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ECONOMIC POLICY RESEARCH CENTRE

Towards Sustainable Development

RESEARCH SERIES No. 126

Socio Economic Effects of Gambling: Evidence from Kampala City, Uganda

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January 2016

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EXECUTIVE SUMMARY

Since the year 2000, the gambling industry in Uganda has experienced a rapid increase in activity, with various new modes and facilities being introduced. The proliferation of gambling has seen the industry diversify from the early forms of gambling like casino gambling and national lotteries to new modes like sports betting and online betting among other forms. Regarding gambling related tax revenues, the industry has equally grown at an unprecedented rate, with tax collections growing from UGX 0.24 billion in 2002/3 to UGX 11.1 billion in 2013/14. While this growth in tax revenue is a welcome development, there is still considerable concern about the potential for the gambling sector to cause harm in form of addictions, loss of savings, idleness and increased crime.

Hence, as the gambling industry continues to grow in popularity and prevalence, a well-founded understanding of its operations and socio economic implications is imperative. This study sought to fill this void by investigating three questions: 1) What is the level of participation in the gambling industry in Kampala city?; 2) How does gambling affect various aspects of welfare and the economy and 3) What is the adequacy and effectiveness of the current regulatory framework in regulating the gambling sector?.

Based on a household survey conducted in Kampala city in April 2015, we find that approximately one in every four adults had engaged in some form of gambling in the twelve months preceding the survey. Age, income, employment status and gender are major determinants in gambling participation. Additionally, we find that, on average, the poorest in society spend a higher proportion of their personal income on gambling compared to their richer counterparts. Gambling also has the greatest displacement effect on household necessities and savings and has to some extent led to problem gambling. In terms of revenue, the percentage contribution of the gambling industry to total revenue is still low (0.15% in 2013/14) but growing. Furthermore, qualitative evidence revealed that many facets of the law relating to lottery and gaming have become obsolete and are not sensitive to the new modes of gambling and the unprecedented growth of the industry. Similarly, the regulatory body (National Lotteries Board) has substantial capacity problems and limited statutory powers and is not always able to effectively exercise its mandate herein inhibiting its ability to comprehensively regulate the gambling industry.

On the policy front, we propose that the public should be protected from over stimulation of latent gambling through limitation of gambling opportunities: by imposing tighter restrictions on advertising; tighter restrictions on entry into gambling establishments, based on age; and limitation of opening hours among others. In congruence, parliament should expedite the passage of the Lottery and Gaming Bill (2013) into law to empower the National Lotteries Board with more statutory powers and provide a basis for addressing capacity and financial challenges that they currently face. In line with this, there is a need to minimize the negative social and economic impacts of gambling by promoting responsible gambling and providing support and counselling to problem gamblers.

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1. INTRODUCTION AND OBJECTIVES OF THE STUDY

1.1 Background and overview of the gambling industry in Uganda

The gambling[1] industry has grown and evolved substantially in terms of penetration and revenue generation. Gambling exists in many forms, which vary in popularity among different groups and classes of people; broadly, it may take various forms including lotteries, casinos, gaming and pool betting. Since the year 2000, the Ugandan gambling industry has seen a rapid increase in activities with various new modes and facilities being introduced. By 2014 there were estimated to be over 1000 gambling outlets, with close to 47 percent being located in Kampala city alone[2]. The proliferation of gambling has seen the industry diversify from the early gambling modes like casino gambling and national lotteries to new modes like sports betting and online betting among various other forms. Specifically, sports betting has grown in popularity over the years and is currently the number one gambling activity in the country. As of June 2015, twenty three (23) promoters had licenses for sports betting and/or slot machines, one (1) promoter was licensed to conduct the national lottery, while eight (8) promoters had licenses to operate casinos (Ministry of Finance Planning and Economic Development, MoFPED 2015)[3].

In terms of revenue generation, nominal gambling related tax revenue has increased by over forty-fold during the past decade, from UGX 0.24 billion in 2002/3 to UGX 11.1 billion in 2013/14 (Uganda Revenue Authority, URA 2015). The revenues were obtained mainly through gaming tax of 20 percent. Over time more taxes are being levied on the sector, for instance, a new withholding tax of 15 percent on winnings was introduced in the 2014/15 national budget. Despite the introduction of the different taxes, the gambling industry is still perceived as one of the unexploited potential tax bases that could be tapped into to finance some of the priorities in the national budget. Undeniably, in some countries, the gambling industry has generated substantial resources to fund government priorities and created jobs. For example in South Africa, the gambling sector, with a GDP multiplier of 2.0, contributed (directly and indirectly) 0.77 percent to the national economy in 2012 and accounted for 1.7 percent of the non agricultural formal employment in South Africa (South Africa National Gambling Board, 2013).

Presently, the gambling industry is regulated by the National Lotteries Board (NLB) and is guided by the National Lotteries Act of 1967, the Gaming and Pool Betting (Control and Taxation) Act of 1968, and an addendum of statutory guidelines introduced in 2012/13. However, due to the expansion of the gambling industry, with new games being introduced over time, and in light of technological advancements, many facets of the law relating to lottery and gaming have become out-dated (MoFPED 2013). This has created challenges for regulators and policy makers as a result. Owing to the weak regulatory framework and inadequate capacity of the NLB to regulate all gambling and betting activities in the country, efforts are underway to amend the current laws[4] and to establish the National Lottery and Gaming Board to comprehensively regulate the industry and raise revenue.

Unfortunately, the lottery and gambling industry is associated with undesirable socio-economic problems. For instance, gambling participation may negatively affect gamblers themselves through financial and family distress caused by problem gambling[5], and through negative externalities imposed on the community, such as increased crime (Kearney 2005). Subsequently, there is a need to achieve a balance between addressing government revenue needs and the social costs that go along with legalized gambling. As the gambling industry continues to grow in popularity and prevalence, a well-founded comprehension of the sector and its socio economic effects on the Ugandan economy and society is imperative. This study attempts

1 Gambling is defined as staking something valuable in the hope of winning a prize where the outcome depends on the outcome of events, which are unknown to the participants at the time of the bet.
2 This estimate is based on outlets that were taxed by URA in FY 2013/14
3 National Lotteries Board Supplement in New Vision, June 2015
4 The Lotteries and Gaming Bill 2013
5 Problem gambling is defined as "having difficulties [controlling the amount of money] and /or time spent on gambling which leads to adverse consequences for the gambler, his household, or the community" (Williams et al. 2012)

to fill this void by investigating the applicability of lottery and gaming in the Ugandan context and its socio-economic implications.

1.2 Objectives of the study

The study is intended to meet the demand for comprehensive data and information related to gambling in Kampala; its prevalence and related socio economic effects. The study provides insights for government and other non-state actors regarding the state of gambling in the city. This can be used to inform the reform process and current initiatives towards improving the gambling industry. Specifically, this study sought to investigate the following three questions:

1) What is the level of participation in the gambling industry?
2) How does gambling impact on various aspects of welfare and the economy?
3) What is the adequacy and effectiveness of the current regulatory framework?

Finally, being the first of its kind, this study provides baseline data against which it will be possible to measure any future changes in the prevalence of gambling and the effects of gambling in Kampala city.

1.3 Outlay of the report

The rest of this report is organized as follows. In section 2, we present the research methodology. Section 3 highlights the main findings of the survey in terms of prevalence and community attitudes towards gambling. The information is disaggregated according to social demographic variables such as age, employment status, education level, gender and personal income. We analyze the socio economic effects of gambling in section 4; this includes the magnitude of problem gambling, the effect of gambling on the welfare of households including less affluent households. Section 5 presents findings from an assessment of the adequacy and effectiveness of the current regulatory framework while section 6 concludes and discusses emerging issues and proposes a way forward.

2. RESEARCH METHODOLOGY

In order to understand the effects of the gambling sector on some aspects of the economy and society, the study employed both quantitative and qualitative survey methodologies. Quantitative information was collected through a household survey, interviews with gamblers at gambling outlets and interviews with managers at the gambling outlets. Qualitative information, particularly with regard to the social effects of gambling, was gathered through a series of focus group discussions in all enumeration areas. The survey was undertaken in April 2015, while key informant interviews were held during January-March 2015.

2.1 Data sources

2.1.1 Quantitative data

a) Household survey

To estimate the level of participation and prevalence of gambling among Kampala residents, we undertook a household survey.

Survey Design: The survey was based on a two-stage, stratified, random-sampling procedure. The first level of stratification was based on the level of participation in gambling activities; the more urbanized areas were likely to have more gambling activity compared to the rural areas. Based on a list of all gambling outlets in the country as provided by URA, the districts were grouped by level of activity (high frequency, middle and low) and drawn using probability proportional to size. A total of 160 Enumeration Areas (EAs) were sampled for inclusion in a nation wide survey, however, due to budgetary constraints, this study reports the pilot phase, which was conducted on 22 EAs that were sampled from the 5 administrative divisions of Kampala city. Hence, the findings of this study are representative of Kampala city and not Uganda as a whole. The selection of EAs was based on the 2012 Uganda Population and Housing Census Mapping frame provided by the Uganda Bureau of Statistics.

The second stage of stratification was the EA, which was the ultimate sampling unit. At EA level, the

target was to randomly select 15 households. During the listing of all households in the sampled EAs, a question was posed to find out if any member of the household had participated in any gambling activities in the past twelve months. After the listing, households were categorized into gambling and non-gambling households. 10 households were randomly selected from gambling households while 5 were selected from non-gambling households. Probability weights were used to adjust for this sample selection design. In EAs where less than 10 households were identified as gambling households, more non-gambling households were sampled. A total of 330 households were sampled using simple random sampling. Thereafter, all adult members of the household aged 18 and above were eligible for an individual interview.

