.
- Monitoring of abnormal gaming behaviour.
- Monitoring of customer locations. The companies monitor the physical location given by customers in their customer data and compare it to the locations from where they log in to the system.
- Hotlists. The companies monitor lists containing data on stolen credit cards, terror suspects and so on. These lists are similar to those used by banks.
- KYC (Know Your Customer) checks. The companies verify the information provided by customers (that they really exist, that they live where they claim to. etc.).
- Monitoring customer behaviour. The companies monitor changes taking place in the time customers spend on the site, as well as gaming from various devices and changing IP addresses, etc. For example, if a customer usually plays on a laptop in London and suddenly logs in from an Internet café in Vietnam, the system may ask for verification.
- Event restrictions. The companies restrict transaction amounts within certain periods. An example is only being able to transfer winnings of a maximum of EUR 10,000 to one’s bank account within one day.
- Monitoring of changes in customer data. The companies look out for unusual changes in customer data, especially in the days immediately after registration.
- Verifications. Some companies use IVR (interactive voice response) systems to verify account applications and to protect customers from identity theft.

International gaming firms have invested in prevention of gambling-related problems already a long time. Good summary of these measures is provided in CEN workshop agreement (CEN 2011). In the interview, the representative of the international gaming operator emphasised the importance of monitoring monetary transactions as a part of credibility and reliability. The interviewee also said that the monitoring systems of that company transcended national boundaries. Veikkaus, for example, does not allow people to play who permanently live abroad, so the company has not have a similar system.

We have an international monitoring system, which the monopolies do not have. It is well-organised and controlled. Every user’s address data, passport number, etc. is checked. Our money transfer measures and other systems are completely on a par with those of banks.
(Interviewee, International gaming operator)

According to Levi (2009), online gaming is sometimes also linked to funding of terrorist activity. By 2009, however, only one case of identity theft had appeared with such a connection (Levi 2009, p. 10).

4 THE MONOPOLY AND FUNDING OF COMPETITIVE SPORTS

Recent years have seen an increasing amount of public debate over the links between the Finnish gaming system and competitive sports in the country. Presumably nobody questions the fact that the funding granted by the Ministry of Education and Culture from the Veikkaus gaming revenue to the grassroots level of sports and fitness activity (e.g. the construction of sporting venues) is beneficial to Finnish competitive sports. However, the directors of some sports clubs have recently criticised the current system for preventing club-level development in that it weakens the position of Finnish clubs on the sponsorship market. What they mean is that it has been made practically impossible for Finnish clubs to partner with international gaming companies.

As part of this research, directors from clubs representing various sports were interviewed to find out their views about the current system. The clubs represented the disciplines of floorball, ice hockey, football and volleyball, in which they played at the top league or first division level nationally. Some of the interviewees had recently moved on to other jobs, but this was not considered to be problematic for this study – in fact it was the opposite, as it seems that acting club directors are unwilling to initiate any critical discussions on the current system due to some recent cases that have received publicity. Therefore the persons who were no longer directly representing a club had more freedom to discuss the topic than those who were still actively involved in managing a club. All interviewees were guaranteed anonymity, however, due to the sensitive nature of the topic. The authors considered that this would improve the quality of the interviews by promoting open interaction between interviewers and interviewees.

The interviews showed that people at the club level often consider it problematic that the funding coming for their sport from Veikkaus is given to the umbrella organisation for that sport, which means that individual clubs do not benefit from it. Therefore a certain level of transparency seemed to be lacking with regard to the application of the funding granted by Veikkaus to Finnish sporting associations, as the club management “in the field” did not know where it ended up. In spite of this, the clubs are obligated to advertise Veikkaus in their matches, for example using audio advertisements or print ads in programmes.

We don't receive a single euro directly, apparently it all stays at the federation level.
(Interview with club director A)

For us, Veikkaus is a no-win situation. Our top team does not currently play at the top league level, and even there the direct monetary assistance from Veikkaus is just a token amount. (Interview with club director B)

The Veikkaus funding came through the league. The amount was pretty marginal. I don't remember the exact sum, but I think it was between 10,000 and 20,000 euros. In exchange we gave them visibility. (Interview with club director C)

It was around 2004 when others, too, started wondering whether things were really the way they should be. We all felt that all sorts of adverts and things were constantly being pushed at us from Veikkaus, but in a way it didn't show anywhere [in the club's income]. (Interview with club director D)

It also became evident in the research interviews that in many clubs or in federation-level meetings, the management often avoid taking any stand on the issue. In other words, it is difficult to initiate constructive dialogue on which to base further development of the system.

I've talked about the issue in meetings but a kinds of "silenzio stampa" comes down when you try it. No one dares talk about it. The argument is that they help in building venues and the like, but it is questionable, because it is never concretely seen... (Interview with club director A)

Up to the very president of the federation made it clear that you just have to shut up, this is how it [the Veikkaus partnership] works. (Interview with club director D)

The clubs have also come up against control of specific sports' federations. An example of this came out in the club director interviews. One of the interviewed clubs had managed to negotiate a valuable deal for changing the name of a sports arena it ran into a format that included the name of an international gaming company. The idea came from the fact that a Finnish ice hockey club had already done a similar thing with the same betting firm. According to the club director interviewed here, the ice hockey club had already investigated the legal aspect of the issue and received a non-prosecution decision with regard to the violation of the Lotteries Act.

We contacted them and they [the betting firm] thought it was a good idea. We would have received 10,000 euros per year from using the name. We reckoned it was a rare opportunity to make such a deal and that it would bring in good money for us. The papers were signed and everyone was happy. ...We published it [the partnership agreement] and pretty much the next day angry men from the federation started calling us and berating us for what we'd done. Other sports federations had contacted them wondering how they'd let that happen. It was at that point that we realised that Veikkaus pours money into the federations and they watch very carefully to make sure that the clubs down below don't start doing their own thing in this [collaboration with international betting companies]. They want to reinforce Veikkaus's position. ... It ended with the federation telling us that if that's the name of the arena, they will not book a single shift in it. The federation pays us around 7,000 euros a year for use of the arena. In the end we decided that because we want our

junior teams to be able to play in the arena, that we'd accept that 3,000 euro loss of income every single year. In a way we were bought or blackmailed into line. (Interview with club director B)

Several international firms contacted us. What I did was send all of the offers to the federation. I said we'd received this contact and that we had no agreement directly with Veikkaus, but we were told from the federation that we weren't allowed to take it, does that still stand? Every time they answered that the ban still stands. They were advertising deals that would have brought in good money. (Interview with club director D)

Similar federation-level control was encountered in the SM-liiga ice hockey league by Tappara in Tampere in the early 2000s. Tappara was about to make a deal with the Åland-based PAF, but the league management threatened to shut Tappara out of the league if they went ahead. PAF and Tappara had already agreed on shirt advertising and ringside advertising at the ice hockey hall in Tampere.

A similar example can be found internationally in Norway, where in 2009 the local football federation forbade the Spanish team Valencia from playing in UEFA Europa League playoffs wearing shirts bearing the logo of an international gaming company. In doing so, the Norwegian federation referred to the country's gaming legislation. A non-EU country, Norway has a law that forbids the advertising of any betting companies besides the national Norsk Tipping. The decision was inconsistent in that in the same year the Polish team Lech Poznan had played in Norway wearing shirts with the logo of a different international betting firm (Kvatningen 2009).

At the club level, marketing income from international gaming operators are seen to have significance especially from the perspective of the broader professionalization of competitive sports in Finland. Currently the number of professional athletes in Finland is low. Out of the team sports, ice hockey and to some extent football can be considered the only professional sports in the country. In many disciplines some players have professional status, while most are semi-professionals or amateurs. According to surveys by the Finnish Sports Federation, the total number of professional athletes is fairly constant, and a few years ago there were around 1,000 in Finland (ww.slu.fi). The interviewees considered that a more lenient policy as regards the marketing of private sports betting companies could bring a significant source of additional income for clubs. Professionalization and higher player incomes would also raise the threshold for betting fraud (cf. section 5).

The aim in all sports should be to have professional teams. Thinking about additional investment being available from somewhere...How can we turn these semi-professional teams professional? This is very important, not least because it would create employment. In volleyball and basketball they complain that there are no junior players. Sure enough, they start playing but they realise it makes no sense. This country won't turn me into a

professional who can play abroad. I'm not good enough for the national team. But would they see it as a career opportunity if out a team of twelve, full professional status could be offered to at least eight? That is what it would help with. (Interview with club director A)

Obtaining funding for clubs in the lower divisions is always challenging, because these clubs cannot sell the benefit of business partnerships to companies in the form of media visibility, for example. In that sense, new sources of income would be welcomed by representatives of less popular disciplines and even clubs in the lower divisions of the popular sports.

Imagining that there would be no Veikkaus monopoly, we would have many more companies to contact regarding marketing. After all, we are a team from a big city in a youthful discipline. I'd say we had great potential [from a marketing partnership point of view] ... After all, they [the gaming companies] have large marketing budgets and are fairly generous with their money. (Interview with club director B)

You have to remember it's always about money. It could make sense to sponsor smaller teams, too. It starts at the grassroots level, which seems to be the problem now. The ice hockey league seems to have plenty of money already compared for example to football or some other smaller discipline. The team members' parents have to pay if they are far from the top division. I'd say that would be a good place to start contributing... But this is always on a case-by-case basis... The funding should go to those who don't receive it from anywhere else. In principle, for example paying the ice rink rental for one year is quite a marginal sum [for a gaming company], but it would be a huge help to the team. (Interviewee, International gaming operator)

A relatively comparable example of new funding sources coming to sports clubs from sports betting companies can be found in Denmark, where after the deregulation of the local gaming market, many Danish football clubs immediately made major sponsorship agreements with diverse betting firms. A direct comparison between Danish and Finnish football is impossible, however, because Denmark is way ahead of Finland in terms of audience sizes and team professionalism. The income flows for Finnish sports would be smaller, but still very significant for the clubs.

