European Research Studies Volume XIX, Issue 1, 2016

pp. 3 - 17

## Online Sports Betting in Greece: An Empirical Investigation

Ioannis Papanastasiou<sup>1</sup>, Vasileios Fourlas<sup>2</sup>

### Abstract:

Although international interest on e-gambling commerce is steadily increasing, studies about the online sports betting sector in Greece are very rare. Based on a web survey the present study, attempts to address this gap, by shedding light on the active sports bettors characteristics, preferences and patterns in Greece. A thorough analysis of 325 internet sport bettors reveals contingent relations between significant variables, while conclusions are drawn about the size of stakes placed and the punters motivations.

Key Words: online sports betting, web survey, sports bettors

JEL Classification: C21, L83, L86

<sup>&</sup>lt;sup>1</sup> Professor at University of Macedonia, e-mail: <a href="mailto:papan@uom.gr">papan@uom.gr</a>, phone number: 2310-891696, fax: 2310-891601

<sup>&</sup>lt;sup>2</sup> Graduate of MBA – Hellenic Open University, phone number: 210-4909574, E-mail: lucard\_1985@hotmail.com

### 1. Introduction

Undisputable the development of communication technologies (ICT) brought with it new forms of online commerce. The advent of digital technology coupled with the enormous potential applications of the web, caused substantial changes in the global gambling industry. Online gambling constitutes one of the most dynamic, promising and rapidly changing businesses around the world. Despite the large volume of studies and internet databases on gambling there is almost nothing known empirically about gambling and its problems in Greece (Griffiths, 2009). Internet gambling is a relatively under-researched area (Griffiths and Parke, 2010).

In its first part, the present study, reports some numerical features of the e-gambling commerce internationally and describes its current situation and future trends. At the same time, it presents an overview of the online gaming sector in Greece, highlighting critical legislative shifts and upcoming trends, which will definitely alter the gambling scene in the country.

In the second part, the study examines the relationship between the characteristics of the internet sports betting sites and the sports bettors in Greece. The findings of the study, may guide key stake holders, including entrepreneurs, policy makers, regulators, researchers, treatment providers, and industry groups, in forming an appropriate response to internet sports betting in Greece. Data concerning punters' attitudes towards online sports betting, made available through links (banners) on relevant sports betting websites and forums accessible by active sports bettors in Greece.

A recent survey showed that internet gambling is still a relatively low prevalence phenomenon (Wardle et al., 2007), making it difficult for someone to present an accurate picture of the characteristics of internet gamblers and their health. Most papers dealing with the gambling issue attempt to establish the active sports-bettors profile and shed light on their motivations, preferences and characteristics in the online sports betting field.

## 2. E-gambling categories and future trends

The European Commission (2012) used the following definition for online gambling services:

"Online gambling services are any service which involves wagering a stake with monetary value in games of chance, including lotteries and betting transactions that are provided at a distance, by electronic means and at the request of a recipient of services."

Due to its embryonic development, there have, and continue to be, several terminologies used to define digitized commercial gambling e.g. remote gambling, e-gaming, e-gambling, internet gambling, online gambling, online gaming,

interactive gambling and virtual gambling etc. All these terminologies are assessed as equivalent under the scope of this research.

Desktop computers, laptops, net books, smart phones, tablets, internet capable mobile phones, interactive televisions, video game consoles are included in a an expanding list of devices that can support e-gambling commerce or interactive gambling (News agents Association, 2011).

According to KPMG (2010), the online gaming market is composed of a number of different types of games, with its own business models and technology. They include: Sports Betting, Online Poker, Casino Games, Online Bingo and Online Lottery.

Although online gaming now accounts for only a small share of the total worldwide market, it has proven to be one of the fastest growing sectors over the past several years (Christian Capital Advisors, 2006). By the end of 1996 it is estimated that about 15 online sites accepted wagers, increasing to over 200 by the end of 1997, 650 by the end of 1999 and 1,800 by the end of 2002 (Schwartz, 2006). H2 Gambling Capital (2012) put the size of the online gambling industry at about €24.6bn in 2011, while the EU gambling market represented the 45% of the world market share (European Commission, 2012).