Sample size: In determining the sample size, the degree of precision and reliability desired for survey estimates, cost and operational limitations were taken into consideration. Due to non-response rates, the actual sampled households with full information were 286, which translates into an 86.6 percent completion rate. Since every adult member of the sampled household was eligible to participate in the survey, in total, the number of individuals interviewed was 577. During data analysis, this sample was weighted to provide estimates that are representative of Kampala city as a whole.

Scope of the survey: The survey gathered demographic information of adult members aged 18 years and above, socio economic characteristics and status of participation in gambling activities. Other information collected included frequency of participation, expenditure on gambling, winnings from gambling, budgetary behaviour regarding gambling, perceptions on gambling, employment status, monthly income, and information on effects of gambling on household welfare.

b) Gamblers and branch managers' survey

To understand the gambling industry better, we visited the gambling outlets in the respective EAs to administer a questionnaire to gamblers who were found gambling on the day of the interview. At EA level, we targeted 10 gamblers. In total, we administered the gamblers questionnaire to 223 respondents. The information collected from the gamblers' survey was used to confirm some of the perception responses collected at household level since the household survey targeted both gamblers and non-gamblers. For each gambling outlet visited, a questionnaire was administered to the person in charge of the outlet/ branch manager. In total, we visited 48 branches spread across the 5 administrative divisions of Kampala city. The branch manager's survey was a useful source of information about gambling business licenses and jobs created by the gambling industry.

2.1.2 Qualitative data

The survey was supplemented by a qualitative component comprising of targeted Focus Group Discussions (FGDs); to supplement the quantitative survey component by providing more in-depth feelings, attitudes, perceptions and beliefs as cited by respondents in the survey. Key informant[6] interviews were conducted with relevant stakeholders which included major players in gambling industry. These comprised of key operators of the different gambling modes (casinos, lottery, sports betting) and representatives from the NLB, URA, Chairperson of Sports Betting Association and Makerere University counsellor to capture issues related to counselling gambling addicts.

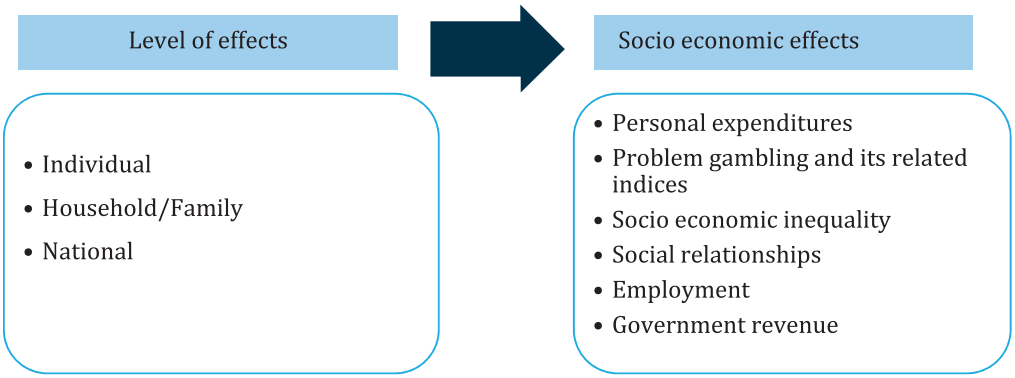
2.2 Methodology

2.2.1 Conceptual framework for assessing socio economic effects of gambling

Figure 1 gives a snapshot for assessing the socio economic effects of gambling. The framework was used as a guide to assess gambling effects on the individual gambler, household and national level.

6 List of KI's is attached as an appendix

Figure 1: Framework for analyzing socio economic effects of gambling



A detailed description of the framework including a narrative of the indicators and data requirements is provided in Table 1.

Table 1: Framework for assessing social economic effects of gambling

Socio economic effects				
Variable	**Indicator**	**Data Required**	**Data Collection method**	**Unit of Analysis**
Personal gambling expenditure	Gambling expenditures as a percentage of personal income	Estimates of monthly income and monthly gaming expenditures	Household survey	Individual
Government revenue	Government revenues from gambling as a percentage of total revenues	Government gaming revenues	URA secondary data	National
Financial problems (gambling debts)	Self-reported financial problems, including gambling debts, borrowing to finance gambling	Level of gambling related debt	Household survey	Individual
Job creation	Direct employment (job creation) in gaming industry	Employment statistics for gaming industry (number of employees)	Branch managers survey	Outlet / Branch
Work /school performance	Productivity losses, absenteeism due, and increased likelihood of unemployment due to gambling	Prevalence of negative effects on work and school	Survey, FGDs	Individual
Entertainment pleasure	Level of enjoyment in time spent gambling	Gambler self-rated enjoyment in spending time gambling	Household survey/ Gamblers survey	Individual
Public attitudes	Citizen positive or negative attitudes toward gambling	Community member perceptions	Survey/ FGDs	Individual/ Community
Problem gambling (PG) prevalence	PG prevalence	PG prevalence study survey data	Household survey	Individual
Social relationships	Impact on children, spouses and other family members of problem gamblers	Household and community perceptions of gamblers and others directly impacted by gambler behaviour	Household survey and FGDs	Individual

Source: Adopted from Anielski (2008) with modifications to fit the Ugandan context

2.2.2 Determinants of participation in gambling - Econometric approach

Literature stipulates that demand for and participation in gambling is influenced by a number of factors including age, gender, educational attainment, monthly income, type of occupation, and community factors such as distance to gambling outlets. For example, in their study on determinants of demand for gambling in Ibadan, Nigeria, Nwinge et al. 2012 found that those with higher levels of educational attainment and those in professional occupations were less likely to gamble. In addition they found that demand for gambling decreases with age and income. Furthermore, they found that males were more likely to gamble as females were considered to be more risk averse. Based on this background, using field survey data, we employ a Probit model to analyse a set of individual and community factors that explain participation in gambling activities. The survey data captures the individual level variables (e.g. age, sex, marital status, education levels, employment status) and community variables such as distance to nearest gambling venue.

Probit Model: Discrete regression models e.g. the Probit and Logit models are ideal to use when the dependent variable is a binary choice. Generally, either of the two models can be used, as they tend to generate more or less similar results (Wooldridge 2009). In this paper, we employ the Probit model to examine factors that are likely to influence the decision of individuals to (or not to) participate in gambling. The model is specified as;

$$\boldsymbol{P(Y_i = 1|X_i) = Z(\propto + \beta_i X_i + \varepsilon_i)} \qquad (1)$$

Y = 1 if the respondent is a participant in the gambling industry and zero otherwise. $\boldsymbol{P_i}$ is the probability that the $\boldsymbol{i^{th}}$ respondent participates in gambling activities. The explanatory variables that include individual characteristics and community factors are represented by $\boldsymbol{X_i}$. The parameters to be estimated in equation (1) are α and β. The error term $\boldsymbol{\varepsilon_i}$ is included in the equation to take care of any other factors that may have not been included in the model but may influence participation in gambling.

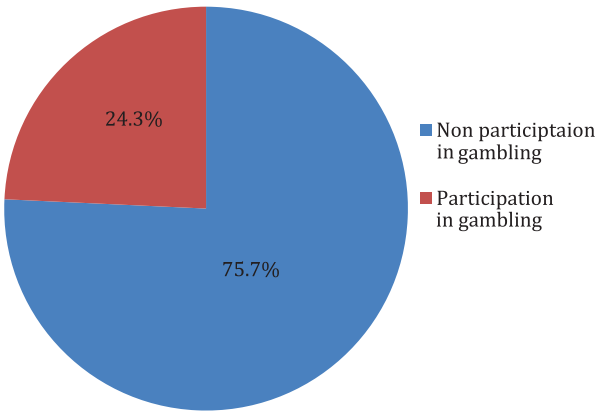
3 PREVALENCE OF GAMBLING

This section provides an overview of the extent of gambling in Kampala based on survey findings. In particular, we highlight the level of gambling participation, the different modes of gambling that gamblers are engaged in and the demographic profile of gamblers in terms of age, education, employment status, gender and personal income. We further analyse econometrically, the determinants of participation in gambling. This section concludes with a presentation on prevalence of underage gambling and reasons why non-gamblers abstain from gambling.

3.1 What is the level of gambling participation in Kampala?

The proliferation of the gambling industry has been two fold; in relation to the participation rate and diversity in the games engaged in. The different modes[7] of gambling range from sports betting, casino gambling, national lottery/play lotto, slot machines, betting on animals, ludo (board game), pool betting, and online betting among others. Our findings reveal that that one in every four adults (24.3%) in Kampala had engaged in some form of gambling in the twelve months preceding the survey (conducted in April 2015).

Figure 2: Prevalence of gambling in Kampala (%)



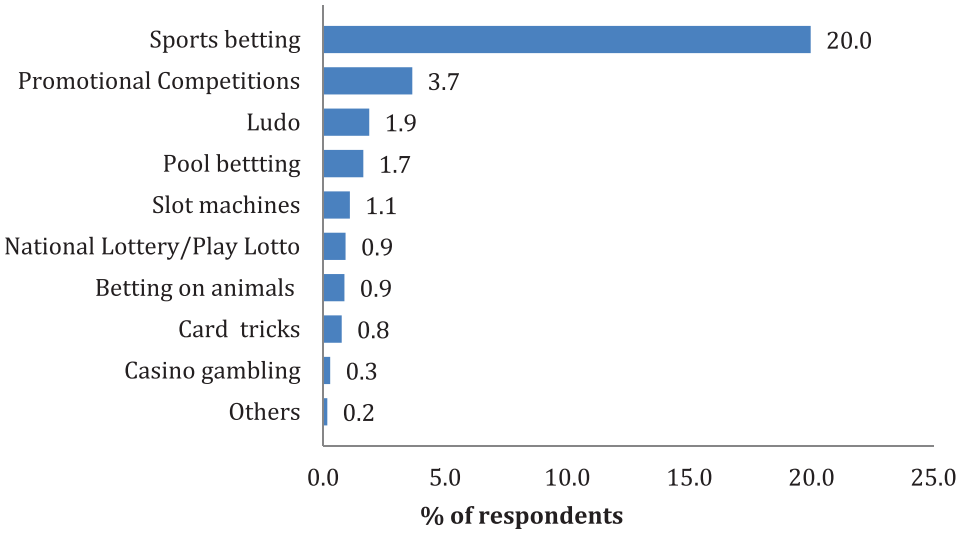
Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

The most popular gambling activity is sports betting with close to 20 percent of the respondents having betted on sports (see figure 3)[8]. This can primarily be explained by easy accessibility resulting from the high proliferation of sports betting outlets and the

7 See appendix 2 for description of gambling modes

8 Note that the total participation exceeds 24.3% due to participation in multiple gambling modes by some respondents

Figure 3: Participation in gambling activities by mode in the twelve months preceding the survey (%)



Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

growing interest in watching sports activities such as the premier and champion's leagues among others. Promotional competitions, ludo, pool betting and slot machines followed with participation rates of 3.6 percent, 1.9 percent, 1.6 percent and 1.1 percent respectively.