On the basis of the interviews, one could be justified in claiming that there is a lack of interaction and funding transparency between the sports federations and clubs in Finland. The club managements are irritated for example by the fact that they do not know where the funding or sponsorship money received by the umbrella organisations concretely go. Even at the time of the earlier Lotteries Act, club managements were prevented from making their own partnership deals with international gaming companies, even though they do not normally receive direct funding from the federation level. Despite this, the clubs are obligated to advertise Veikkaus Oy at their

competitive events. This should explain why criticism from the club managements is often directed not only at the federations but also at Veikkaus. The perceived lack of transparency is probably more of a problem between the federations and the clubs, however. The interviewed club directors hardly mentioned any grassroots-level projects funded by Veikkaus revenue. The representatives of Veikkaus were well aware of this.

That is one of the specific things we aim for in these [partnership agreements]. The further we can roll it out the better. But then if a league has 12 clubs, it is impossible for us to work with all 12. It has to go through the federation. It's not like we have that many resources to sink into it. But this is a well-known and common problem. (Interviewee A, Veikkaus Oy)

You talk about playing ice hockey at some rink and look at where the investment for the rink came from. They were funds granted by the Ministry of Education and Culture or by the Centre for Economic Development, Transport and the Environment, and it came from Veikkaus revenue. But one thing, and I don't mind admitting that we're bloody terrible at this, is that when the money goes to the Ministry of Education and from there passes through either the Young Finland Association or some other association or the Centre for Economic Development then it [the money] becomes odourless, tasteless and colourless. It is government money. It is actually money that we have transferred to the Ministry of Education...But the origin is erased along the way, and then it's easy for clubs to say they never get anything.... We are currently working on this in collaboration with the ministry. (Interviewee B, Veikkaus Oy)

Looking at the funding granted by Veikkaus to Finnish sports, one often encounters a mix-up of the different funding forms in everyday speech. Veikkaus Oy does provide some sponsorship against payment, but by far the largest funding flows into sports take the form of free government funding taken from gaming revenues. The sponsorship money paid by Veikkaus directly into Finnish elite sports only make up a small portion of all the funding it provides for sports and fitness in Finland. But Veikkaus expects to gain financially from these sponsorship agreements. The representatives of Veikkaus emphasised the fact that in their sponsorship they aim for equality and that is why they work at the federation level rather than with individual clubs.

Our board requires that we are able to justify every deal we make financially.... We are not allowed to finance clubs for free, and therefore our legal advice department carefully checks each agreement. (Interviewee B, Veikkaus Oy)

If someone says that the clubs get no money then the answer is that we are not supposed to give it directly to the clubs unless we get the sort of value for our money that we look for....If

the clubs can get together to offer us a concept that benefits us and that we want to buy into, then we can negotiate it. But we will not directly finance any club. ... The sports federations make the decisions. Of course we work to make agreements that benefit the clubs. Any actions we take, the clubs get a part of it. Usually what the clubs want is some money in their bank account. We hope that if any of the money we give is passed on from the federation to the clubs, then it should be used for development efforts rather than for player salaries. (Interviewee A, Veikkaus Oy)

In conclusion it can be said that Finnish sports associations/federations should be more open to their members about their income and expenses. This would make the club managements more aware of the concrete expenses that the federations cover using funds from Veikkaus, for example. It would also further the creation of constructive dialogue between the clubs and the umbrella organisations.

These research findings are in line with those of Mäkinen (2010). Mäkinen found that unlike Sweden and Norway, in Finland the funding distributed according to the government distribution principles is mainly used to cover the cost of running the organisations themselves. The central organisations and federations were not found to provide significant financial assistance to the club level. On the contrary, they sell services to the clubs and, in some cases, use this to collect significant incomes. The clubs, on the other hand, cover these and other costs through voluntary work and financial assistance from parents and other stakeholders. All these factors reinforce Koski's (2009, p. 118) view that the current system leaves the clubs pretty much to fend for themselves.

Mäkinen (2010) also compared the funding received from gaming revenue in Finnish sports to that in Norway and Sweden. The research shows that the funding in Finland is surprisingly small in proportion to the overall distribution of revenue. In comparing the distribution of gaming revenue for 2007, Mäkinen found that for every EUR 100 million received by Finnish sports, EUR 205 million was received in Sweden and 220 million in Norway. The Finnish system provides proportionally much more support for culture and science than the Swedish and Norwegian systems. It is worth noting that in Norway and Sweden the sports clubs receive a significant amount of funding from slot machines maintained by civic organisations. In Finland, RAY has exclusive rights to these types of games, and RAY provides little or no funding for sports. In Norway this source of income has diminished since the decrease in popularity of slot machines due to tightened controls (cf. section 3.4). It can be said that the significant differences in the sports funding received from gaming revenue between Finland, Sweden and Norway are due to the lack of income from machines maintained by civic organisations in Finland, and to the smaller allocation to sports of the revenue of the state-owned enterprise in Finland (Veikkaus Oy).

5 INTEGRITY IN SPORTS AND SPORTS BETTING

The professionalization of sports and the astronomical growth in sports-related cash flows, combined with technological advances, have caused an explosion of the global sports betting market. The growth of the sector has led to certain problems, one of the most significant of which are those parties who seek to gain from the sector by dishonest means. Illegal betting organisations that try to manipulate the outcomes of sporting events for their own benefit have been uncovered, particularly in Asia.

Due to the rapid development of technology and the televising of events, betting can now be directed at elements of sporting events beyond the final results. For example, in football, it is possible to bet on which team will have the first corner. Uncovering corruption related to these kinds of events is a great challenge for genuine sports betting companies, which lose significant sums of money in the fraud. The sports themselves can suffer a major image decline as a result of corruption, which is quickly reflected in the cash flows coming in (from sponsors, audience intake, etc.). Therefore the maintenance of integrity in sports can be considered a joint target for sports federations, umbrella organisations and betting companies.

Although several match-fixing scandals have hit Finnish sports in the last few decades (Veikkausliiga and Superpesis), previous research has shown that sports betting constitutes a relatively low risk for integrity in sports. Researchers Gorse and Chadwick from Coventry University published a report in 2011, which shows that doping is still clearly the biggest threat to integrity in sports. The researchers analysed 2,089 incidents of corruption in sport dating from 2000–2010. They found that 96% of these incidents were related to doping. Seen by discipline, athletics and cycling were the most prone to doping cases. The researchers calculated that the threat of doping to integrity in sports was sixty times greater than the threat posed by matches or other results being fixed in relation to betting.

Of the researched cases, 2.7% were related to match-fixing. Most of these cases (approx. 70%) took place in football. This is in line with the corruption cases found in Finland, which have mostly appeared in the football league. In Finnish football, the risk of corruption is increased by the fact that the national league is active in the summer when the large European leagues are on a break. This is why Veikkausliiga, for example, can be considered of interest for the global betting market and has attracted interest from Asian betters. Furthermore, the player salaries in Finnish football are so small that players may be more tempted to accept bribes than players in the top international leagues, who are millionaires and also closely watched by the media. There are numerous examples in Finnish sporting history of club directors providing personal guarantees to loans for clubs which have exceeded their incomes. Such financial predicaments may also lower the thresholds for club managements to accept funding from less scrupulous sources. These conjectures are supported by the research outcomes of Gorse and Chadwick (2011), which indicate that most of the bribery cases found in sports betting have taken place in the smaller European football leagues. Similar

conclusions were drawn in a report by the Financial Action Task Force (FATF) (2009) looking at the links between football and money laundering.

Not all match-fixing is related to sports betting. According to Gorse and Chadwick (2011), betting was behind just under 60% of the 57 match-fixing cases that were revealed, whereas the rest of the cases were separate from betting. A typical case is the buying of points to retain a place in a league. To safeguard integrity in sports, betting companies and sports federations have invested in diverse systems which use statistical analysis, for example, in order to uncover abnormal player behaviour. Another method that is often emphasised in relation to beating corruption is the training of people working in the sports world (club management, referees and players).

From the point of view of integrity in sports, the use of insider information in betting by athletes or other club activists can also be seen as a problem. In the UK, for example, cases have been revealed in which team members removed from playing due to injury have betted against their own teams because they have had insider information concerning last-minute injuries. These players have not affected the outcomes of the matches as such, but their behaviour has been ethically questionable to say the least. In Finland, players often have a clause in their contracts which forbids them from betting on their own club's matches.

The major sports betting operators in Europe established the European Sports Security Association (ESSA) in 2005 to uphold integrity in sports. ESSA seeks for instance to train people who work in sports to prevent betting fraud, to initiate international debate on corruption, and to warn its members quickly of any suspected cases of corruption. ESSA is a non-profit organisation entirely funded by its members, which works closely with leading sports organisations such as UEFA, FIFA, WTA and MLS (ESSA 2011).

To conclude, it should be said that doping is still a much bigger threat to integrity in sports than match-fixing even if the latter is often given extensive attention. Naturally, the threat of doping varies significantly by discipline. However, the gaming system of a country has little significance in terms of protecting integrity in sports. The risk of corruption is present wherever competitive sports are played, and the roots of corruption cases such as those that shook the Finnish football league often lead back to the illegal Asian betting market. Protecting integrity is fundamental both for the sports clubs and the operators that organise betting on sports. Gaming companies can lose significant amounts of money in corruption cases. Sports organisations and clubs, on the other hand, can suffer major image losses, which can reduce the incoming cash flows, for example from business partners. Examples of these kinds of image losses can be found in Finland within skiing and baseball, for instance. Some of the most important measures for safeguarding integrity include stabilising the finances of clubs, training sports workers and athletes in integrity-related matters, open information-sharing between clubs, and the professionalization of small disciplines and leagues, also in terms of the salaries paid. Collaboration between sports betting operators and sporting federations is also an important factor in integrity. It is important for example for gaming

companies to inform sporting federations of any abnormal player behaviour they have observed in a sporting event.