Online sports betting constitutes the most popular and well known sub-category of online gambling. According to Kalb (2011), sports betting can be defined as: "All the sports betting-based games that involve wagering a stake with a monetary value in games in which participants may win, in full or in part, a monetary prize based, totally or partially, on chance or uncertainty of an outcome."

It represented the leading market segment in 2010 in terms of revenue generating more than US \$12 billion and accounting more than 40% of the market (ReportLinker, 2011). With experienced and knowledgeable online gambling operators constructing suitable markets, responding to sports-based information and consumer investments, online sports betting can be a profitable product, albeit within tight margins in the future (Church-Sanders, 2011).

Emerging regions such as India and Latin America are likely to be the next major markets to dominate the online game industry. Regulatory enhancements worldwide have the potential to further broaden the online gaming market after all (Ernst & Young, 2011). A movement toward legalized and regulated online gambling market seems to be very likely (Williams and Wood, 2007). According to Gainsbury (2011), sustained growth is predicted as more jurisdictions legalize online gambling, technology continues to develop, the internet becomes more accessible, and existing land-based gambling and non-gambling companies move to enter this market. According to KPMG (2010), important trends include: Industry consolidation,

business to business expansion, entrance of land-based casino operators, growth of mobile gaming and emerging platforms.

## 2.1 E-gambling in Greece

Greece had a closed gaming sector till 2011, where most of the market was controlled by the one licensed entity, OPAP. In August 2011 the Greek government passed gambling legislation (Law 4002/2011) which introduced a licensing regime for some forms of online gambling. It issued temporary online gambling licenses to 29 firms, only to revoke those licenses a year later after deciding to extend OPAP's online monopoly on sports betting and random number generated games until 2020. Various major online gambling operators such as Stanleybet International Ltd., William Hill Plc. and Sportingbet Plc. have submitted a complaint to the European Commission regarding Greece's refusal of awarding them with an online sports betting license. According to the RGA (2012), the new online gambling regime in Greece contains a range of clear anticompetitive and protectionist restrictions. Greece's gambling monopoly owned by OPAP was ruled illegal by the European Union's highest court in January 2013.

Until December 2012, in the Greek online market, more than 250 unauthorized providers of e-betting services operated, while illegal gambling was estimated to avail of around 4 billion Euros (T&A, 2010). GamblingData (2011) estimates that in Greece, the annual spending of internet user on online gaming is between €250 to €320. In 2011, 400.000 Greeks have used at least once an e-gambling service and 100.000 of them in a frequent basis (ELTRUN, 2011). In 2012, approximately 456.000 individuals have engaged in an online gambling activity indicating a substantial growth trend in e-gambling (ELTRUN, 2012).

### 3. Methodology and main features of the study

Collection of data through online methods is now considered to be a common practice (Wood & Griffiths, 2007; Griffiths, 2010). However, this approach is not without potential problems. For example, self-selected web surveys are likely to result in biased samples and provide little or no control over the sample (Jansen et al., 2007). Bethlehem (2010) argues that two phenomena can make web surveys results unreliable: under-coverage and self-selection. Similarly, Couper (2000), Dilman and Bowker (2001), suggest that web surveys have unique challenges related to bias resulting from coverage error, sampling error, measurement error and nonresponse error. Despite these limitations researchers generally agree that electronic surveys offer faster response times and decreased costs (Wood and Griffiths, 2007; Griffiths, 2010). Finally as Griffiths and Whitty (2010) indicate, "online gamblers' familiarity with internet technology may facilitate and enhance such studies being undertaken."