We posed a question regarding the year when gamblers started gambling and approximately 6.1 percent of gamblers reported to have started gambling before 2005 while 12 percent started gambling between 2005 and 2010. The majority (81.7 percent) started engaging in gambling activities after 2010 with the highest proportion having begun in 2013. These numbers imply that the popularity and prevalence has been on a steeply increasing trajectory since the year 2000.

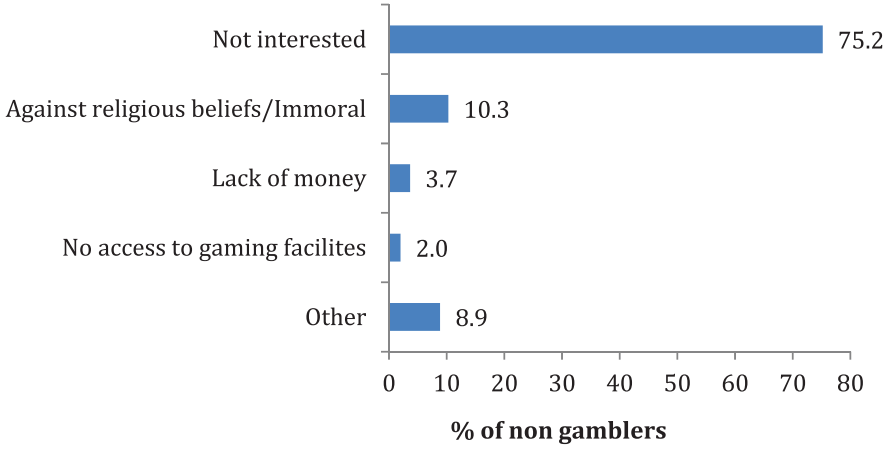
In trying to understand why Kampala city residents engage in gambling, the majority of respondents (both gambling and non-gambling) stated that the desire to make money is the major driver (76.6%) while leisure did not feature prominently. Only 6.5 percent of respondents' think that Kampala city residents engage in gambling for leisure related reasons. FGD respondents confirmed this finding; it was noted that the desire to make quick easy money from gambling is driving the youth into gambling to the extent that some look at gambling as a source of livelihood in lieu of undertaking jobs that may require substantial time, mental and physical commitments. Findings from the gamblers survey confirmed this perception, the majority of the gamblers interviewed fronted monetary reasons as their major reason for engaging in gambling (about 73.3 percent of the gamblers cited making money and only 25 percent gamble for leisure related reasons). Yet those who gamble as a source of livelihood and/or to escape poverty are more likely to get addicted to gambling when compared to those who gamble for leisure or entertainment related reasons.

3.2 Reasons for abstaining from gambling

The 75.7 percent of the population that did not participate in gambling activities in the twelve months preceding the survey were asked to state their major reason for abstaining. Two out of every three respondents reported that they were not interested in gambling while 10.3 percent did not engage in gambling because of cultural and religious considerations. Lack of money and unavailability of gaming facilities did not stand out as major reasons for non-participation in gambling (see figure 4).

In response to the question on attitudes to gambling, majority (45%) of the respondents stated that gambling is not acceptable to them while 30.1 percent indicated that although gambling is not acceptable to them, they have no objections to gambling by others. Finally, about one in four respondents indicated that gambling is acceptable to them (24%). Overall respondent reaction reflects a fairly negative view on gambling by the populace.

Figure 4: Reasons for not participating in gambling in the 12 months preceding the survey



Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

3.3 Who gambles?

Participation in gambling by gender: Table 2 confirms that for the majority of gambling modes, males were inclined to gamble more than women. The male to female participation rates for the most prominent forms of gambling are: sports betting 36.7 percent for males and 3.61 percent for females, promotional competitions 2.8 percent for males and 4.5 percent for females; ludo 3.4 percent for males against 0.32 for females. The findings could be interpreted to mean that females are more likely to engage in games that do not necessarily require their physical presence at the outlets; for example promotional competitions where usage of mobile phones is the major medium. Overall, the propensity to abstain from gambling of 91.3 percent for females was substantially higher than the 60.3 percent for males.

Participation in gambling by age group: Table 2 reveals that the youth (18-30 years) are more likely to engage in gambling compared to their older counterparts (31 years and above). Considering different age cohorts, male youth participation in gambling was the highest at about 45.6 percent. This can be linked to the fact that today's youth are the first cohort to experience the current high levels of accessibility and acceptability of gambling. In addition, the desire to make quick money is another key driver of gambling among the youth. The non-youth showed the highest non-participation rate at 81 percent compared to youth at 73.2 percent. In comparison to non-youth, the youth are more likely to participate in all other gambling modes except casinos, national lottery and ludo.

Participation in gambling by education level: The propensity to participate in casino gambling and national lottery are correlated positively with the level of education. Respondents with post-secondary education were more likely to be participants in these games compared to the less educated ones. The same pattern holds for sports betting where those without formal schooling are less likely to be participants. This could be explained by the fact that most of the instructions for these games are displayed in English, which may not be well understood by those with no formal schooling.

Participation by work status: The unemployed are less likely to be participants in the gambling industry compared to those in employment. Although the majority of the unemployed are engaged in sports betting (5.9%), there are more likely to play promotional competitions compared to those in employment. This could be explained by the fact that promotional competitions (e.g. by sms) do not require a lot of money for one to participate. A single sms message could cost as low as UGX 200 compared to an average of UGX 1000 for a single ticket in sports betting. Those in paid employment displayed higher levels of participation compared to those employed in self-employment. This is because people in paid employment are likely to earn more money compared to those in self-employment hence increasing their affordability of gambling activities. Self-employment is highly associated with both income and time related

Table 2: Participation in gambling by gambling mode and selected variables (%)

	Sports betting	Promotional Competitions	Casino	National Lottery	Slot machines	Pool betting	Ludo	Betting on animals	Card tricks	Others	Non participation in gambling
All	**20.0**	**3.7**	**0.3**	**0.9**	**1.1**	**1.7**	**1.9**	**0.9**	**0.8**	**0.2**	**75.7**
Gender											
Male	36.2	2.8	0.3	1.2	3.3	1.9	3.5	1.7	1.2	0.3	60.3
Female	3.6	4.5	0.3	0.7	0.0	0.3	0.3	0.0	0.3	0.0	91.3
Age group											
Youth (18-30)	21.6	4.0	0.2	0.0	1.4	1.6	1.4	0.7	0.8	0.3	73.2
Non youth (31+)	16.5	3.0	0.5	2.8	2.3	0.0	2.8	1.3	0.7	0.0	81.0
Educational attainment											
No formal education	9.9	0.0	0.0	0.0	0.0	0.0	9.9	0.0	9.9	0.0	90.1
Some primary	14.5	5.2	0.0	0.0	3.4	1.8	1.8	1.8	1.8	0.0	78.6
Completed primary	18.7	1.4	0.0	1.4	1.2	1.2	0.0	0.0	0.0	1.4	77.2
Some secondary	18.9	4.2	0.0	1.2	0.0	1.0	0.0	0.0	0.0	0.0	76.9
Completed secondary	26.1	3.7	0.5	0.0	1.8	2.0	4.2	0.9	1.1	0.0	70.3
Post - secondary	16.9	4.3	0.5	2.1	2.2	0.0	0.5	1.6	0.0	0.0	78.2
Work status											
Paid employment	27.4	2.9	0.4	0.0	1.9	0.8	3.4	1.1	0.6	0.0	69.4
Self employment	24.4	4.2	0.0	2.5	2.5	2.1	1.3	1.4	1.3	0.0	71.7
Not working	5.9	4.4	0.5	0.6	0.6	0.5	0.6	0.0	0.5	0.0	87.8
Income quintile											
Lowest	20.8	1.0	0.0	0.0	1.0	0.0	1.5	0.0	0.0	0.0	78.1
Second	17.9	2.2	0.0	0.0	0.0	2.2	0.0	1.2	0.0	0.0	78.9
Middle	35.0	4.3	0.7	2.0	6.2	1.5	6.3	3.3	2.8	0.0	62.2
Fourth	17.5	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.0
Highest	31.5	3.5	0.0	1.3	0.0	2.4	1.1	0.0	0.0	0.0	63.8

Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

underemployment according to current labour market statistics.

Participation by personal income: The propensity to gamble is strongly influenced by personal income level. Table 2 shows that abstention from gambling amounted to an average of 65 percent among respondents in the highest two income categories compared to 78.5 percent among respondents in the poorest two categories. The abstention rate decreased as income increased. The lowest abstention rate was recorded in the middle-income category. No significant peculiarities are evident across the different income groups as far as participation in different gambling modes is concerned.