6 ECONOMICS OF REGULATION

Gaming activities have several direct and indirect economic and social effects, which can be divided roughly into six categories (Anielski and Braaten 2008; Kärki 2010, pp. 36–61):

1. health-related and social effects
2. economic effects
3. employment and education-related effects
4. entertainment and tourism-related effects
5. societal and judicial effects
6. cultural effects

This section analyses how the possible dismantling of the legal monopoly in gaming and the opening of the gaming market to international competition might change the impact of gaming on the Finnish economy. Above all, the analysis looks at direct effects on production, employment and market efficiency, i.e. categories 2 and 3 above.

6.1 Externalities and market regulation

Market regulation and public service provision are often justified by the existence of externalities related to the economic activity. Externalities are costs or benefits arising from an economic activity that affect somebody other than the people engaged in the economic activity and are not reflected fully in prices. A classic example of negative externalities is pollution; determining ownership of clean air is difficult and individual citizens would find it hard to claim compensation from factory owners or car drivers for spoiling the air. Respectively, services may also have positive externalities. Education, for example, has been proven to have positive externalities, because a highly educated population is a factor that promotes social, political and economic development.

Externalities lead to market outcome, in which products that entail them are traded either too little or too much as compared to the social optimum. Methods to safeguard positive externalities have included public funding and public, taxpayer-funded service provision. Respectively, negative effect of externalities are reduced by taxation, restricting entry onto the market using licensing systems, and/or limiting competition by restricting marketing or the launch of new products.

Despite the significant income- and job-generating effects of gaming, empirical cost-benefit analyses have given indications that when the negative externalities of gaming are taken into account, its benefits for the economy only slightly exceed the costs incurred, or that the costs can even be greater than the benefits (cf. e.g. Gazel 1998; Grinols 2004; Grinols and Omorov 1996). This type of research is problematic in many ways (cf. Walker 2007). Still, the existence of externalities is hard to dispute. Therefore the need for public regulation of the gaming sector is largely accepted, even within the sector itself. Means of regulation is naturally under dispute.

6.1 Monopoly, taxation and efficiency of the markets

One possible way to reduce the social inefficiency of a pure market solution caused by externalities is the extreme licensing model, i.e. a government monopoly. Although legal monopolies may strive for good things, it is difficult to avoid some of the fundamental problems related to them.

A profit-maximising monopoly typically causes net welfare losses, because it will keep production lower and prices higher than the optimum for the economy. This leads to situation, where some of the consumer surplus is transferred to the monopolist in the form of profits. Furthermore, due to the higher prices, the society is deprived of some of its share of the total surplus from the producer (the margin) and the consumers (the difference between willingness to pay and the market price). Strictly speaking, monopoly profit does not represent inefficiency, but an income transfer from the consumer to the producer. The genuine detriment to the welfare of the society is generated by sub-optimal level of consumption and is called the monopoly's *allocative inefficiency*.

In addition to the suboptimal price levels for the society, the so-called static inefficiency of a monopoly is related to the fine-tuning of existing products and production methods. The lack of incentives created by competition can easily lead to a lack of willingness of the monopolist to improve its existing functions compared to a company operating in competitive markets. This leads to excessive production and administrative costs. In other words, the lack of competition generates *productive inefficiency*.

In addition to the aforementioned types of static inefficiency, a monopoly can create *dynamic inefficiency* in the economy as a consequence of the lack of competitive incentives. With no market incentives, monopolists do not innovate as actively as companies in competitive markets. Hence the exploitation of new production technologies and new products or services in a monopoly market is limited.

Competition drives market evolution. In a competitive market, inefficient operators disappear while the most efficient operators and best practices remain. In other words, in market economy the purpose of competition is to allocate the resources in the economy to their most efficient use. A lack of competition reduces the fulfilment of the advantages of efficiency. In the short term, the biggest problems are related to the distribution of income, and to unnecessarily high production costs and service prices. In terms of long-term development, problems in competition process can prevent the renewal or "creative destruction" of the economy, which is embodied in the replacement of old and inefficient operating models with new, efficient ones.

The economic impact of this problem can be evaluated using empirical productivity analysis. According to research, "creative destruction" has accounted for 10–60% of the growth of productivity in various sectors and at varying times; between 1985 and 2000 it accounted for one third, on average (Maliranta 2003; Maliranta 2008). Since the economic growth in the developed economies is based almost exclusively on growth of productivity, this has a significant negative

impact on growth. In other words, the dynamic inefficiency of a monopoly-based market leads to slower growth in productivity.

To these general themes, Posner (1975) added an important aspect related to social welfare: the cost of maintaining the monopoly. According to Posner, traditional inefficiency analyses underestimate the social costs of a monopoly, because they assume that there are no costs involved in building and running the monopoly. In practice, a monopoly (especially a legal monopoly) ends up having to defend its position relatively forcefully using communication and direct influencing methods. In economics, this kind of behaviour is termed “rent seeking”, which refers to seeking economic gain without producing value and while damaging the overall economy. This kind of activity causes unnecessary costs and slows down positive market development.

In the case of a legal monopoly, rent seeking differs from the activities of a normal company in a leading market position. If a potential competitor exists, a free-market operator usually has to improve its competitiveness using normal business methods. A legal monopoly or the parties that act in its interest can use competitive methods but also restrict competition through governmental power.

Taxation is another method, in addition to the state monopoly, used for restricting the negative externalities of gaming. Taxes levied for the purpose of reducing externalities may be set at a level at which the economic optimum – at which the marginal utility for the consumers is on a par with the marginal cost for the society – is fulfilled. If the tax level is too high, allocative inefficiency is caused in the market similarly to the monopoly situation: the market consumes too little of the product in terms of the society’s overall welfare. This is seen not only as a reduction in the welfare of producers and consumers but also as a lower-than-optimal accrual of tax.

Taxation can be used to regulate externalities regardless of whether the operations in question are arranged in the form of a government monopoly, licence-based regulation or as open competition. The accrual of tax income is affected not only by the tax rate but also, above all, by the profitability of operations: the higher the revenues and profits in the sector, the higher the taxes collected.

6.2 Monopoly vs. competition in gaming markets

In gaming activities, price refers to the return rate: the lower the return rate, the higher the price of the service. As it was mentioned above, a profit-maximising monopoly typically causes net welfare losses, because it will keep production lower and prices higher than the optimum for the national economy.

If there are externalities related to the consumption of the service, it is possible that the monopoly will not cause the traditional allocative inefficiency losses. Instead, a government monopoly can redress some of the problems caused by the disparity between individual benefits and

social costs arising from the externalities. For this to happen, the aim of the monopoly must not be to maximise its profits; instead, it must set a price for the service that maximises the benefits reaped by the society from the service (= producer's surplus + consumer benefit)

It is, however, unclear to what extent the current Finnish gaming operators seek to maximise their profits versus try to set the return rate at the optimal level for society. Because the current gaming monopolies are able to distribute profits to purposes other than preventing and treating gambling problems, they can be assumed to operate as any profit-maximising monopoly. If this holds true, then the gaming monopoly also generates allocative inefficiency in the market.

In principle, monopoly profit is not in itself a significant problem because it is a question of income transfer, similar to taxation, from the players and the gaming companies to important causes in the society. Like monopoly pricing, also commodity tax entails an element that reduces allocative efficiency of the market. The bigger problem is related to possible deficiencies in the organisations' cost efficiency and dynamic efficiency. In practice, the lack of competitive incentives may cause unnecessary bloating of the organisational structure and a heavy cost structure (cf. e.g. Basham and White 2002). There is also the danger that the public gaming monopoly might operate as a playing field for political interests (e.g. Stigler 1971; Peltzman 1976; Becker 1983; Sauer 2001). At worst, the economic performance of gaming companies can be worse than the performance in the case of free competition, even if the return rates were lower (i.e. the prices were higher). This possibility is heightened by the fact that a lower return rate reduces gaming and contributes to the shift of gaming to international markets (via the Internet). Veikkaus, for example, has often been criticised for its low return rates, which are clearly below those of international gaming companies. According to estimates publicly given by RAY and Veikkaus Oy, the amounts spent on gaming outside of the national borders have ranged between EUR 100 million and EUR 150 million.

Giving up monopoly-based regulation will not automatically lead to efficient competition, however. This is especially true in sectors with extensive economies of scale from mass production and large-scale obstacles to market entry; in a sector such as that it is highly likely that a monopoly or at least a highly centralised market structure will arise even in a deregulated market. The gaming market differs substantially from the aforementioned characteristics, however. The sector has no universally speaking extensive benefits of scale in production, entry into a deregulated market would be relatively simple, the products are largely homogeneous and the companies can operate equally in the producer market. This view is supported by the current situation in the market: the global BVD Orbis database lists 35,196 companies that name "Gambling and betting activities" as their main line of business. In this respect, the gaming market is close to fulfilling the requirements of competitive markets and is therefore apt for the achievement of the benefits arising from competition.

Growth of consumer welfare also comes from new product innovations. In the gaming market, product innovations are usually seen as at least partly problematic, taking into account the addictive effects of gaming. The existing legislation mainly justifies the monopoly on the grounds of

preventing product innovations generated by competitive markets (cf. e.g. Government Bill 207/2010, justifications for regulation). In other words, the model turns the fundamental inefficiency of the monopoly into a virtue. Companies operating in an open market, however, also have incentives to develop genuine new ways of operating that can improve the production of their basic products. In addition to improving cost efficiency, responsible companies in an open market also have incentives to reduce the problems related to gaming. As an example, all serious online gaming operators have developed diverse methods for identifying problem gamblers based on recognising changes in the players' risk profiles. Similarly, companies have developed methods for identifying money laundering and match-fixing. In this way, licence-based regulation in combination with open market competition has promoted the creation of problem-solving methods. It should not be impossible to strive to use regulation to promote the wider diffusion of these practices in the field.