In the present study data were gathered through a *web survey*<sup>3</sup> based on an online questionnaire. The web survey relied on sports betting websites and forums likely to be accessed by active sports bettors in Greece. The majority of these forums attracts gamblers who are interested in sports betting, providing prognostics and counseling as far as the outcome of the sports events and the bet methodology are concerned. Hence, the survey was likely to have targeted the active sports bettors population in Greece and recruited responses from those who bet on a more frequent basis.

This was a self selected web based survey (non-probability sampling strategy), since it included those respondents that came across the survey in the course of their normal browsing and were not proactively solicited by the researcher. Clicking on the link, the prospective respondents were redirected to an online questionnaire written in Greek language. Given the fast paced nature of the web, most researchers suggest that surveys should be kept short in order to increase response rates (Crawford et al., 2001). Hence the questionnaire was relatively brief, it guaranteed confidentiality and anonymity, taking only about 3 minutes to be completed. Data were collected from the participants during the period: 28 September 2012 to 28 December 2012. Furthermore, the participation was limited to those who had engaged at least once in an online sports betting activity in the past. The web survey was connected directly to a database supported by SurveyMonkey's software, where all completed survey data was categorized and stored automatically for later analysis, diminishing thus possible coding errors. The softwares SPSS and E-views were employed for the statistical analysis.

Several restrictions were applied in the data collection procedure in order to strengthen the validity of the survey. In order to minimize repeat responses, a "cookie" was built into the survey, such as those who attempted to repeat the survey were politely denied access. Hence, only one response per computer was allowed, while all respondent's IP's were stored. SSL encryption was enabled securing the data from possible hacking attempts and violations.

The web-link resulted in more than 7.000 "impressions" (the number of times the link was displayed), which resulted in the link being clicked 510 times, or a rate of 1 click per 14 displays. From these 510 clicks, 444 survey participants were recruited and completed the entire survey (a completion rate of 87%), while 325 questionnaires were valid. The obtained sample had substantially more men (93.5%) than women and all the age groups were represented. The average age of the participants was 29 years and ranged from 12 to 50+ years old.

<sup>&</sup>lt;sup>3</sup> Web based Survey can be defined as a form of electronic survey instrument that reside on a network server connected to the Internet and it can be accessed only through a web-browser.

Participants involved in this study were recruited from only a selection of betting forums and sports sites. Therefore, the sample is likely to be skewed towards those sports bettors that use these particular sites, where the banners where placed. Weighting adjustment techniques (post-stratification, reference samples, propensity weighting) that could improve the quality of the web survey estimates by reducing the bias of self-selection, are far beyond the analysis and the scope of the present study due to primary cost and time restrictions. However, the methodological approach used (containing a large sample of active internet sports bettors – using selection restrictions), eliminates the possible coverage error (since the target population includes strictly people with access to internet) and the high response rate (87%), allows us to rectify this problem to a great extent.

### 4. Empirical Results

### **4.1 Descriptive Statistics**

The target population of the present study was the active gamblers community in online sports betting in Greece. The average net annual income of Greek sports bettors was about 12.000€. Their educational level was relatively high (67% stated that they hold a University/Technological Institution degree or higher). While it is not surprising that the educational level of the respondents was high, it is worrisome the fact that 28.5% of the sample were students and 11% were adolescents, between the ages of 14-20. That statistic is surely alarming, since it may reveal future gambling addiction dangers.

Online sports betting was the most popular category of e-gambling according to the survey's respondents. 86% stated that they bet more money on sports. Football was the dominant category in sports betting, since it concentrated 93% of the sports bettors preferences. The main motivations for internet-betting on sports were, the better odds provided (75.78%), the live-betting ability (50.84%) and the convenience (48.92%). Griffiths and Mc Cormack (2010) identified the greater opportunity to gamble, the convenience, the value for money, the greater variety of games and the anonymity as the main reasons why people gamble online. Williams and Wood (2007) found that in terms of motivation for gambling online, internet gamblers overwhelmingly identified the convenience of internet gambling to be its main advantage.