3.4 Determinants of participation in gambling-Econometric results

The results in Table 3 indicate that participation in gambling is significantly influenced by age, gender and work status. There is a positive and significant relationship between participation in gambling activities and employment status. Those who are working are more likely to be participants in the gambling industry compared to their non-working counterparts. This is not surprising because gambling is associated with monetary stakes implying that those who are active participants in the labour market may use part of their earnings on gambling. However, this seems to contradict the current assumption among the populace that the current levels of youth unemployment have to a great extent amplified the popularity and prevalence of gambling.

Similar to the descriptive results, the Probit model results confirm a higher probability of gambling participation among the males in comparison to females. Indeed close to 40 percent of those that had participated in gambling in the 12 months preceding the survey were males compared to 8.7 percent among females. However, further disaggregation reveals that more females are likely to participate in particular forms of gambling compared to males. As noted earlier, more females participated in promotional competitions by use of mobile phones. The likely explanation is that mobile telephone gambling is closeted thus does not expose an individual to stigma and disrepute from the society. The females are more likely to be stigmatized compared to males hence the preference for more discreet gambling modes.

Finally age seems to be positive and significantly correlated with participation in gambling. This implies that an additional year in terms of age increases participation in gambling however the life cycle effects reveal that there is a certain threshold upon which gambling participation declines with age. Although proximity to gambling outlets was positively correlated with gambling participation, it was not statistically significant. Other factors like level of education and marital status were equally not significant.

Understanding the likely participants of the gambling industry is a good starting point as far as making effective gambling related policies is concerned. For example given the findings, programs aimed at promoting responsible gambling should focus more

Table 3: Factors influencing participation in gambling activities[9]

Dependent variable: Participation in gambling = 1			
Explanatory variable	**Coef.**	**Std. Err.**	**P>z**
Age	0.113	0.062	0.068*
Age (squared)	-0.002	0.001	0.027**
Years of Education	-0.026	0.018	0.155
Gender (cf: female)	1.088	0 .143	0.000***
Work status (cf: not working)	0.332	0.182	0.069*
Distance to nearest gambling outlet	0.013	0.120	0.913
Marital status (cf: single)			
Married/cohabiting	0.125	0.171	0.465
Separated/Divorced/Widow	-0.097	0.365	0.789
Intercept	-2.713	0.938	0.004
Number of observations = 505			
Pseudo R^2 =0.17			

Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015: ***, ** and * represent 1%, 5% and 10% level of significance respectively

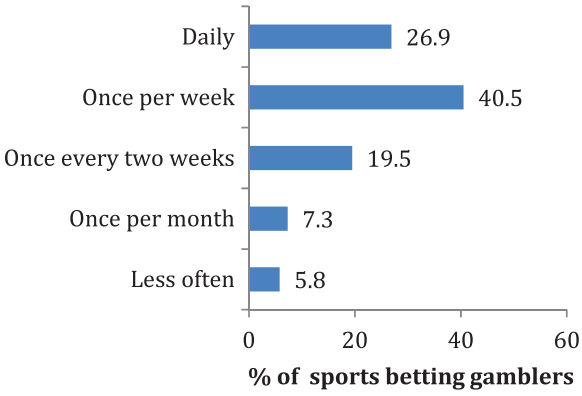
9 See appendix 1 for a description of variables used in the model

on the youthful population and particularly the males because they are more likely to engage in gambling activities.

3.5 Frequency of participation in gambling activities

Detailed questions on frequency of gambling participation were asked only to relevant respondents participating in gambling activities. The percentages calculated are only for the relevant subpopulations and not for the survey population as a whole. The analysis is based on sports betting since it is the most popular form of gambling in the city. The findings indicate that gambling has become part and parcel of those engaged in it. About 27 percent of those who bet on sports do it on a daily basis. A higher proportion (40.5%) bet on sports at least once in a week (see figure 5).

Figure 5: Frequency of betting on sports (%)



Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

Further disaggregation of the data shows that the youth are likely to bet on sports on a daily basis compared to the older betters (table 4). This finding confirms the claim that Ugandan youth have embraced sports betting as a way of survival given the high levels of unemployment and under employment in the country.

Although working class gamblers are more likely to bet on sports daily (28.2%), a reasonable proportion (18.8%) of the unemployed also gamble on a daily basis. This finding seems to suggest that the unemployed are resorting to gambling to earn a living.

3.6 Under age gambling

The issue of participation of minors in gambling activities is increasingly coming under the spotlight. This is especially important, given the fact that today's young people are the first group to grow up in a society where legalized gambling is both widely available and heavily advertised. The participation of young people (below 18 years of age) in gambling is against the law and is prohibited under the current laws governing the gambling industry in Uganda.

Respondents were asked if they were aware of underage gambling and 39 percent stated that they were aware of minors who were engaged in gaming activities. Sports betting, slot machines, ludo and card tricks featured prominently among games that the minors engage in (see figure 6).

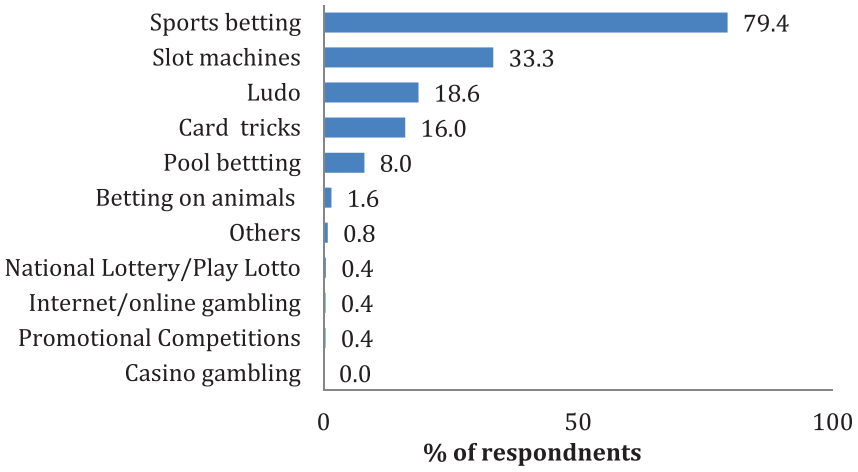
These results point to extant loop holes in the country's current regulatory framework. Although there are laws to guard against under age gambling, in practice such laws are rarely implemented or are wilfully ignored by the owners of the gambling outlets. Gambling amongst minors who are most likely students has led to loss of school fees, poor academic performance and participation in other high risk activities such as use of alcohol, narcotics and risky sexual behaviour (KI interview 2015).

Table 4: Frequency of betting on sports by age group and employment status (%)

	Age group		Employment Status	
	Youth	*Non youth*	*Working*	*Not working*
Daily	30.2	20.2	28.2	18.8
Once per week	34.7	52.6	44.2	13.2
Once every two weeks	20.7	16.8	18.3	30.4
Once per month	5.8	10.4	3.8	29.2
Less often	8.6	0	5.6	8.3
Total	100	100	100	100

Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

Figure 6: Gambling modes engaged in by persons under 18 years old



Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

4 SOCIO ECONOMIC EFFECTS OF GAMBLING

While policy makers are relatively positive about the socio-economic contribution made by the gambling sector, there has always been considerable concern about the potential for the sector to cause harm. In a recent press conference in 2015, the Chairman of the National Lotteries Board, Mr. Manzi Tumubweinee articulated this concern, arguing that

"Although the gaming industry has had a positive impact on the economy by providing business and employment opportunities and making the industry one of the most growing government revenue sources, there is a need for a strong regulatory framework to protect society from harmful effects of gambling while at the same time provide an opportunity for others to benefit from the industrial positives" Press conference at Uganda Media Centre, 2015.

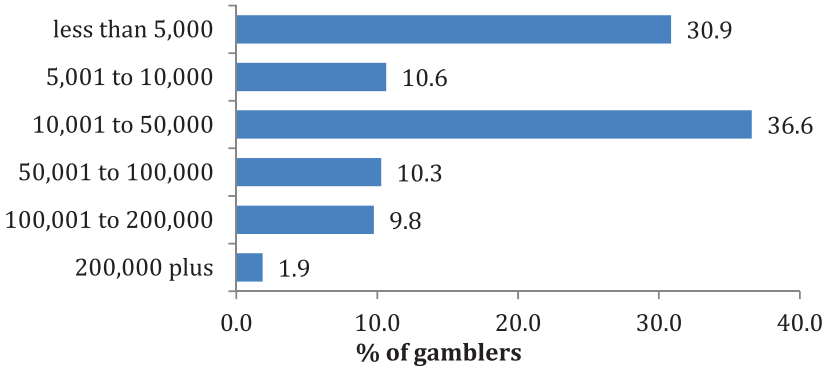
Gambling, in short cannot be about revenue maximization alone. It is important that policy and regulation takes cognizance of the relatively high poverty and inequality levels in Uganda, and to ensure that gambling does not negatively affect the most vulnerable sectors of our society. This section analyses and presents the effects of gambling.

4.1 Gambling expenditure and budgetary behavior

Expenditure on gambling

Respondents were asked about their expenditure on gambling in the month preceding the survey. Figure 7 shows the distribution of personal monthly expenditure on gambling by expenditure group. About 41 percent

Figure 7: Expenditure on gambling in the last month preceding the survey



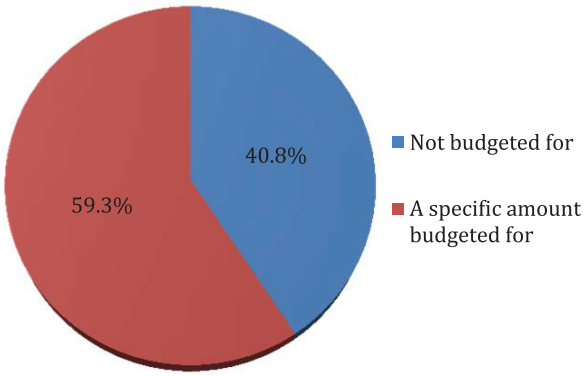
Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

reported gambling expenditure of UGX 10,000 and below, with 31 percent reporting expenditure of less than UGX 5,000. Although these amounts may look meagre, they represent a substantial proportion of the overall household budget for poor households. Indeed, looking at monthly gambling expenditure as a percentage of monthly income reveals that the poorest quintile spends a higher fraction of their personal income on gambling compared to their counterparts in the richest quintile (see figure 11). Our findings reveal that on average, those who gamble spend about 12 percent of their monthly income on gambling activities. It is worth noting that expenditure on gambling is to some extent impulsive and not budgeted for, and hence respondents tend to underreport.