Taking into account the aforementioned factors, monopoly-based regulation may not be the most efficient option from the point of view of the society, because the welfare losses caused by the monopoly may even increase the social burden of gaming (cf. also Basham and White 2002). It is also possible that opening the gaming market to competition would cause several benefits to the economy. The main benefits would be in the form of the incentives for greater cost efficiency and innovation (compared to the current system) brought about by competition. Cost efficiency and competition for customers lead to lower prices and therefore higher consumer benefits. Even if the companies' profits were reduced, competition as a whole would lead to greater benefits than operations that seek to maximise the profits of the monopoly: the consumers' surplus would grow by more than the producers' surplus would diminish.

Based on this theory it can be assumed that the greater efficiency brought about by competition would lead to higher revenues and profits. An example of this is the significant rise in tax revenue for the government in Italy after the de-regulation of the gaming market. A further risk associated with the current monopoly is that gaming and the related tax revenues will increasingly be drained out of Finland through the Internet.

6.3 Employment and economic impacts

In 2009, gaming provided jobs to more than 2,000 people in Finland directly through the gaming operators. The sector also has a significant indirect employment effect in the charitable and public sectors through the distribution of gaming revenue and the use of tax revenue. If it is assumed that without the presence of Finnish gaming operators, the money used by Finnish households on gaming would have been spent on products by companies operating and paying tax outside of Finland, then all of these effects would be eliminated.

It is often thought that through their placement in grocery stores, kiosks, service stations, restaurants, hotels, bars and cafés, slot machines and other games also increase demand for the services of those locations. Proving this kind of economic effect is difficult, however, because it can be assumed that the households would spend a similar amount on domestic consumption anyway.

Increased efficiency also has an effect on employment. Optimally, efficiency enhancements and innovation increase revenues and create jobs. On the other hand, reforms in regulation might significantly reduce the number of jobs in the Finnish gaming sector. Naturally the number of jobs in Finland is directly affected by how much of the Finnish gaming operations would be conducted from inside and outside Finland. If jobs are lost due to the loss of earlier operational inefficiency (e.g. the removal of excessive bureaucracy and bloating), this is not detrimental to the economy, however. It is beneficial for the economy to have workers allocated efficiently to the functions where their productivity is greatest. This means that the productivity of the economy will improve when inefficient (low productivity) jobs disappear and more efficient employers have increased access to labour. If the current Finnish gaming operators would be unable to cope in an open competition situation, it would primarily mean that their operations are not cost-effective or innovative enough compared to their competitors (cf. market evolution, section 6.2).

It is impossible to determine in advance the scale of the benefits brought by competitive incentives to the economy. One factor to take into account is that Veikkaus, in particular, is already subjected to a certain level of competition via the Internet. In 2004, Veikkaus was permitted to raise its return rates to respond to online competition (Örnberg 2006). This means that competitive incentives are already affecting Veikkaus's operations to some extent. Still, the company's return rates are as yet lower than those of its foreign competitors.

6.4 Conclusion of economic impacts of regulation

Regulation of gaming can be seen to have a dual justification based on externalities. The licensing system and taxation are used to minimise and redress some of the ill effects of gaming, such as problem gambling. Similarly, the tax revenues and monopoly profits that are collected are used to support efforts in youth work, mental health care, physical education and culture, which can be seen to have positive externalities.

From the point of view of income and employment, possible deregulation would be highly problematic without the implementation of licence fees or other charges for the gaming operators on the market. In the current model, the gaming revenue is distributed to charitable associations and the resulting assets, services and jobs are kept within Finland. Provided this is the goal also in the future, for a similar sum to be distributable after the deregulation of the market, mechanisms must be created for transferring the gaming based tax revenues towards the charitable purposes.

It is important to note that similar sums would still be possible to pay out even if the total licence and tax revenues were slightly lower than the monopoly's current gaming revenues, since the public sector capital that is currently tied to running the monopoly would be freed for other purposes. Naturally the assumption then is that the public sector capital that is tied to the gaming operators would be freed through deregulation as a consequence of higher efficiency and reduced bloating.

Only indicative predictions may be made in advance concerning the overall effect of deregulation on income and jobs in the economy. There is great need for further research in this area. It is clear, however, that increased competition brings benefits related to cost efficiency and innovativeness.

Possible deregulation actions should strive for: 1) that the benefits gained through competition should not be eliminated through excessive bureaucracy; 2) that the system should encourage Finns to play through companies licenced in Finland rather than shifting gaming to other countries via the Internet; 3) that the cash flows (tax revenue and gaming revenue) that stay in Finland should remain at the desired level, while also fulfilling points 1 and 2.

The flip side to the possible flow of jobs from Finland to other countries due to re-regulation would be a growth in income from marketing. Currently, only the monopolies are allowed to advertise their gaming products in Finland. In a licence-based model, the gaming companies would have to compete for customers by investing significant sums into marketing their products – both in the direct media and through other forms of entertainment relevant to sports and betting. It is also noteworthy that gaming companies are front-line utilisers of information technology and the opening the gaming market for competition could provide new business opportunities to Finnish technology companies. Hence re-regulation of gaming market can have strong impact on production and employment also in related industries.

7 COUNTRY COMPARISONS

7.1 Turning point in the EUR gaming market

Europe governmental gaming monopolies are today subject to extensive political pressure. The European Court of Justice has put the position of the monopolies to the test by invoking the need for free trade (e.g. Rahapelifoorumi 2006). In the gaming sector there are large multinational, mainly European companies, and it is in their interest to expand to the regulated national gaming markets. These companies have appealed to the EU courts against the status of the government monopolies, alluding specifically to the free movement of services stipulated in EU law.

After the so-called Gambelli verdict of 2003 (C-243/01), many countries' practices have been under scrutiny. The Gambelli verdict has been interpreted as stating that monopolies cannot be justified based on the financial interests of member states, even if the profits are channelled to charitable causes. With regard to Finland, the courts of law have not so far imposed any major restrictions of the monopolies. In 2007 the European Commission did give Finland a warning for limiting sports betting. On the other hand, in 2009 the European Parliament approved a consultation paper according to which online gambling would not need EU-level regulation. In other words, each member state may regulate online gaming in the manner it deems best (Peltonen 2010). The complexity of the topic is reflected in the fact that in 2011 the European Court of Justice decided that EU member states may still decide on their own gaming monopolies, but within certain, more specifically defined conditions justifying the existence of monopolies. According to the verdict, national legislation applying to a gaming monopoly is only possible in cases where gaming-related crime and the possibility of fraud are a proven risk in the country. It also stipulated that advertising of gaming must be highly restricted in gaming monopolies. Advertising that aims at market expansion is not, according to the court, in line with crime prevention. The Court of Justice also specified that maximisation of public revenue is not a sufficient justification for restricting the free movement and provision of services within the EU (European Court of Justice 2011).

In other words, the EU imposed conditions for the continued existence of monopolies. The only acceptable reasoning behind the protected status of gaming companies is that they can prevent the social problems arising from gambling (*Suomalaisen rahapelaamisen vuosikirja* 2009). This means that the gaming companies must be able to prove to the overseeing authorities that they work to protect players from these problems. In practice, the main problem that is cited is usually gambling addiction. In addition, government-regulated gaming must be implemented in such a way that it can help reduce the crimes related to gaming (Peltonen 2010).

The European gaming system has changed rapidly in recent years:

Going back ten years, the European gaming market was pretty much based on exclusivity. Looking at the map now, it seems to be mostly licensing and multi-licensing based, especially in casino games and sports betting. Only lottery-type games are still mostly [exclusive]...Clearly the market is changing around us, even here in the Nordic region. (Interviewee B, Veikkaus Oy)

We are aware of the European developments. They won't change. There is no going back to exclusivity. We can be sure that if our system differs very much from the European mainstream, then it will be really under the microscope. Then our system has to be very well built and extremely well justified, and it can't have any worm holes. There can't be any inconsistencies within the system. (Interviewee B, Veikkaus Oy)

Within the EU, countries such as Italy, France and Germany have taken steps away from government gaming monopolies and toward open licence systems. At the start of 2012, Denmark was the first Nordic country to adopt reformed gaming legislation which re-regulated the betting and gaming market somewhat. Generally speaking, the re-regulation actions have not been taken voluntarily by governments, but have been expedited by verdicts from the European Court of Justice. Looking at gambling-related legislation on the EU level, it is clear that until now it has been unclear, with a lot of room for national interpretations. The EU has often left gaming-related decisions to national courts of law, which has led to different interpretations of the law being made in different countries. In other words, there have been national differences in legislation (cf. e.g. Bernitz & Kjellgren 2002; Cisneros Örnberg & Tammi 2011).

In Finland, Veikkaus Oy has reacted to the tightened conditions for the maintenance of its status as a monopoly by placing ever greater emphasis on the corporate responsibility of its operations. In 2004, the company set up a social responsibility unit and added ethical questions to its strategy. As a part of these changes, Veikkaus also established a consultative ethical committee comprising representatives of its various stakeholder groups. Interviews with the representatives from Veikkaus pointed out the fact that the Swedish system, for example, is currently undergoing change and therefore Veikkaus is already preparing for possible alterations of the Finnish gaming system.

At least it is clear that there is ongoing debate in Sweden. We're having an e-gaming forum in April... A year ago the talk there was still that we're not going to [change]; now it relates more to how we will do it [change the system]. (Interviewee B, Veikkaus Oy)

Looking at the developments around it, no one can be blind to the changes. We can't sit here in our corner and pretend everything's ok....Now is exactly the right time to have open and unbiased discussions as to what Finland wants from its gaming policy, what is the best

option for Finnish consumers and what is the best alternative for the beneficiaries of the gaming revenue. We are only the middleman here. (Interviewee B, Veikkaus Oy)

Denmark is a good point of comparison for Finland as a fellow Nordic country of a relatively similar size. Denmark recently re-regulated its sports betting market. There are certain fundamental differences, however, between the Danish and Finnish gaming markets.