Interestingly enough, 83% of the surveyed e-gamblers stated that they feel satisfied through their online sports betting experience, while surprisingly only 2% of them stated that they prefer OPAP. Despite the high satisfaction degree for the online betting firms, there seems to be no incremental trend for online sports betting expenditures in the future by the customers, perhaps due to the uncertainty of the severe financial crisis in Greece. The offered odds (95.44%), the live-betting ability (92.09%) and the transactions security guarantees (94.96%), were considered as the most significant sports books attributes by the respondents.

Monthly stakes estimates for the mean together with their 95% confidence interval (based on bootstrapping) are presented in table 1 below<sup>4</sup>. Stakes size is left skewed, which makes the mean a less desirable estimate of the "typical" stake size among sports bettors than the 5% trimmed mean. Therefore, we will use the 5% trimmed mean as a robust estimator for inferences.

**Table 1.** Monthly Stakes (€)

Income ('000)	[Responders]	Num.	Mean	95% C.I.
0-12	[177]		78.32	66.05-92.34
12-22	[116]		191.39	146.85-242.59
22-40	[32]		328.59	195.75-466.91
OVERALL			143.32	118.28-170.78

As we can see from the table 1, the majority of Greek sports bettors belongs to the low income class (below 12000€). These players are betting online an average amount of 78.32€ monthly with a 95% confidence interval equal to (66.05-92.34). It is obvious from table 1 that the average monthly stakes of Greek sports bettors increases as income levels increase. Overall we conclude that a Greek sports bettor is expected to bet through internet about 143€ monthly.

Furthermore, table 2 indicates that a Greek bettor spends a large proportion of his income in sports e-gambling (14.6%).

**Table 2**: Stake per income (%)

mid-Income	Mean	95% C.I.
6000	15.66	13.21-18.47
17000	13.51	10.37-17.12
31000	12.72	7.58-18.07
OVERALL	14.60	12.66-16.72

These proportion levels decrease as income increases. However, it is worth noted that Greek sports internet-bettors spend more than 10% of their income irrespective of their income category.

## 4.2 Regression Analysis

**4.2.1** Active Sports bettors<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> Due to a very limited number of observations the last two income classes have been excluded.

<sup>&</sup>lt;sup>5</sup> Active sports bettor/punter is defined as anyone who engages in sports betting at least once per month.

In this section we investigate the effect of the independent categorical<sup>6</sup> variables: gender (GN), annual net income (INC), age (AG), occupation (OCC), educational level (EDU), residence place (RP) and players' betting frequency (BF), on the dependent variable, monthly stakes size of active sports bettors.

Linear regression estimates are presented in Table 3. As we can see from table 3 the monthly amount a Greek sports bettor spends online, depends on all independent variables with the exception of residence place. Therefore the monthly stakes size placed on sports of Greek people living in the major capital city do not differ from those living outside Attica region.

 Table 3. Active Sports Bettors

Dependent Variable: monthly stakes size

Method: Least Squares Included observations: 325

White heteroskedasticity-consistent standard errors & covariance

Coefs	GN	AG	OCC	<b>EDU</b>	INC	BF
Const.	45.00	75.90	115.3	30.00	78.32	48.90
	(***)	(***)	(***)	(***)	(***)	(**)
1	103.1					
	(***)					
2		56.69	56.07	61.54	113.1	31.12
		(*)	()	(***)	(***)	()
3		125.9	71.85	138.7	250.3	214.2
		(***)	(*)	(***)	(***)	(***)
4		314.1	-51.71	147.3		
		()	()	(***)		

<sup>()</sup> Means statistically insignificant

Although *location* seems to be an insignificant factor in affecting the monthly amount of money a Greek bettor spends, the other all independent variable found to be significant. Specifically, men bettors spend on average more than double the

\_

<sup>(\*)</sup> Means statistically significant at 10% level

<sup>(\*\*)</sup> Means statistically significant at 5% level

<sup>(\*\*\*)</sup> Means statistically significant at 1% level

<sup>&</sup>lt;sup>6</sup> These categories are explained in the Appendix.

amount women spend on internet sports stakes monthly. It is prevalent that men are more interested in online sports betting than women.