Budgetary behaviour regarding gambling expenditure

In order to understand whether gamblers budget for their expenditure on gambling activities, a question regarding their gambling expenditure was posed. Although a higher percentage (59.2%) of gamblers budget for their expenditure on gambling, four in every ten gamblers do not budget for their expenditure (figure 8). The fact that close to 41 percent of the gamblers do not budget for their expenditure on gambling is worrisome. These are likely to be the people who may gamble till they lose their last shilling and /or gamble longer than planned. This practice, if left unattended to, may eventually result into problem or addictive gambling.

Figure 8: Budgetary provision for expenditure on gambling



Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

In-depth analysis shows that budgetary behaviour was positively correlated with the level of education. Those with higher levels of education were more likely to budget for their expenditure on gambling compared to their less educated counterparts. Those with education levels above secondary depicted better budgetary behaviour (65%) compared to other categories. The lack of sufficient budgetary provision was highest among the youth (41.4%) compared to the older gamblers at 38.8 percent. Gender disaggregated data reveals that women are less likely to budget for their expenditure on gambling. This could be explained by the kind of games women engage in. As noted earlier, women are more likely to engage in promotional competitions, which are seasonal and hence likely to be associated with impulsive expenditure. Our results do not reveal any discernible differences in budgetary behaviour among the employed and unemployed participants.

The 40.7 percent of gamblers who did not budget for their expenditure on gambling were further asked about the incidence of impulsive gambling expenditure (whether this occurred regularly or on occasional basis). Sixty two percent of the gamblers indicted that their impulsive gambling occurred on an occasional basis while 38 percent indicated to gamble impulsively on a regular basis. This is an indication that although a substantial proportion of bettors do not budget, their impulsive expenditure does not occur regularly which is a positive finding in as far as responsible gambling is concerned.

Allocation of winnings

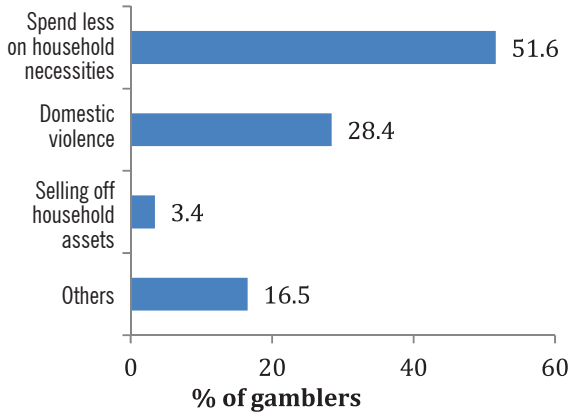
A hypothetical question on how respondents would spend UGX 5 million worth of winnings from gambling was posed and the responses reveal that majority would spend on investment (start/ invest in a business, buy land etc.), followed by purchase of household necessities. Less than 4 percent of the gamblers indicate that they would spend on luxuries or gamble the winnings. This finding implies that the populace perceives gambling as a potential avenue from which they can accumulate assets and wealth.

4.2 Effect of gambling

4.2.1 Impact of gambling on household welfare

In order to understand the effect of gambling on gamblers themselves and their households, a number of questions were posed. The majority of the gamblers (63.4%) indicated that gambling did not have any impact on their household welfare, 20 percent reported a negative impact while 16 percent reported a positive impact. Of the 20 percent that reported a negative impact, more than half singled out displacement effects on spending on household expenditures as the major effect (51.6%), domestic violence was reported by 28.4 percent of the respondents while selling off of household assets was ranked last (see figure 9).

Figure 9: How gambling negatively affects household welfare



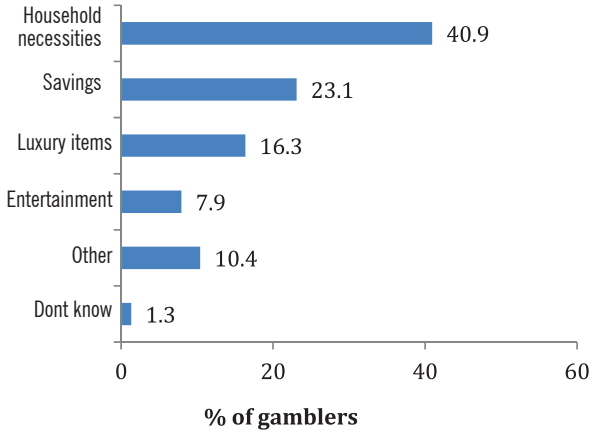
Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

Of the 16 percent that reported positive impacts on the household welfare, every six in ten of the gamblers pointed out source of income as the major positive effect arising out of their participation in gambling. Indeed findings from the FGD discussions revealed that some of the gamblers have won significant amounts of money and have bought assets from the winnings.

Expenditure displacement effects

To determine possible displacement effects the following question was included in the survey: 'If you were not gambling, what would you have spent the gambling amount on instead?' Several alternatives were listed and as figure 10 shows, gambling has the greatest displacement effect on household necessities. Gambling expenditure also results in dissaving, implying no immediate displacement but the postponement of the purchase of durable goods, frequently funded from accumulated savings. The high displacement effect from purchase of household necessities goes ahead to confirm the effect of gambling on poor households whose main expenditure is on basic household necessities.

Figure 10: Items from which gambling money is displaced



Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

Effects on work and school performance

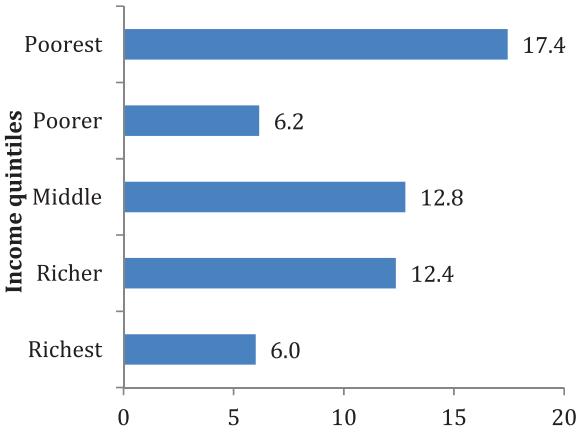
Other effects of gambling were looked at in terms of time lost from work or school due to gambling. Nearly one out of every six frequent gamblers (16 percent) reported to have lost time form school or work due to their involvement in gambling. This implies that that involvement in gabling may be associated with productivity losses at work, and poor performance in school for the case of students. This may have long run effects like increased likelihood of being fired from work.

The less affluent and gambling

As far as the effect of gambling on socio economic inequality is concerned, a number of studies that have examined the issue have found that gambling is largely economically regressive. This implies that the poorer people spend disproportionately more income in gambling activities than those with higher incomes. In their review of gambling studies from around the world, Williams et al (2011a) found that of the seven

studies that analysed the regressivity of gambling, six concluded that gambling is regressive. MacDonald et al. (2005); WEFA (1997) found that low income households were over-represented in the top gambling expenditure quintiles and spent a larger percentage of their income on gambling products than do other household income groups. However, some forms like internet gambling are believed to be less regressive as it is associated with the highly educated and those with high incomes. Figure 11 below illustrates gambling expenditure (expressed as a percentage of personal income) by income quintiles.

Figure 11: Gambling expenditures as a percentage of personal income (%)



Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

On average, the gambling expenditure accounted for about 12 percent of monthly income earnings. By and large, there is no clear trend as to whether gambling is economically regressive. Although a comparison between the richest 20 percent and the poorest 20 percent reveals some bit of regressivity. Survey results show that the poorest 20 percent of gamblers had spent about 17.4 percent of their monthly earnings on gambling compared to only 6 percent for the richest gamblers. This trend is likely to exacerbate socio-economic inequality that already exists and might cause more poverty among the already poor.

4.2.2 How prevalent is problem gambling?

The most common and significant negative effect of gambling is related to problem gambling and related indices like bankruptcy, idleness and others. As described earlier, problem gambling is defined as "having difficulties controlling the amount of money and /or time spent on gambling which leads to adverse consequences for the gambler, his household, or the community" (Williams et al. 2012). For example, problem gambling services division of Connecticut experienced a more than six-fold increase in its caseload from 2001 to 2008 (Spectrum Gaming Group, 2009). Further evidence suggests that certain forms of gambling are more likely to result into problem gambling compared to others. For example lotteries run by governments with a maximum limit on how much can be spent are less likely to create problem gamblers compared to Electronic Gambling Machines (EGM) and internet gambling with limited or no restrictions. Increase in EGM exposure and participation is strongly associated with increase in problem gambling, but eventually problem gambling rates level off even as EGM exposure increases (Abbot 2006).

Instrument used to measure problem gambling

Several instruments to measure problem gambling exist and they include the South Oaks Gambling screen, Diagnostic and Statistical Manual and the Gamblers Anonymous Questionnaire (GA). These instruments have their limitations and can only offer rough estimates of problem gambling. The rough estimates are adequate for purposes of informing the debate on policy in respect of gambling, and to equip counsellors and educators with information about the scope and extent of the problem. For this particular study, we chose to use the GA questionnaire. One is classified as a problem gambler if they answer a minimum of 14 questions out of the 20 GA questions in the affirmative. Refer to box 1 for the set of questions used in the GA questionnaire.