It [the system] is politically more established here. They [Veikkaus] have a 50% greater market share here than Danske Spil has there... Finland is Finland- we have our own operating models. The difference is that the case here [in Finland] is slightly more difficult. (Interviewee, International gaming operator)

In Denmark the situation was that some market share had already been lost to international gaming companies. The question was actually how to bring in money to the government from the share that had already been lost. In Finland, the proportion of foreign gaming is still relatively low. (Interviewee B, Veikkaus Oy)

In recent years, legal experts have increasingly called for an EU-level framework for online gaming that is not tied to any specific country or physical location (cf. e.g. Verbiest & Keuleers 2004; Cisneros Örnberg & Tammi 2011). A clear signal of the EU's intention to harmonise the models for gaming in Europe is the European Commission's recent Green Paper (2011). The so-called Creutzmann Report, drawn up after the Green Paper independently by the European Parliament (European Parliament 2011), has also often been seen as reflecting a wish for harmonisation.

According to reviews by the consulting company H2 Gambling Capital, the European online gaming market was estimated to be worth around USD 12.5 billion (approx. EUR 9.5 billion⁸) in 2010. The value of the global gaming market was estimated then at USD 29.3 billion (EUR 22.2 billion). The general consensus is that online gambling will grow sharply in the next few years. This prediction is based on the fact that certain large markets (such as the United States, China and Japan) still have bans on many forms of online games. Technology in the field is advancing quickly and new mobile applications are constantly being launched.

It was estimated that in 2010, 10.9% of all European gaming was taking place online. It is noteworthy that this figure was put closer to 25% for the Nordic countries. The Italians are Europe's most enthusiastic Internet users, with around 24% of Europe's online gaming revenue for 2009 coming from Italy. Italy was followed by the United Kingdom (14%), Spain (12%), Germany (12%) and France (11%). Around 76% of all the online gaming revenues from Europe came from these six countries. The rest was divided pretty much between Greece, the Netherlands, Sweden,

⁸ In March 2012, USD 1 = EUR 0.76

Ireland and Finland. Finland, Ireland and Spain had the highest gaming spending per capita (H2 Gambling Capital 2010).

Below are brief presentations of the gaming models of Denmark, the UK, Italy, France and Germany. These countries were chosen for the analysis mainly because their systems differ clearly from the Finnish model. These country comparisons are used in the final section of this research report for proposing alternative solutions for the Finnish gaming system.

7.2 Denmark

In recent years, the Danish government has carried out several reforms of its gaming-related legislation (cf. Lov 202: Bill for a Regulation of Gaming Act; Lov 202: Amendment of Bill for a Regulation of Gaming Act and Lov 203: Bill for Gaming Duties Act). In relation to these reforms, Denmark also carried out a comprehensive review of the current status of gaming in the country. This section is largely based on these publications. It also includes views on the country's gaming legislation from representatives of law firms in Denmark.

Formerly, Denmark was similar to the rest of Scandinavia in running gaming through a government monopoly. At that time, Danske Spil A/S had the exclusive right to offer lottery, gaming, and betting services within the national borders (cf. Lov 202: Bill for a Regulation of Gaming Act). In 2009, Danske Spil had revenues of around EUR 1.4 billion, of which 59.7% (around EUR 826 million) went towards winnings and 15% (around EUR 212 million) went to charity. The charitable funds were distributed through various ministries according to laws passed by the Danish Parliament (cf. *Charity Lotteries in the EU Member States* 2010).

In addition to Danske Spil, there are also other gaming operators in Denmark whose gaming revenue is directed at charitable causes. Example include Landsbruglotteriet (provides funding for agriculture and fish processing), Varelotteriet (funding for humanitarian and social projects) and Kræftens Bekæmpelse (cancer research and treatment) (*Charity Lotteries in the EU Member States* 2010). With the recent amendments to the Gaming Act, the Danish gaming market has been partly opened to the private sector. The deregulation applies to online casinos and betting services, among others. Lotto, Bingo, Keno, Jokeri and Toto games are still controlled by the monopoly, as are scratch cards⁹. Before the legal reform, laws concerning betting and gaming in Denmark were fragmented and supervised by several different official bodies. Some of the legislation was decades old and no longer applicable to the modern business environment. That made it very difficult to regulate and supervise the gaming market, and the government found it difficult to draw clear policies in the area. These problems were addressed with the legal reform, which centralised the supervision to a single government body, the Danish Gambling Authority. The duty of the board is to regulate licensing and monitor the fulfilment of licence conditions. The board also supervises the

⁹ For further details see Bill for a Regulation of Gaming Act, p. 20

game selection, looks out for unlawful gaming activity and works together with international authorities. Mainly for historic reasons, the gaming board comes under the remit of the Danish Ministry of Taxation (Lov 202: Bill for a Regulation of Gaming Act). The board supervises three types of gaming: lotteries, combination games and betting. A licence for operating gaming is necessary in Denmark whenever a game fulfils the following criteria:

- Participants have to pay an entry fee (of some kind)
- Participants have the possibility of winning something
- The game involves stakes where the possibility of winning is based on chance or a combination of chance and skill

Different game types require different licences. There are nine types of licences in the new law. The following licence categories can only be granted to certain bodies determined by the government:

- Lottery licence
- Government-held licences for Landsbruglotteriet and Varelotteriet
- Licences for non-profit lotteries (can be applied for by any organisation domiciled in Denmark).
- Totalisator licence for equestrian and canine sport betting (only granted to Danske Spil A/S)

In addition to these, there are the following five licence categories for which anyone can apply:

- Betting licence (both online and offline betting)
- Local licence for bicycle, dog, dove and horse racing (different from the totalisator licence above)¹⁰
- Land casino licence
- Online casino licence
- Slot machine licence

Certain legally stipulated conditions are imposed on applicants for these licences. Some of them are related to the backgrounds and characteristics of the company's management (e.g. criminal records, age and debts). The gaming board must be informed of any changes in the management. The company must be registered in Denmark or another EU or EEA country. If the company is not registered in the EU or the EEA, it must have a representative domiciled in Denmark. The representative must be approved by the board and the right to act as a representative may be waived if the person later fails to fulfil the criteria for the licence.

The basic criterion for the granting of the licence is that the gaming board considers the company to be able to offer betting services in a financially secure way. The company's personnel must also

¹⁰ Cf. 22nd Consolidated Act, 16 January 2006

be deemed professional. The licence will not be granted if there is any reason to suspect the company or any related person or organisation (e.g. the management) of involvement in criminal activity. This report only presents the costs of the betting and on-line casino licences, because the other licences mainly apply to markets not included in this study or can only be granted to public bodies (for more information on the other licences, visit www.mwblaw.dk and www.skat.dk).

Applying for an online casino licence or betting licence in Denmark costs DKK 250,000¹¹ (around EUR 44,000). The total cost of applying for both at the same time is DKK 350,000 (EUR 61,700). The licence holder must also pay a licence fee that is tied to the company's taxable income¹². The licence fee ranges between DKK 50,000 (EUR 8,800) for taxable income up to DKK 5 million (EUR 880,000) and DKK 1.5 million (EUR 265,000) for taxable income from DKK 100 million (EUR 17.6 million) upwards (for more details see Lov 202: Amendment of Bill for a Regulation of Gaming Act). Licence holders with small-scale operations may apply for a one-year licence costing DKK 50,000, as long as the taxable income obtained under the licence do not exceed DKK 1 million. All the abovementioned licence fees are paid annually in advance. They may be raised or applied retrospectively based on the actual taxable income.

As in the case of the licences, this report only concerns the taxation of online casinos and betting in Denmark. The taxation of other types of licences can be found in the information sources mentioned in this section. With regard to the Danish legislation, it is important to understand the difference between three key figures on which the taxation related to the different licences is based. These key figures are:

- Taxation of gross gambling/gaming revenue (GGR). Paid by the licence holder.
- Taxation of winnings. Paid by the player but must be deducted from the winnings already by the licence holder.
- Taxation of received betting stakes (taxation of revenue).

The taxation of online casinos and betting is usually based on the GGR figure¹³. Online casinos pay 20% tax on their GGR, based on the contributions of all Danish players. The players themselves do not pay tax on their winnings. The GGR tax rate for offline land casinos is higher.

¹¹ DKK = Danish krona

¹² In casino and betting games, taxable income consists of the gross gaming revenue.

¹³ According international gaming operator's representative, the tax for online casinos and betting is on GGR, unless there is no stake. If there is, then the winning is taxed but deducted by the operator, and not the player. Stakes are not taxed under those licenses.

7.3 United Kingdom

The United Kingdom is a traditional gaming nation. The roots of its gaming traditions go as far back as the seventeenth century, when the government set up the National Lottery to collect funds. After the lottery launch, the gaming market was quiet for a long time until the industrial revolution brought it to the forefront. Gaming became a popular pastime but the government was worried about the lack of regulation. It meant that the government got no share of the profits from the activities. This was solved by the passing of the Gaming Act of 1845, which completely prohibited the operation of casinos and arcades (*Gambling Guidance* 2007). Many other major reforms have taken place in British legislation since then (e.g. the Street Betting Act of 1906). One of these was in 1960 with the Betting and Gaming Act, which allowed bookmakers to offer the services on licenced premises. It also permitted the opening of bingo halls and casinos. These had to be operated as clubs, from whose membership fees the government collected a share. There was no separate tax on the gaming revenue, however (*Gambling Guidance* 2007). 1968 was the next year in which Britain reformed its gaming laws. The new Gaming Act prohibited advertising and incentivising of gaming. The government was tasked with controlling gaming in order to prevent crime (*Gambling Guidance* 2007). This law remained in effect until 1991 when (partly thanks to lobbying from the gaming operators) it was deemed out of date and detrimental to gaming activities. The first major change was the National Lottery Act in 1994, which removed the ban on advertising gaming. This resulted in a significant growth in popularity of the National Lottery, which brought in significant added income to local charities (*Gambling Guidance* 2007). Another reform was the Gambling Act of 2005, which brought together almost all the forms of gaming under the same act. Its fulfilment is monitored by the Gambling Commission, which is an independent government body. The commission is funded by licence fees. The act came into full effect on 1 September 2007. The United Kingdom was then one of the first nations to take into account the rapidly growing market of online gaming in its legislation. Only spread betting and the National Lottery were left outside of the Gambling Act; they have their own supervisory authorities. The UK government has announced the merger of the Gambling Commission and the National Lottery Commission by the end of 2012. (Gambling Commission 2011a; 2011c)