Furthermore, there exists a positive relationship between age and average monthly size of the stakes placed. Greek online sports-bettors aged 14 to 20 bet on average almost  $76\varepsilon$  on a monthly basis. Those aged 21 to 34 bet around  $133\varepsilon$ . Middle-aged Greek players are expected to spend every month on internet sports stakes approximately  $202\varepsilon$ . Finally Greek bettors over fifty years old, bet on average  $390\varepsilon$  every month. Despite the fact that younger bettors are more familiar with the web betting procedures, older bettors seem to spend higher amounts of money perhaps due to gambling addiction problems and higher income resources.

Similarly there is a positive relation between annual net income and size of sports stakes. When we move from a lower income category (below 12000€) to a higher one (between 12000-22000€) the size of sports stakes increases by 113€ approximately. Greek sport bettors with annual income between 22000 to 40000€ pay on stakes about 250€ more per month, than those players in lower income category. It seems that the annual net income has a positive influence upon the size of stakes and consequently online sports betting can be classified as a normal good. Regarding the education as we can see from table 3, we reach to the same conclusions as before. Greek online bettors with higher education levels spend more money on sports stakes compared to those with lower education levels. For example, bettors holding a post-graduate degree are expected to spend about 147€ more per month than those holding an elementary school degree. The high educational level of the participants perhaps can be explained by the specificities of online sports betting. This finding comes in accordance with the existing literature which indicates that sports bettors are the most likely to be educated to degree level or above (Wardle et al., 2007; Lloyd, et al., 2010).

The *occupation* variable indicates that the average monthly amount of money a student bets on sports through the web is almost  $60\mathfrak{E}$ . The bettors that do not work (not necessarily unemployed) place an average amount of  $115\mathfrak{E}$  on sports stakes every month. Compared to that amount, bettors working on the public sector are betting about  $56\mathfrak{E}$  more, whereas for those working in the private sector or self-employed that extra amount is about  $72\mathfrak{E}$ . The insufficient income resources perhaps is the main reason why students bet on average the lower stakes.

# **4.2.2** Heavily $^{7}$ involved sports bettors

 $^7$  A Heavy sports bettor/punter is anyone who engages in sports betting at least once every day.

In this section we study the effect of the above-mentioned independent variables on players' betting frequency. We used a logistic regression, since the dependent variable is binary categorical (heavy and non-heavy bettor). Estimates of the regression with relevant odds ratios are presented in table 4.

Table 4. Frequent Sports Bettors

Logistic Regression Heavy sports bettors						
Included of	Included observations: 325					
Coefs	OCC	odds	INC	odds	RP	odds
Const.						
	-1.084		0.125		-0.73	
1	(***)		()		(***)	
	0.95	2.59	-0.72	0.49	0.4	1.49
			(*)		(*)	
2	(**)					
	0.90	2.45	-0.73	0.48		
	(**)		(*)			
3						
	0.67	1.95	_			
	(**)					
4						
	_					

The empirical results showed that betting frequency depends on bettors' attributes related to *occupation*, *income* and *location*. Bettors that do not work (this does not necessarily mean that they do not have income) or they work in the public or private sectors or they are self-employed have all twice as much probability of being heavy bettors compared to student bettors. For example, the probability of being a heavy bettor for someone who do not work is around 2.6 times higher than that of a student bettor. That finding can be explained taking into consideration that students do not afford to place high bets, since they usually have insufficient income and limited available time.

Similarly, the probability of being heavy bettor for high-income bettors (with net annual income between 22000-40000€) is almost two times higher than the probability of bettors with relatively low-income (below 22000€). The lower risk that high-income bettors take, compared to that of the low-income bettors, perhaps leads them to higher betting frequency.