The survey subjected the 20 GA questions to frequent gamblers. That is respondents who participated in gaming promotions, visited a casino; betted on sports; bought play lotto tickets, pool betted, used slot machines, betted on animals, gambled on the internet; played ludo for money or played cards tricks for money at least once per week.

Box 1: GA questionnaire

GA1: Have you ever lost time from work or school due to gambling?
GA2: Has gambling affected your reputation?
GA3: Have you ever felt remorse after gambling?
GA4: Have you ever gambled to get money with which to pay debts or otherwise solve financial difficulties?
GA5: Has gambling caused a decrease in your ambition or efficiency?
GA6: After losing, have you felt you must return as soon as possible and win back your losses?
GA7: After a win, have you felt a strong urge to return and win more?
GA8: Have you often gambled until losing your last shilling?
GA9: Have you ever borrowed to finance your gambling?
GA10: Have you ever sold anything to finance gambling?
GA11: Have you ever been reluctant to use 'gambling money' for normal expenditures?
GA12: Has gambling made you careless of the welfare of yourself or your family?
GA13: Have you ever gambled longer than you had planned?
GA14: Have you ever gambled to escape worry or trouble?
GA15: Have you ever committed, or considered committing, an illegal act to finance gambling?
GA16: Do arguments, disappointments or frustrations create within you an urge to gamble?
GA17: Has gambling caused you to have difficulty sleeping?
GA18: Has gambling ever made your home life unhappy?
GA19: Have you ever had an urge to celebrate any good fortune by a few hours of gambling?
GA20: Have you ever considered self-destruction or suicide as a result of your gambling?

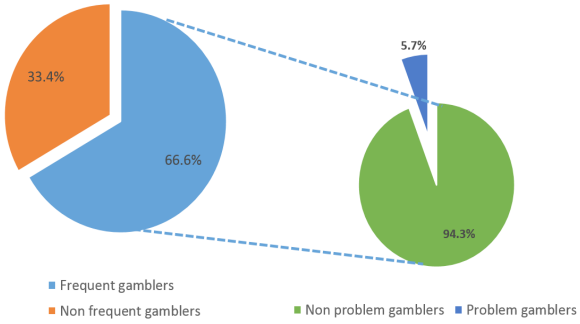
Source: South Africa National Gambling Board, 2013

Identification of a problem gambler

Figure 12 shows that 66.6 percent of the gamblers were classified as frequent gamblers (i.e. gamblers who participated in any of the listed gambling modes at least once a week). Of the frequent gamblers, only 5.7 percent were categorized as problem gamblers (see figure 12). As indicated earlier, from literature, a cut-off point of 14 affirmatives (YES responses) on the GA questionnaire is used as a threshold for classification of problem and non-problem gamblers. Although the prevalence is still low, the fact that it exists should be an eye opener for the regulators as far instituting programs related to promotion of responsible gambling is concerned. Only 2.3 percent of the high frequency gamblers recorded no affirmatives and thus did not experience any addiction related problems.

A disaggregated analysis of the affirmatives on individual questions posed in the GA questionnaire shows that most affirmatives centred largely on financially related reactions after winning or losing money (table 5). Seven out of every ten frequent gamblers reported a strong urge to return and win more after a win, 60 percent have gambled longer than planned, 57.6 percent have felt a strong urge to return and win back their losses and 46.3 percent have gambled to get money to pay debts or solve their financial difficulties. As would be expected, the desire to win was the major driver of uncontrolled gambling. Table 5 shows the percentage score of affirmatives per GA question.

Figure 12: Prevalence of problem gambling



Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

Table 5: Frequency count of affirmative responses for gamblers by GA questions

GA question	Affirmatives (%)
After a win, have you felt a strong urge to return and win more?	69.7
Have you ever gambled longer than you had planned?	58.6
After losing, have you felt you must return as soon as possible and win back your losses?	57.6
Have you ever had an urge to celebrate any good fortune by a few hours of gambling?	53.0
Have you ever gambled to get money with which to pay debts or otherwise solve financial difficulties?	46.3
Has gambling caused you to have difficulty sleeping?	36.9
Have you often gambled until losing your last shilling?	36.5
Have you ever been reluctant to use 'gambling money' for normal expenditures?	34.6
Have you ever felt remorse after gambling?	25.2
Has gambling ever made your home life unhappy?	24.2
Have you ever borrowed to finance your gambling?	24.1
Has gambling affected your reputation?	16.2
Do arguments, disappointments or frustrations create within you an urge to gamble?	15.7
Have you ever lost time from work or school due to gambling?	15.7
Has gambling caused a decrease in your ambition or efficiency?	12.8
Have you ever sold anything to finance gambling?	7.9
Has gambling made you careless of the welfare of yourself or your family?	6.3
Have you ever gambled to escape worry or trouble?	4.5
Have you ever considered self-destruction or suicide as a result of your gambling?	2.2
Have you ever committed, or considered committing, an illegal act to finance gambling?	0.0

Source: Authors calculations based on Kampala Gambling Baseline Survey, 2015

The findings from key informant interviews disclosed a vacuum as far as measures to control problem gambling are concerned. There are no government-initiated programs in place to counsel and rehabilitate problem gamblers. However, private players like Gamble Aware Uganda are trying to fill this vacuum by providing the services although awareness, access and usage are still limited. Below are excerpts from an interview with the Makerere University Counsellor who has dealt with students that are obsessed with gambling.

Box 2: Overcoming gambling addiction- counselors perspective

The government can minimize the negative outcomes associated with problem gambling by reducing access to gambling outlets, taxing it heavily and developing social interventions that rehabilitate problem gamblers. Universities should also increase awareness about problem gambling as well as provide information on where to find help if a student finds out that they, or a friend is a problem gambler. Furthermore, universities should train counsellors on how to identify and rehabilitate problem gamblers. There is also a need to integrate counselling for gambler into programs targeted at counselling for co-occurring problems such as alcoholism and substance abuse. Such a program mix would greatly reduce the impact of problem gambling.

Interview with students' counsellor, Makerere University

4.2.3 Contribution of the gambling sector to Ugandan economy

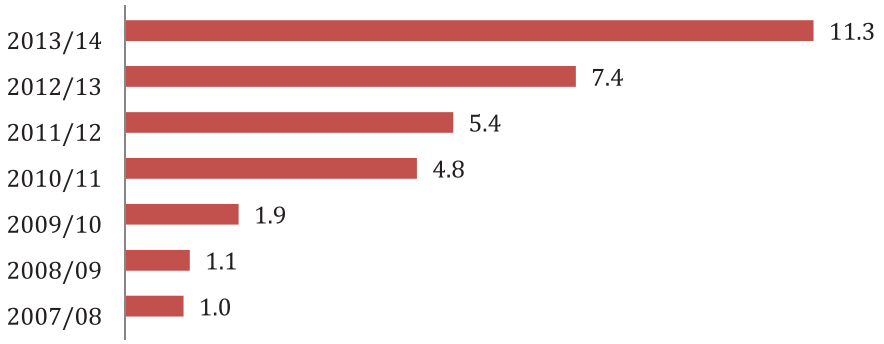
Government revenue effect

Empirical evidence reveals that the introduction or expansion of gambling has a consistent positive effect on government revenue (Madden 1991; Williams et al., 2011b). The associated increase in revenue seems to be consistent across all forms of gambling. The revenue may be received directly by government through gambling provision as is the case with most national/state lotteries or indirectly through taxation of private businesses providing gambling. Taxes may be in form of property tax, corporate income tax and taxation on gambling winnings by consumers (Williams et al. 2011a). From a systematic review of 28 studies that evaluated the impact of gambling on government revenue, 25 out of the 28 studies revealed a positive impact on government revenue (Williams et al. 2011a). In many cases, it appears that the desire to legalize gambling is driven most significantly by the will to enhance tax revenues. Indeed, from a government revenue perspective, the ability of gambling to generate revenue represents a significant net social gain. The generated revenue has been associated with improvements in the quantity and quality of public services in many countries (WEFA 1997; Aasved 1993).

Regarding the Ugandan gambling industry, there are various kinds of taxes imposed by the Uganda Revenue Authority (URA) on gaming activities: Gaming and pool betting tax of 20 percent. Withholding tax is imposed on all bets; the winning bet pays 15 percent of the win's worth. An additional income tax is imposed on betting company profit, which is 30 percent of the net revenue of a gambling promoter. The tax yield from the gaming industry is estimated at around 70 percent of the gambling tax potential collection (KI interview 2015). In financial year 2013/14, UGX 11 Billion was collected from gaming activities. Although nominal gambling tax revenue has been growing, its contribution to total tax revenue is still low. For example, gambling tax as percentage of total tax revenue (UGX 8,031.01 Billion) was less than one percent (0.15 percent in 2013/14).

While the gambling tax yield is expected to grow in 2015/16, the presence of many unregistered gambling promoters and branches makes gambling tax collection an expensive venture. Furthermore, a significant proportion of gambling outlets are involved in tax avoidance and evasion. This suggests that a reduction in the number of promoters in the market could yield higher tax outcomes. However, URA is of the opinion that such a reduction should ensure that the revenue collected is greater or equal to the current gambling tax revenue. This could be achieved through zoning; the government could also explore the idea of setting up special gambling zones outside the city such as those in Macau (china) and Las Vegas (United States of America) by providing incentives like tax breaks, which could attract significant investment in Uganda's gambling and tourism industry and boost tax collections (KI interview, NLB 2015).

Figure 13: Gambling Tax Revenue Collections (UGX Bn), 2007/8- 2013/14



Source: Uganda Revenue Authority, 2015

Why is the tax collection below potential?