Therefore, in the UK, the Gambling Commission is tasked with ensuring the fulfilment of the Gambling Act of 2005. The key points of the act relate to preventing gaming-related crime, monitoring the openness and fairness of gaming, and protecting children and other vulnerable groups from the risks of gaming (Gambling Commission 2011b). The Gaming Act divides gaming into the following categories (Gambling Commission 2011c):

- Arcades
- Betting
- Bingo
- Casinos

- Slot machine supply and maintenance
- Game software supply
- Lotteries
- Remote gambling

A licence is not needed to run gaming in the UK if there is no physical gaming equipment installed on land. In order to advertise its services in the UK the company must be headquartered in either one of the EEA states, Alderney, Antigua & Barbuda, Gibraltar, the Isle of Man or Tasmania. If any part of the gaming equipment is located within Great Britain, the company must apply for the appropriate licence. The company's personnel must also then hold personal licences to work in the gaming sector in the UK (Gambling Commission 2011d). The Gambling Commission has delegated some of its regulatory duties to local authorities. These include the granting of licences for gaming premises and race tracks, and the regulation of slot machines in clubs. (Gambling Commission 2011e).

In principle, anybody can apply for a licence to run various forms of gaming operations in the UK. The licence application process is tough and depending on the case may take three to four months (Gambling Licence England 2008). The regulatory body assesses the suitability of the applicant, paying attention especially to the company's ownership status and finances, as well as personnel competence, ability to operate in the field and possible criminal records. This information is collected with the aim of making gaming operations as transparent as possible (Gambling Commission 2011f). The Gambling Commission must also report to the government on gaming and any related problems. (Gambling Commission 2011h). The licensing process is also linked to the size of the UK gaming market. In 2009–2010 the market was worth GBP 5.6 billion calculated by the GGR (approx. EUR 6.7 billion in February 2012). Figure 2 below shows the proportions of the different gaming categories. (Gambling Commission 2011i).

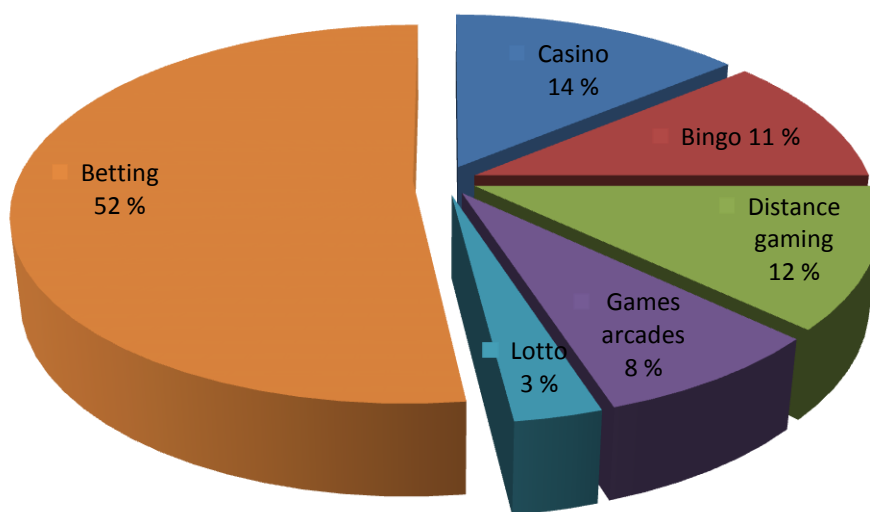


Figure 2. Market shares in the UK (Gambling Commission 2011i)

Licensed gaming operators in the UK pay 15% tax on their GGR. The authorities are currently working on imposing the same tax on non-UK gaming operators that offer their services in the UK. This is due to the fact that large operators such as Ladbrokes have moved their operations to countries with cheaper licences to avoid the competitive disadvantage of the 15% tax rate. (*Financial Times* 2011; *Tax-News* 2007). Private individuals' game winnings do not constitute taxable income in the UK (HM Revenue & Customs 2012).

7.4 Italy

In the past, Italy took a very negative stand to any alternatives to monopoly and actively worked to prevent online gaming operators from offering services in Italy. In recent years, however, the government has granted licences to hundreds of operators within betting, bingo, poker championships, games of skill and casino games. The licences have applied to both online and offline operations.

The gaming market in Italy is regulated by the Autonomous Administration of State Monopolies (AAMS), which grants licences and administers tax revenues. Gaming legislation in the country is complex and partly inconsistent. The penal code forbids gambling, but certain games are considered to be exceptions and permitted by other laws. The different parts of the gaming market are treated differently in legislation. The regulation of lotteries was not removed, and certain operators have exclusive rights to different lottery licences. With regard to bingo, AAMS has granted licences to around 300 operators through a tendering process. In 2010, 200 of them were still active. The licences entail certain conditions related to facilities and technology.

From the late 1990s until 2006, Italy had 1,500 licensed state-run betting offices. These offices had the right to conduct sports, equestrian and other types of betting. The European Court of Justice deemed this arrangement to be illegal, however. In 2006, Italy organised a public tendering process, open to any operator registered in the EU, for these forms of betting. A total of 158 new licences were granted for 115 licence holder to run 13,686 outlets. Of the licences, 112 were for sports betting and 46 for equestrian sports. The licences are subject to conditions related for example to the geographical distance between outlets and to the premises. The licence holder must pay fees to the Italian Olympic Committee and the Italian Equestrian Federation. The fees have a fixed minimum. The operators also pay tax to the government, but the legislation for this is continuously changing. Italian tax law is complex and there are different formulae for calculating the tax on different forms of gaming¹⁴. The government sets maximum levels for winnings and betting stakes. (Verona 2010).

Italy has also granted licences for online gaming since 2010. AAMS has the right to grant a total of 200 licences for all the different forms of gaming. The licences granted so far apply to games of

¹⁴ For taxation of different games see Ficom & Leisure 2011, p. 18

skill, poker championships, casino games, bingo and sports and equestrian betting. To receive a licence, companies must fulfil certain criteria. They must have revenues of at least EUR 1,500,000 (when a company applies for a new licence, it must give a warranty up to EUR 1,500,000). The services offered by the gaming operators must be easy to use and secure. The licensed company and the party that provides it with technical support must be registered in the EU or the EEA. Depending on the licence type, the company must pay a one-off charge of EUR 50,000- 350,000 to AAMS to cover the administrative costs of licensing. (Ficom Leisure 2011).

The volume of gaming has grown by as much as 350% between 2003 and 2009 in Italy. In 2009, the volume was EUR 54 billion, of which players' winnings made up 69%. The state's tax revenues grew by 150% in 2003–2009, from EUR 3.5 billion to EUR 8.8 billion. In 2009, the biggest contributors to tax revenues were lotteries (SuperEnalotto, 46%, and Lotto, 28%). Scratch cards brought in 18% of tax revenues, bingo 18%, slot machines 12%, sports and equestrian betting 5%, and games of skill 3%. The growth in volume and tax revenue is due not only to the partial deregulation of the market but also to a continual increase in the advertising of gaming products by the government. Despite the deregulation actions, the Italian gaming market is still characterised by heavy government involvement. This is justified on the basis of collecting tax revenue and preventing gaming-related crime. (Verona 2010).

7.5 France

France began weakening the regulation of its gaming market in June 2010. That was when a new government body, ARJEL (Autorité de régulation des jeux en ligne), set up to administer online gaming in accordance with a new gaming law, began granting licences for sports betting, equestrian betting and poker. One major factor beyond the decision was that there is a huge “black market” in French gaming. At the moment, France's deregulation actions only apply to online gaming. The reform allowed international gaming operators to operate in France but on many conditions:

- The licences have an onshore requirement. This means that the operator must place some of its IT infrastructure in France. This is considered to cause additional costs for the operators.
- There are limitations on the amount and types of games.
- ARJEL has to have full access to the operators' data
- Operators have to prevent problem gambling, e.g. place links to sites that help people with gambling problems on their websites.
- Operators have to prevent illegal gambling. (Barcaroli 2010 and Mullenex & Richard 2011).

From the viewpoint of profitable business, private gaming companies find the French market very challenging. In addition to the tough criteria, there is taxation, which is considered to be

excessively high (Interviewee, International gaming company). The French taxation model is very different from the British and Danish models, for example. For equestrian and sports betting, the tax rate is 8.5% on all the contributions made. For poker, it is 2% on total revenues (up to a maximum of EUR 1 per hand). The maximum return rate has been set at 85% to reduce the risk of gambling addiction.

In France, organisers of sports events may decide for themselves whether betting can be organised on the event. Therefore, to conduct betting, the operator must obtain a licence from ARJEL and make an agreement with the event organiser. In practice this means contacting numerous event organisers and making separate agreements for every event. This undoubtedly increases the gaming companies' administrative costs. The agreements often only grant the operators limited rights, excluding for example the use of athletes' or teams' names or logos for betting purposes. (Mullenex & Richard 2011). This restriction has been justified based on the athletes' and clubs' intellectual property immaterial rights, but the interpretations of the law have until now been ambiguous (cf. Bretonnière 2011). The law stipulates that the operators must disclose information on the players to the event organisers in order to prevent abuse, but it does not specify how this should be done. Therefore there are challenges related to protection of the players' privacy. The event organisers also have the right to demand royalties of 0.75–1.8% of all the stakes taken in by the operator as compensation for the betting permit. According to the authorities, these royalties are used for recognising and preventing malpractice. In practice, however, it may just be a way to increase the event organisers' profits. (Mullenex & Richard 2011).