Finally, Greek bettors living in the greater capital area are having almost 1.5 times higher probability of being frequent players compared to that of bettors living

outside Attica. The higher per capita income, the vast internet penetration and the greater convenience which Attica residents enjoy, enable them to bet more frequently in relation to those who live outside Attica.

## **5. Summary and conclusions**

The empirical findings of the present study are in accordance with the existing literature. For example, Griffiths and Barnes (2008) found that males are significantly more likely to be internet gamblers than females and internet gambling appears to be more popular among males than females (Wood and Williams, 2007). In fact, Wood and Williams (2011) found that the patronage of online sports betting is overwhelmingly male, whereas Woodruff and Gregory (2005), found that internet gamblers come from the middle of the income range and that sports bettors are most likely to be educated (hold a college degree) (Lloyd, et al., 2010).

The empirical findings from regression analysis support the existing literature and showed that spending preferences of Greek online sports bettors are affected by socioeconomic factors such as age, gender, education, occupation, income and habit (betting frequency).

Moreover the analysis indicated that bettors' habit formation (gambling addiction) seemed to be affected by the type of occupation, the income level and the place of residence.

### **APPENDIX**

- Sports sites and Forums that provided links (banners) to the web survey:
  - 1. http://forum.matchmoney.com.gr
  - 2. http://www.infobeto.com/forum
  - 3. http://www.stoiximatizoume.com/
  - 4. http://www.betviews.com/forum/
  - 5. http://forum.betblog.gr/forum.php
  - 6. http://www.fanatikosforum.com
  - 7. http://agones.gr/forum.php
  - 8. http://www.forums.gr
  - 9. http://www.e-bet.co/forum
  - 10. http://www.insomnia.gr/index
  - 11. http://www.adslgr.com/forum
  - 12. http://www.gameover.gr/forum
  - 13. http://www.red-card.gr/forum
  - 14. http://www.rocking.gr
  - 15. http://www.thegreekz.com/forum.
  - 16. http://betghetto.com/forum

- 17. http://www.red-dna.com/forum
- 18. http://www.e-steki.gr
- 19. http://agones.gr/forum.php
- 20. <a href="http://www.greeksoccer.com/forum/">http://www.greeksoccer.com/forum/</a>

## • Categorical Variables used in the Regression Analysis

GENDER (GN)	Coding (j)
Woman	0
Man	1

AGE(AG)	Coding (j)
14-20	1
21-34	2
35-50	3
50+	4

AGE DUMMIES: 
$$AGj = \begin{cases} 1 & \text{if } obs. = j, j = 1,..., 4 \\ 0 & \text{otherwise} \end{cases}$$

OCCUPATION (OCC)	Coding (j)
I do not work/Household	1
Public servant	2
Self-employed/ Private employee	3
Student	4

## OCCUPATION DUMMIES:

$$OCCj = \begin{cases} 1 & if obs. = j \\ 0 & otherwise \end{cases}, j = 1, ..., 4$$

EDUCATION (EDU)	Coding (j)
Elementary School	1
Middle School/High School/IEK etc.	2
University or Technological Institution	3
Master / Phd	4

### **EDUCATION DUMMIES:**

$$EDUj = \begin{cases} 1 & \text{if } obs. = j \\ 0 & \text{otherwise} \end{cases}, j = 1, ..., 4$$

INCOME (INC)	Coding (j)
0-12000€	1
12000-22000€.	2

22000-40000€	3

### **INCOME DUMMIES:**

$$INCj = \begin{cases} 1 & \text{if obs.} = j \\ 0 & \text{otherwise} \end{cases}, j = 1, ..., 3$$

BETTING FREQUNCY (BF)	Coding (j)
Once-Twice Monthly	1
Once-Twice Weekly	2
Everyday	3

### **BETTING FREQUENCY DUMMIES:**

$$BFj = \begin{cases} 1 & \text{if obs.} = j, j = 1, ..., 3 \\ 0 & \text{otherwise} \end{cases}$$

RESIDENCE PLACE (RP)	Coding (j)
In Attica	0
Outside Attica	1

HEAVY PLAYER (HP)	Coding (j)
Not-Everyday	0
Everyday	1

#### References

Bethlehem, J. (2010), "Selection bias in web surveys", *International Statistical Review*, Vol. 78 No. 2, pp. 161-188.