In most countries, the national lottery accounts for most of the gambling revenue collections, however, this is not the case in Uganda. Interviews with key stakeholders revealed that Global PS lotto (company that currently operates national lottery) has not adequately marketed the Uganda national lottery and has yielded low revenues thus far (KI interview with URA official, 2015). Their unpopularity is also partly explained by the failure and dishonesty of previous lottery license holders who damaged the publics' goodwill and trust for lotteries.

Secondly, the low tax yield can also be explained by the inability of URA and the NLB to track gambling transactions in real time due to the absence of appropriate technology. Specifically, it is considerably difficult to monitor gambling activities carried out over the Internet. It would be beneficial to embrace the appropriate information technology tools that ease the collection of tax and the flow of information on gambling activities between gambling outlets, the NLB and the URA.

Furthermore, the existence of unlicensed outlets and those operating in makeshift premises inhibits effective tax collection. However, to great extent, URA does continue to collect taxes even on unlicensed outlets. While URA works with the NLB in collection of taxes, the URA does not help the NLB in making sure all gambling outlets are licensed and are operating under the law. The operation of unlicensed outlets is mainly due to the internal incapacity of the NLB. The NLB has only 5 permanent support staff (1 lawyer, 1 economist, 2 inspectors and a secretary). This is far from the necessary human resources required to manage gambling activities. NLB needs to be empowered, by law and human resources, in order to adequately regulate the sector (KI interviews, 2015).

Employment creation effect

Regarding employment, research evidence suggests that major increases in gambling activity may increase employment levels through direct employment at gaming venues and indirectly through gaming related sectors (Conner et al., 2009; Farrigan et al., 2005). For example, the recent evidence from South Africa puts the employment multiplier at 5.6, suggesting that for every 100 jobs created directly by the gambling sector a further 416 are created indirectly in other sectors of the economy (Ligthelm, 2009). Nevertheless, most jobs in the gambling sector require some skills such as accounting, computer operations, card dealing, crowd control, security or other expertise.

Results from the branch managers interviews in the 48 surveyed gambling branches (mainly sports betting and slot machines) across the 5 administrative divisions of Kampala reveal that, on average, each sports betting branch employs about 4 workers (a branch manager, 2 cashiers and 1 security officer). Given that Kampala had 490 out of the 1033 gambling outlets that were taxed in 2013/14, we can roughly estimate that the sports betting subcomponent of the gambling sector directly employs about 1,960 people in Kampala and 4,132 nationwide.

5 EVALUATION OF UGANDA'S GAMBLING REGULATORY FRAMEWORK

Cognizant of the likely negative effects of gambling, the industry should be strictly controlled, well regulated and effectively policed. In order to ensure that gambling activities are conducted according to government rules and regulations, there is need for an institution to play the regulatory oversight role. As indicated earlier, in Uganda, gambling is governed by the national lottery act of 1967 and the gaming and pool Betting (Control and Taxation) Act of 1968, and an addendum of statutory guidelines introduced in 2012/13. These sets of legislation regulate gambling by defining the terms and duration of licenses, taxation of gaming activities, and penalties for violating statutory requirements (payment of taxes). However, the two laws are obsolete and are not sensitive to the new modes of gambling in Uganda. Indeed, advancement in technology has enabled the rise of other forms of gambling such as internet gambling. However, a set of new legislations is being reviewed by a subcommittee in the Parliament of Uganda and the new laws are expected to be operational by 2016.

In most cases, governments play the regulatory oversight for the gambling industry. This is aimed at, among other reasons, ensuring that the sector flourishes and the players are protected from criminal activities, such as money laundering and skimming, associated with gambling, and underage gambling is controlled. In Uganda, the National Lotteries Board plays this role. This section analyses the adequacy of the current regulatory framework.

5.1 Adequacy and effectiveness of current regulatory framework

5.1.1 Legislation (National lottery act of 1967 and the gaming and pool Betting Act of 1968)

The policy and legislation relating to gambling should be well formulated, detailed, very clear and should cover as much as possible all forms and operations of the gambling spectrum. At present, lotteries are regulated separately from casinos and other gaming activities. Whereas the law relating to lotteries is contained in the national lottery act of 1967, casinos and other gaming activities are regulated under the gaming and pool betting (control and taxation) Act of 1968. The NLB is established under the terms of the Lotteries Act of 1968.

Some of the inadequacies of the existing gambling Acts relate to insufficient provisions to protect the minors and addicts from engaging in gambling activities, inadequate provisions for standards of gambling premises, no stringent restrictions on misleading advertising and promotion of commercialized gambling, and no provision for certification of machines and devices used in gambling activities.

Furthermore, interviews with key stakeholders reveal that the current legislation is not detailed and clear on what forms of gambling it covers. For example an interview with one of the key players in the casino subsector suggests that neither of the two laws stated above covers casinos explicitly.

The existing law (the national lottery act of 1967 and the gaming and pool betting act of 1968) has no jurisdiction over casinos. As such, there is no regulation of the casino industry. The industry is self-regulating and casinos are registered in an ad hoc manner. However, given that the NLB issues licenses to casinos, it has a substantial influence on the casino industry.
Interview with Mr. Bob Kabonero, Owner Kampala Casino

Given the inadequacies of the two laws in regulating the industry, sets of statutory regulations have been produced over time. For example the Gaming and Pool Betting (Control and Taxation) (Amendment) Regulations were released in 2012. The regulations stipulate additional roles for the NLB and call for registration of gaming and pool betting equipment. Another set of regulations announced in 2013 presented revised license fees for the promoters.

5.1.2 The National Lotteries Board (NLB)

The Minister of Finance, Planning and Economic Development (MoFPED) appoints the chairman and the members of the NLB. Currently, the NLB is composed of five members. Under the Lotteries Act, the object of the NLB was initially to regulate lotteries. Under the act, the term "lottery" includes any scheme or device for the sale, gift, disposal, or distribution of any property, depending upon or determined by lot or chance, whether by the throwing or casting of dice or by the drawing of tickets, cards, lots, numbers or figures or by means of a wheel or trained animal or otherwise howsoever. Although the NLB was initially set up to facilitate, regulate and manage lotteries, its mandate has since expanded to include casinos and other gaming activities.

The Board's main functions, as prescribed in the Gaming and Pool Betting (Control and Taxation) (Amendment) Regulations, 2012, include:

a) process applications for gaming and pool betting licences;
b) advise the treasury on matters relating to gaming and pool betting;
c) recommend to the Minister the standards relating to gaming and pool betting equipment;
d) make recommendations to the treasury on the applications for gaming and pool betting licences;
e) establish and maintain a register of all gaming and pool betting equipment;
f) maintain a register of every promoter, principal or

agent licensed under the Act;

g) ascertain that gaming and pool betting is conducted in accordance with the laws of Uganda;

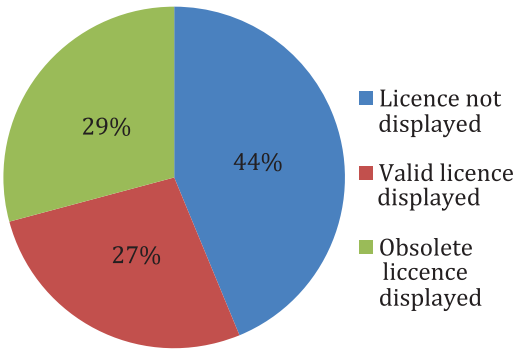
Based on documents sourced from NLB and key informant interviews, we review the latest achievements and challenges of the NLB against their mandate in the section below.

a) Issuing promoter and branch licenses

One of the key roles of NLB is to vet applications and recommend successful applicants for issuance of a license based on certain criteria. The criteria involves proof of incorporation in Uganda, proof of availability of funds to run the business as proposed, detailed description of the games and how they work, proof of registration with URA for tax purposes, proof of residence in Uganda or work permit for non-citizens and a security bond of UGX 200m to guarantee payment of taxes and consumers of gambling products. Under the regulations prescribed by the new license, a casino promoter, principal agent and agent pay UGX 10 million for a license, a gaming and pool betting operator, promoter and principal agent pay UGX 5 million while a gaming and pool betting agent and branch of promoter or principal agent pay UGX 1 million for a license per annum. As of June 2015 the NLB had licensed 32 promoters in Uganda.

In order to understand the extent to which operational gambling outlets are licensed, we undertook a spot check on 48 branches of sports betting and or slot machine outlets in April 2015. Most of the licenses displayed were not up to date, majority having expired in December 2014. Only 27 percent of the branches visited had valid licenses displayed, 29 percent had obsolete licenses while 44 percent of the branches did not have any license displayed (see figure 14).

Figure 14: Results from spot checks on branch licenses



Source: Survey visits to gambling outlets, 2015

b) Monitoring compliance with legislation, with license conditions; and combating illegal gambling

One of the main functions of the NLB is to monitor and ensure compliance with license conditions and the relevant gambling legislation. NLB were asked to explain how often they conduct site visits and inspections as well as what the cost of ensuring compliance is. Although the NLB expressed the desire to effectively enforce licensing and combat illegal gambling, they do not have sufficient financial and human resource capacity and they also have limited statutory powers. In addition, the budget allocated to the NLB is inadequate to facilitate effective monitoring of the industry. As a result, there still exists illegal and under age gambling, substandard structures for gambling operations and unlicensed outlets. Once in a while, NLB outsources capacity from the Uganda police force to enforce license requirements. For example, six companies were closed for operating without a license in 2014 (Interview with NLB chairperson, 2015). On a positive note, licensing of casinos has been largely successful majorly because the subsector still has very few players (about 4). Unlike sports betting, casinos have infrastructural requirements that entail substantial investments and foreign capital.

c) Managing National Lottery

Ideally, the NLB can on behalf of the Minister in charge of MoFPED supervise the collection and disposal of lottery subscriptions, the issue of tickets in respect of subscriptions, determine the method of claiming prizes, dispense any dispute on the prize money and dispose of any unclaimed prizes. A commission appointed by the minister in charge of MoFPED supervises the NLB. Specifically, the commission in consultation with the NLB appoints agents for the sale of lottery tickets and verifies the numbers of tickets sold in a particular lottery. Currently, the national lottery is state owned but privately operated.