Despite the restrictions, extensive bureaucracy and tough taxation, many of the biggest international gaming operators have applied for licences to operate on the French online gaming market. By the end of 2010, licences had been granted to 54 gaming websites run by 30 different operators. This made up about 60% of all the available licences. A large part of the licences were for poker sites. Companies such as Betclik Everest Group have said, however, that it is impossible to run profitable business operations in France. In 2010, Betclik Everest had a market share of around 46% of the French online sports betting market and of 15–20% of the online poker market. Many of the smaller operators were predicted to be loss-making in 2011. (Gambling Capital 2011). One indication of the challenging nature of the French system for private companies is that some large operators such as Ladbrokes have removed themselves from the French market. The tight regulations in France can be expected to result in licensed operators finding it very difficult to compete for French customers with unlicensed black market operators.

7.6 Germany

In 2010, the European Court of Justice deemed the German gaming monopoly to be illegal. Germany had justified the existence of its monopolies by stating they were essential for the

protection of consumers from the problems of gaming. According to the court, however, the monopolies had marketed their games so aggressively that they were deemed to seek maximisation of their profits and therefore to operate questionably from the point of view of consumer protection. Therefore the verdict of the Court of Justice was that the German government gaming monopolies were unjustified. (Schneider 2010).

Germany had an interstate gaming regulation treaty which recently expired, and the new treaty can be seen as the kick-off for the deregulation of the German gaming market. The first deregulation actions are taking place in the sports betting arena. Germany will probably grant nationwide online licences to private operators in the near future. The licences will be for a test period of five years. The tendering process will be open to all gaming operators in the whole of Europe.

The plans are for the licensing system to be fairly tightly regulated. Firstly, no betting licences will be granted for in-game betting (related e.g. to half-time results or the next goal, etc.). Secondly, the licensed operators may place advertisements on athletes' clothing and in the fields, but no TV advertising will be permitted during sports telecasts. Thirdly, following the French example, the government will levy a 5% tax on the contribution revenue, not on the GGR like most other recently re-regulated countries. Furthermore, the licence holders will have comprehensive disclosure obligations to the players concerning the terms and conditions of betting. They must commit to taking steps to reduce playing by underage players and gambling addicts. (Olswang 2011 and GamblingData 2011).

With regard to lotteries, Germany intends to continue the government monopoly. The new interstate treaty does not allow the granting of licences for any other online gambling games than sports betting. It is worth noting that the state of Schleswig-Holstein passed its own bill (Gaming Reform Act and Interstate Treaty on Gambling) concerning a less regulated gaming market, where companies are taxed 20% on their GGR and online betting and casino games are permitted. So far it is unclear whether private operators could take in customers from Germany's fifteen other states based on a licence obtained in Schleswig-Holstein (cf. e.g. Hambach & Bolay 2011; Heuking Kühn Lüer Wojtek 2011). All in all, deregulation appears to be starting on a rather cautious and tightly controlled note in Germany.

7.7 Summary of country comparisons

Table 4 collects together the general characteristics of the gaming systems described above. As the table shows, the systems are often very different but on a more abstract level some similarities can also be found. In reading the table it is important to remember that the systems contain lots of exceptions and the table only provides a generic overview of the national systems. A typical exception is that different types of games can be taxed in different ways. In many cases, some

games are still maintained by a government monopoly, while other parts of the market has been re-regulated and opened to private operators.

Table 4 Summary of country comparisons

| Key figure on which gaming taxation is based | Denmark | United Kingdom | Italy | France | Germany |
|---|---------|-----------------|-----------------|--------|-----------------|
| Revenue | | | ✓ | ✓ | ✓ |
| Gross gaming revenue | ✓ | ✓ | ✓ | | x ¹⁵ |
| Company profits | | | | | |
| Other/depends on game | ✓ | | ✓ | ✓ | |
| Number of licences | | | | | |
| Limited | | | x ¹⁶ | ✓ | ✓ |
| Unlimited | ✓ | ✓ | | | |
| Licence criteria | | | | | |
| Onshore requirement | | x ¹⁷ | | ✓ | |
| Registered in EU/EEA | ✓ | ✓ | ✓ | ✓ | ✓ |
| General competence requirement | ✓ | ✓ | ✓ | ✓ | ✓ |
| Minimum revenue requirement (based on former years) | | | ✓ | | |
| Online licences available for application by private operators | | | | | |
| Casino games | ✓ | ✓ | x ¹⁸ | | |
| Sports betting | ✓ | ✓ | ✓ | ✓ | ✓ |
| Totalisator betting | | | ✓ | ✓ | |
| Online poker | ✓ | ✓ | ✓ | ✓ | |
| Bingo | | ✓ | ✓ | | |
| Offline licences available for application | | | | | |
| Casino | ✓ | ✓ | | | |
| Sports betting | ✓ | ✓ | ✓ | | |
| Totalisator betting | | ✓ | ✓ | | |
| Poker | ✓ | ✓ | ✓ | | |
| Bingo | | ✓ | ✓ | | |
| Slot machines | ✓ | ✓ | ✓ | | |

¹⁵ In Germany, GGR taxation applies only to one state (Schleswig-Holstein).

¹⁶ Limited, but up to a total of 200 licences.

¹⁷ Licence required to advertise or place IT infrastructure in the UK.

¹⁸ Italy's online casinos may not contain online slot machines.

| Other fees | <i>Denmark</i> | <i>United Kingdom</i> | <i>Italy</i> | <i>France</i> | <i>Germany</i> |
|-------------------------------|----------------|-----------------------|-----------------|---------------|----------------|
| Administrative costs | | | | | |
| Fee based on GGR or similar | ✓ | | | ✓ | |
| Royalties to event organisers | | | | ✓ | |
| Warranty | | | ✗ ¹⁹ | | |

¹⁹ Warranty = guarantee of revenues exceeding EUR 1.5 million.

8 SUMMARY AND ALTERNATIVE MODEL FOR THE FINNISH GAMING SYSTEM

This research has examined the Finnish gaming system from diverse viewpoints. Because there has thus far been very little constructive debate on alternatives to Finland's current gaming system model, this section considers some licence-based alternatives to the monopoly model.

Firstly it can be said that the gaming systems of the EU member states have developed in diverse directions and that there has been a clear polarisation in recent years between systems in the EU. Whereas Denmark, for example, has recently begun opening its gaming market to private operators, Finland has sought to strengthen its monopoly even further. This is reflected by the Government Programme of Prime Minister Jyrki Katainen's first Government, which under "Substance abuse policy and services" (p. 62) states the following: "The current gambling monopoly will be enhanced by imposing restrictions on international gambling. The monitoring, research, prevention and treatment of gambling problems will be improved. Cooperation between the authorities, civil society organisations, gambling communities and research institutions concerning the prevention of gambling problems will be enhanced." Interviews with representatives from Veikkaus Oy indicated that Veikkaus does not support blocking-based regulation; in other words it does not recommend measures such as blocking IP addresses or preventing money transfers.

The openness to interpretation of the EU's gambling legislation has partly promoted development in this direction. The EU has reacted to the problem, however, and it seems that in the near future efforts will be made to harmonise the gaming market within the EU, at least up to a point. This is evident for instance in the European Commission's 2011 Green Paper on On-Line Gambling in the Internal Market.

Some EU states have decided to open up their gaming markets to private operators. The deregulation has usually arisen from the desire of the national governments to control the gaming that takes place in their areas. Because online gaming transcends national boundaries, gaming can no longer be controlled using traditional methods. Therefore countries such as Spain and Denmark have decided that a licensing system offers the government a way to benefit from the citizens' online gaming, which has until now largely taken place outside of the national gaming systems. The licensing systems vary, however, in relation to the number of licences granted, the cost and the taxation models, among other things.

Recent developments in the European Union's gaming market make it clear that Finland cannot close its eyes to the changes that have already affected some of the other member states. By EU law the protection of gaming monopolies may only be based on the prevention of social problems arising from gaming, so the gaming companies must now prove to the supervisory authorities that they work on that issue. In practice, the main social problem that is cited is usually gambling addiction. In addition, government-regulated gaming must be implemented in such a way that it can help reduce gaming-related crime. Typical gaming crimes are money laundering and corruption in sports. The analysis of literature conducted as a part of this study, however, did not produce

outcomes supporting the view that a monopoly is more effective than the free market at preventing the negative effects of gaming. For example, the UK has a lower proportion of people with gambling problems than Finland. It must be taken into account when looking at gambling problems, however, that the numbers can vary significantly depending on the indicators that are used. Nor did the analysis of literature find proof to support the claim that online gaming produces more problem gambling than offline (so-called real-life) gambling. Prior research has shown that money laundering is not a particularly significant problem in a supervised (licensed) gaming market. Today's technologically advanced systems track money transfers and the licensed gaming operators monitor changes in their customers' gaming behaviour. Therefore criminals are likely to choose easier and less risky forms of money laundering than online gambling.

From the point of view of integrity in sports, doping is a much bigger risk than corruption related to sports betting. Within sports, betting fraud has focused mainly on football and especially on the smaller leagues in Europe, where player salaries are low, there is less media attention and little education is provided to prevent fraud. It is important to note that safeguarding integrity in sports is essential from the points of view of both the gaming operators and the sports clubs themselves. These parties have in recent years increased their cooperation, for instance in information-sharing, in order to minimise the problem.