Christiansen Capital Advisors, (2006), Global Internet Gambling Revenue Estimates and Projections (2001 – 2010). Christiansen Capital Advisors. Retrieved from: http://www.cca- i.com/about/about.htm (date of last access 15 December 2012)

Church-Sanders, R. (2011), Online sports betting: A market assessment and outlook, London: iGaming Business.

Couper, M. (2000), "Web Surveys: A Review of Issues and Approaches", *Public Opinion Quarterly*, Vol. 64, pp. 464-494.

Crawford, S., Couper, M. and Lamias, M. (2001), "Web Surveys: Perceptions of Burden", *Social Science Computer Review*, Vol. 19 No.2, pp. 230-253.

Dilman, D. and Bowker, D. (2001), The Web Questionnaire Challenge to survey Methodologists. Dimensions of Internet Science, Lengerich, Germany: Pabst Science.

ELTRUN, (2011), Research on e-Gabling in Greece. Athens University of Economics and Business. Retrieved from: http:// www.eltrun.gr/wp-content/surveys/e-gambling.pdf (date of last access 5 December 2012)

ELTRUN, (2012), Research on e-Commerce in Greece. Athens University of Economics and Business. Retrieved from: http://www.eltrun.gr/wp-content/uploads/2012/12/%CE%91%CE%BD%CE%B1%CE%BA%CE%BF%CE%A

- F%CE%BD%CF%89%CF%83%CE%B7-
- %CE%A4%CF%8D%CF%80%CE%BF%CF%85-
- %CE%88%CF%81%CE%B5%CF%85%CE%BD%CE%B1-
- %CE%97%CE%BB%CE%B5%CE%BA%CF%84%CF%81%CE%BF%CE%BD%CE %B9%CE%BA%CE%BF%CF%8D-
- %CE%95%CE%BC%CF%80%CE%BF%CF%81%CE%AF%CE%BF%CF%85-2012.pdf (date of last access 5 December 2012)
- Ernst & Young, (2011), The 2011 Global Gaming Bulletin. Retrieved from:http://www.ey.com/Publication/vwLUAssets/2011\_global\_gaming-bulletin/\$FILE/2011%20Global%20Gaming%20Bulletin.pdf (date of last access 9 October 2012)
- European Commission, (2012), Online Gambling in the Internal Market. Retrieved from: http://ec.europa.eu/internal\_market/services/docs/gambling/doc\_121023\_onlinegambling staffworkingpaper en.pdf (date of last access 5 December 2012)
- Gambling Data, (2011), Greek Gaming Market Report. Retrieved from:http://www.gamblingdata.com/files/Gambling%20Data%20Greek%20Report\_0.p df (date of last access 8 December 2012)
- Gainsbury, S. (2011), "Editorial: Exploring the opportunities and impacts of Internet gambling", *International Gambling Studies*, Vol. 11 No. 3, pp. 267-272.
- Griffiths, M. and Barnes, A. (2008), "Internet gambling: An online empirical study among student gamblers", *International Journal of Mental Health and Addiction*, Vol. 6, pp. 194-204.
- Griffiths, M. (2009), "Problem gambling in Europe: An overview", *Report prepared for Apex Communications*.
- Griffiths, M. (2010), "The use of online methodologies in data collection for gambling and gaming addictions", *International Journal of Mental Health and Addiction*, Vol. 8, pp. 8-20.
- Griffiths, M. and Whitty, M. (2010), "Online behavioural tracking in Internet gambling research: Ethical and methodological issues", *International Journal of Internet Research Ethics* Vol. 12, pp. 104-107.
- Griffiths, M. and Parke, J. (2010), "Adolescent gambling on the Internet: A review", *International Journal of Adolescent Medicine and Health*, Vol. 22, pp. 59-75.
- Griffiths, M. and McCormack, A. (2010), "Gambling on the internet: Motivating and inhibiting factors", *World Online Gambling Law Report*, Vol. 9 No. 10, pp. 6-7.
- H2 Gambling Capital, (2012), Preliminary Results 2011. Retrieved from: http://www.h2gc.com/article/preliminary-results-2011-h2-egaming-dataset-now-available (date of last access 5 December 2012).
- Jansen, K., Corley, K. and Jansen, B. (2007), E- Survey Methodology. Retrieved from: http://faculty.ist.psu.edu/jjansen/academic/pubs/esurvey\_chapter\_jansen.pdf (date of last access 5 December 2012)
- Kalb, C. (2011), Integrity in Sport. Retrieved from: http://www.sportaccord.com/multimedia/docs/2012/04/SportAccordIntegrityReport\_A4 \_V2UpdatedApril2012.pdf (date of last access 5 December 2012)
- KPMG International, (2010), Online Gaming, a gamble or a sure bet? Retrieved from:http://www.kpmg.com/BS/en/IssuesAndInsights/ArticlesPublications/Documents/OnlineGaming.pdf (date of last access 5 December 2012)
- Lloyd, J., Doll, H., Hawton, K., Dutton, W., Geddes, J., Goodwin, G. and Rogers, R. (2010), "Internet Gamblers: A Latent Class Analysis of Their Behaviours and Health Experiences", *Journal of Gambling Studies*, Vol. 26 No. 3, pp. 387-399.

- New agents Association, (2011), The Australian future of Internet gambling and lottery agents.

  Retrieved from: http://www.dbcde.gov.au/\_\_data/assets/pdf\_file/0005/142619/NANA\_Sumission\_to\_th e\_Interactive\_Gambling\_Act\_Review.pdf (date of last access 8 December 2013)
- ReportLinker, (2011), Gambling Industry: Market research reports, statistics and analysis. Retrieved from: http://www.reportlinker.com/ci02215/Gambling.html (date of last access 5 December 2013)
- Schwartz, D. (2006), Roll the Bones: The History of Gambling, New York: Gotham Books.
- T&A, (2010), Greece Bet on gambling to earn revenue for the treasury. Retrieved from: http://www.tourismandaviation.com/3161-greece-bet-on-gambling-to-earn-revenue-for-thetreasury.html (date of last access 22 October 2012)
- Remote Gambling Association (RGA), (2012), Remote Gambling Association calls on European Commission to safeguard notifications. Retrieved from: http://www.rga.eu.com/data/files/press2013/rga\_egba\_greek\_nonnotification\_complain t\_pr\_doc\_pdf.pdf, (date of last access 5 December 2012)
- Wardle, H., Moody, A., Spence, S., Orford, J., Volberg, R., Jotangia, D., Griffiths, M., Hussey, D. and Dobbie, F. (2007), *The British Gambling Prevalence Survey 2010*, London: The Stationery Office.
- Williams, R. and Wood, R. (2007), Internet Gambling: A Comprehensive Review and Synthesis of the Literature. Report prepared for the Ontario problem Gambling Research Centre, Ontario, Canada.
- Wood, R. and Griffiths, M. (2007), "Online data collection from gamblers: Methodological issues", *International Journal of Mental Health and Addiction*, Vol. 5, pp. 151-163.
- Wood, R. and Williams, R. (2011), "A comparative profile of the internet gambler: Demographic characteristics, game-play patterns and problem gambling status", *New Media and Society*, Vol. 13, pp. 1121-1143.
- Woodruff, C. and Gregory, S. (2005), "Profile of Internet gamblers: Betting on the future", *Gaming Research & Review Journal*, Vol. 9 No. 1, pp. 1–14.