In the light of former studies and the interviews conducted, the number of people with gambling problems can be seen to have remained fairly constant. It is estimated that 1–3% of players suffer from gambling problems in Finland. When looking at problem gambling, it is important to remember that there are various levels of problems and that numbers vary depending on the indicators used. Based on the analysis of literature and the interviews conducted for this research, it could be said that if the government wishes to radically reduce the number of gambling problems caused by gaming in Finland, it should primarily look at RAY's slot machines. The placement of slot machines is really intensive in Finland, and for example by the end of 2010 there were more than 17,000 slot machines on business premises around the country. In addition to this, RAY operates 76 of its own arcades with slot machines and casino games. From the point of view of reducing gambling problems, the physical slot machines should be made less attractive and their distribution should be limited or prohibited altogether. Other ways of reducing the risk of problem gambling related to slot machines are increasing the duration of games and reducing maximum winnings. However, the funding provided by RAY from its gaming revenue is very important for many Finnish charities. Therefore the net effect of a complete ban, for example, could be to create more far-reaching social problems. In the long run, treatment of these kinds of problems (e.g. from a significant rise in mental health problems) could be much more expensive for society than the treatment of people with gambling problems. It is possible, therefore, that the social benefits achieved from a total ban on slot machines could be outweighed by the indirect negative impact of the ban. In addition to signifying the loss of RAY funding for the third sector, it would also imply

an increased risk of illegal slot machines appearing on the market. Sweden provides a cautionary example in this respect.

One compromise between the current model and a total ban could be to place slot machines only in RAY arcades, which would make it significantly easier to monitor for instance the ban on underage playing. A similar practice is already in use in some EU countries (e.g. Cyprus). The change would probably significantly reduce RAY's revenue and profit, however, and thereby also the funds distributed from them to the third sector.

Finland's gaming operators are well aware of the recent developments in the European gaming market. Interviews with experts from Veikkaus Oy, for example, made it clear that the company is preparing for the dismantling of the legal monopoly in the near future.

The time frame may be up to 2020, but by then Finland must have given up this legal monopoly. Finland has several options to choose from and it can choose as it deems best. We have gone through the options and of course we have to consider how we would organise our operations in different circumstances. What's better for us and what's worse. And what would be the optimal alternative from the point of view of our beneficiaries. (Interviewee B, Veikkaus Oy)

On the other hand, we have to organise our operations so that, whichever option is chosen, we can succeed in the licensing competition.... The worst case scenario is that the legal monopoly is... oppressed... so much that we lose our ability to function.... Then 2, 3, 4, 5 [years] down the line we have a competition for licences and then we won't be one of the best in the world anymore... Right now we should be initiating these dialogues so we know what we should prepare for. (Interviewee B, Veikkaus Oy)

Looking at the Finnish gaming system from an economic point of view, it can be said that regulation of gaming can be based on the externality principle. Licensing and taxation can be used to redress some of the ill effects of gaming. Similarly, the collected tax revenues and monopoly profits can be used to support charitable causes. A legal monopoly leads to inefficiency that causes higher prices and lower-quality services for consumers. Inevitably, some of the monopoly profits are also lost in unnecessary operations and actions defending the monopoly's position.

If it is done correctly, liberalisation will increase cost efficiency and the right kind of innovativeness in the gaming sector. Done correctly, a competitive licensing system can also respond to the externality issues in the sector. Possible deregulation actions should strive for: 1) that the benefits gained through competition should not be eliminated through excessive bureaucracy; 2) that the system should encourage Finns to play through companies that operate in Finland rather than shifting gaming mostly to other countries via the Internet; 3) that the cash flows (tax revenue and gaming revenue) that stay in Finland should remain at the desired level, while also fulfilling points 1 and 2.

In light of these observations, it should be considered what the shift from a monopoly to a licence-based system would mean for gaming in Finland.

When pondering alternatives it is worth keeping in mind that the deregulation of the market does not have to be complete; instead, as in many countries, certain elements, such as the Lotto, can be kept under the government monopoly. On the other hand, sports betting, online casinos and online poker have in many countries been opened to competition from private operators through licensing. This kind of partial deregulation would most likely be the most suitable system for Finland as well, due to the strong historic links between gaming and charity. Even the interviewed representative of a private gaming company stated that the grassroots work carried out by Veikkaus is considered to be valuable.

I'd go for a private-public partnership-type solution. Because Veikkaus does conduct charitable operations and provides a lot of funding, and that sum should not be reduced. If you added the tax revenue coming from foreign gaming companies to that sum, the same government body could distribute it. The private and public sectors would work together for the good of society by channelling the tax revenue. (Interviewee, International gaming operator)

Many fears that deregulation of the gaming market would lead to a crash in the funding of the third sector. This would be unlikely, however, if the deregulation were only partial. For example, deregulation of online sports betting would hardly have a significant impact on Veikkaus's results. Sports betting only bring in just over 20%²⁰ of Veikkaus's revenue, and the proportion of online sports betting is even lower. According to representatives of Veikkaus, the company makes just over EUR 30 million from online betting each year. In contrast, the company transfers over EUR 130 million to the Ministry of Education and Culture each year for use in sports and fitness causes.

It seems likely that international gaming companies would only enter the Finnish market through online services, and therefore Veikkaus would still control the offline betting. Veikkaus Oy has long traditions and Finns have been used to using its products (e.g. Vakioveikkaus) for decades. So not only does sports betting form a small source of income for Veikkaus, but it would probably maintain market leadership even in that area.

Therefore Veikkaus might not experience a significant change in its revenues or profits even if sports betting were re-regulated under licence. As a consequence, Finnish competitive sports would have access to potential new sources of income, which would allow for professionalization of their operations and reduce the risk of corruption that arises from low salaries and lack of education. Deregulation of sports betting does not form a significant risk in relation to problem gambling, either. There is a bigger risk of increased problem gambling in the areas of online casinos and online poker.

²⁰ In 2010 it was 22.6%, after which the trotting games were transferred to Fintoto as a part of the Lotteries Act reform.

If a licensing system were planned for Finland, the Danish model could be a good starting point. There, deregulation has applied so far to sports betting and online casinos, while products such as Lotto, Keno, Toto and scratch cards are still run by the government monopoly. Denmark has set specific requirements that private operators must fulfil in order to receive a licence. The licence conditions vary by game, but some of the criteria are related to the background of the company management, the location of the company and the competence of personnel. According to the interview conducted with a representative of international gaming operator, gaming operators see that Danish criteria makes it really challenging to make profitable business in Denmark. A reason for this is for example that after the re-regulation took place in Denmark, the marketing costs have significantly increased. Hence, if the tax rate and license prices are too high, it leads to the situation where private gaming firms can not operate profitably in local markets. As a consequence, these firms will stay in countries with lower tax rates and “easier” licence criteria also in the future.

One incentive to transfer to a licence-based system in Finland is that the government would then receive its share of the online gaming done by the citizens through international gaming companies. Veikkaus and RAY estimate that Finns already spend EUR 100–150 million on gaming outside of Finnish borders. Private gaming company representatives estimate this number to be much higher still.

In a typical international licence system, the licence fees collected from the companies are used for monitoring the system whereas the tax revenue goes to the state. Therefore from a taxation point of view it does not make sense to limit the number of licences granted, but licences should be given to all those companies who apply and are able to fulfil the criteria set for the licence. The Danish licence criteria could be expected to be fairly suitable for Finland, too. If the criteria are tough enough they can ensure that the licensed companies operate reliably and invest into reducing gaming-related crime and gambling problems. Typical responsibility-related actions on behalf of international gaming companies are presented in section 3 of this report. A functioning licence system often requires an independent and unbiased body to supervise the system, analyse gaming and share gaming-related information. A practical example of such a body is the Gambling Commission in the UK. In Finland there is already a comparable operator in the electricity market, where the Energy Market Authority supervises and promotes the operation of the electricity and natural gas market, collects data and grants licences.

In the optimal situation, therefore, the government would receive significant tax revenue from carefully selected, licensed gaming companies. The licence system would not, however, remove the risk of an increasing amount of Finnish gaming funds being transferred to international gaming companies via the Internet. By allowing marketing by the licensed gaming companies, however, the quantity of gaming on the grey market could be minimised. On the other hand, drastic measures such as blockages of certain websites, which have occasionally been proposed, would probably not work very well in an information society such as Finland. This was also indicated by the interviewed representatives of Veikkaus. Total bans also do not work in the online environment

because monitoring their fulfilment is practically impossible in the constantly developing technological world. Italy, for example, tried previously to stop its citizens from playing on international gaming sites, but the active players quickly learned to circumvent such bans. Similar examples can be found in the music and film industries. In Italy, gaming through domestic websites only began to grow when the local gaming companies managed to launch sufficiently attractive games. A similar phenomenon was observed in the music industry with the Spotify service.

During the research, representatives of sports club were consulted to find out their views on the current system. The interviews indicated that more transparency is needed in the application of Veikkaus's gaming revenue and the sponsorship money granted to sports federations and umbrella organisations. This cannot really be considered a Veikkaus problem, because the distribution of money typically takes place within the organisation for each sport. The club directors were dissatisfied with the fact that they did not know where the funds went that were granted to their federations. In certain disciplines and on certain league levels, the clubs did not receive a penny in Veikkaus sponsorship money or funding but were still required to advertise Veikkaus extensively in their events. In other words, the money was left at the federation level and the clubs did not know specifically where it was going. This causes dissatisfaction and suspicion "out in the field".

Many interviewees felt that they could collect significant amounts of sponsorship money by collaborating with international gaming companies. Without exception, such collaboration was forbidden, however. The most surprising aspect of the research outcomes was the fear of the current management of Finland's sports clubs to express any views on the existing system. Only the guarantee of full anonymity allowed the directors to open up and one interviewee came back afterwards to ensure that identities could not be determined based on the research report. This indicates an exceptionally strong level of control from the sports federations over their member clubs, and shows that the atmosphere is not conducive to constructive dialogue on the system.

This study aimed to consider gaming from diverse perspectives. Many factors were identified that would benefit from more extensive public debate. Until now, interaction between defenders and critics of the current systems has usually led to unfruitful disputes and argumentation. The results of the research indicate, however, that if analytical and unbiased discussion can be established on the strengths and weaknesses of the Finnish gaming system and on the future of and gaming in the EU, then it will be possible to come up with a solution that is acceptable for all the parties involved. We hope that this report will spark some of the debate necessary for the creation of such a solution.

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