A private company (Global PS Lotto) operates the Uganda national lottery on behalf of the government. The company remits 15 percent of its gross revenue to the government. However, the performance of the current player in terms of revenue collections is still far below the projected amounts. According to the CEO Play Lotto Uganda, some of the justifications for the weak performance include inheriting an already failing lottery subsector, infringement of copy right because of no clear distinction between ''promotions'' and ''lottery'' (Mobile telephone companies run lotteries disguised as promotions), mismanagement and inefficiency by government in the use of proceeds from lottery and the refusal by government to treat Uganda Play Lotto appropriately- as an agent for the sale of lottery tickets as opposed to a licensed business. These challenges have hindered Uganda Play Lotto from making significant investment in the industry. Nevertheless, Uganda Play Lotto has been selling their products through the big telecom brands such as MTN, Airtel and Orange in an attempt to salvage the lottery industry. In many countries significant revenues are realized from lottery and are invested towards improvements of the quantity and quality of public services, but lottery has performed poorly in Uganda.

d) Ensure that the interest of every participant in the gambling industry is adequately protected

One of the major roles of NLB is to protect the consumers of gambling products from unscrupulous promoters. The NLB charges a UGX 200m refundable security bond to pay for any claims, viewed to be fair by a tribunal, arising out of a dispute between a promoter and a client has been put in place (see table 6). However, as noted earlier, the NLB does not have the capability to monitor cheating. For instance, there has been an unrestricted influx of slot machines from Russia to Uganda. Many of these machines are said to be faulty, dysfunctional or recalibrated to cheat clients. NLB is also unable to monitor or tax gambling products offered over the online/internet hence online gambling is associated with loss of revenue and illegal activities. The NLB appears to have considerable capacity problems, which inhibits its ability to exercise its mandate effectively. Table 6 below provides a summary of NLB achievements and challenges so far.

Table 6: Summary of NLB roles and achievements

	Mandate	Achievements/Challenges
1	Issuing promoter and branch licenses	• Partly achieved. Although most promoters have operational licenses (as of June 2015, the NLB had licensed 32 promoters in Uganda), some of their branches still operate without licenses. ○ Results from a spot check on 48 branches of sports betting and/or slot machine outlets undertaken in April 2015 revealed that most of the licenses displayed at the outlets were not up to date, majority having expired in December 2014. Only 27 percent of the outlets visited had valid licenses displayed, 29 percent had obsolete licenses while 44 percent of the outlets did not have any license displayed.
2	Managing national lotteries	• Currently, the national lottery is state owned but privately operated. The performance of the current player in terms of revenue collections is still far below the projected amounts. • Due to the absence of a clear distinction between ''promotions'' and ''lottery'', promotional competitions are being illegally run as lotteries and disguised as promotions. This leads to loss of revenue in form of taxes and infringes on the copyrights of the official company authorized to run lotteries.

	Mandate	Achievements/Challenges
3	Ensure that the interest of every participant in gambling is adequately protected	• A UGX 200m refundable security bond, to pay for any claims, viewed to be fair by a tribunal, arising out of a dispute between a promoter and a client has been put in place. • There still exists an influx of faulty, dysfunctional or recalibrated slot machines to cheat clients.
4	Establishing registers and central monitoring systems	• Due to capacity and technological challenges, this is yet to be achieved.
5	Monitoring compliance with legislation, and with license conditions; and combating illegal and underage gambling	• Due to capacity challenges, this is yet to be successfully achieved, for example; ○ There exists underage and illegal gambling, ○ Substandard structures for gambling operations.
6	Monitoring the socio-economic impact of gambling	• No framework for combating the incidence of addictive gambling, • No systematic research undertaken to track socio impacts

Source: Authors' compilation based on key informant interviews, 2015

6 CONCLUSIONS AND EMERGING ISSUES

6.1 Conclusions

About one in every four adults (24.3%) in Kampala had engaged in some form of gambling in the twelve months preceding the survey: The most popular gambling activity is sports betting with close to 20 percent of the respondents having betted on sports in the past twelve months preceding the survey. The majority of Kampala residents (73.3 percent) engage in gambling as a source of livelihood as opposed to leisure. Of those that do not engage in gambling, lack of interest stands out prominently as the main reason for abstaining from gambling. Overall respondent reaction reflects a fairly negative view on gambling.

Age, income, employment status and gender are major determinants in gambling participation: Survey results indicate that participation in gambling is significantly influenced by age, gender and work status. There is a positive and significant relationship between participation in gambling activities and employment status. Those who are working are more likely to be participants in the gambling industry compared to their non- working counterparts. More so, there is a higher probability of gambling participation among the males in comparison to females. Finally age seems to be positive and significantly correlated with participation in gambling, meaning that an additional year in terms of age increases participation in gambling however the life cycle effects reveals that there is a certain threshold upon which gambling participation declines with age.

Prevalence of underage gambling: More than a third (39 percent) of all respondents affirmed awareness of underage gambling. This finding points to loop holes in the country's current regulatory framework. Although there are regulations to guard against under age gambling, in practice such laws are rarely implemented or are wilfully ignored by the owners of the gambling outlets.

Gambling negatively affects household welfare through displacement effects, dissaving and domestic violence: About 20 percent of gamblers reported a negative impact of gambling on household welfare. Of the 20 percent that reported a negative impact, more than half singled out displacement effects on expenditure on household expenditures as the major effect (51.6%), domestic violence effects were

reported by 28.4 percent of the respondents. Gambling expenditure also results in dissaving, implying no immediate displacement but the postponement of the purchase of durable goods, frequently funded from accumulated savings.

The magnitude of problem gambling is estimated at 5.7 percent among frequent gamblers aged 18 years and older: The findings show that problem gambling is not very prevalent with just about 5.7 percent of the frequent gamblers being classified a s gambling addicts. They have difficulties controlling the amounts of money and /or time spent on gambling which leads to adverse consequences for the gambler, his household, or the community.

While government has introduced a number of regulations to guide the smooth running of the gambling industry, in practice, it has been extremely weak at implementing the regulations: Cognizant of the inadequacies of the current acts in regulating the industry, a set of statutory regulations have been produced over time. Despite their introduction, there is still a huge implementation gap. The National Lotteries Board appears to have considerable capacity problems, and is not always able to exercise its mandate effectively. As such there exists unlicensed gambling outlets in operation, faulty, dysfunctional or recalibrated slot machines are being used in gaming centres, and prevalence of under age and illegal gambling.

The percentage contribution of the gambling industry to total revenue is still low but growing: Although the percentage share of gambling tax revenue to total tax revenue is still meagre (0.15% in 2013/14), it has been growing over the years. In nominal terms, gambling related tax revenue increased by over forty-fold over the past decade, from UGX 0.24 billion in 2002/3 to UGX 11.1 billion in 2013/14. The revenues were obtained through taxes on turnover (20%), winnings (15%) and other charges.

6.2 Emerging Issues for policy consideration

Protect the public from over stimulation of latent gambling through limitation of gambling opportunities: Given the high proliferation of gambling outlets, sports betting in particular, we propose restrictions on gambling opportunities to those that can be effectively managed. Besides, over proliferation of gambling outlets stimulates demand that wouldn't otherwise have existed. For example, Spain has prevented the propagation of gambling outlets by ensuring that outlets are 100 miles apart from each other. Further protections for society may include tighter restrictions on advertising, tighter restrictions on entry into gambling establishments, based on age, limitation of opening hours among others.

Safeguard minors from engaging in gambling activities through tighter laws and monitoring systems: The participation of young people (below 18 years of age) in gambling is increasingly becoming a matter of concern and is prohibited under the current laws governing the gambling industry in Uganda. However, in practice, the practice still exists and needs tighter monitoring systems to be curbed. With the recent introduction of national identification cards, we propose that the admission of clients into gambling outlets should strictly be based on presentation of an identification card for proof of age. Gambling outlets found in breach of the law should be held culpable and face closure.

Bolster controls and supervision of the gambling industry: Parliament should prioritize and pass the current Lottery and Gaming Bill (2013) into law. This will give more statutory powers to the NLB and provide a basis for addressing capacity and financial challenges that they currently face. Furthermore, the NLB should continue to ensure that gambling is conducted under the laws and regulations that govern gambling. This will protect players against unscrupulous businessmen, unlicensed players, curb illegal and underage gambling, and preserve the integrity of the industry. Furthermore, a gambling police force that is specialized in gambling activities could be put up to help in enforcing controls.

Minimize the negative social and economic impacts of gambling: As noted in the research findings, gambling is associated with negative social economic effects. There is need for continuous research by the regulatory body to track these effects, patterns and trends and how to circumvent them. In addition, there is need to introduce a specific program that is aimed at promoting responsible gambling and handling problem

gamblers. Continuous mass sensitization about the likely negative impacts of uncontrolled gambling should be prioritized.

Strengthen efforts to generate tax revenue for funding government priorities: Mindful of the conflicting objective of revenue maximization on one hand, and minimization of negative social impact on the other, we do not advocate for a revenue maximization model that imposes few restrictions on advertising and allows excessive introduction of new games and expansion of new ones but rather a sumptuary mode of operation that seeks to accommodate existing gambling demand whilst discouraging excessive consumption. To improve tax collections, we propose that the following:

- Embrace use of appropriate information technology tools to ease the collection of tax and the flow of information on gambling activities between gambling outlets, the NLB and the URA.
- Zoning: The government could also explore the idea of setting up special gambling zones outside the city such as those in Macau (china) and Las Vegas (United States of America) which could attract significant investment in Uganda's gambling and tourism industry and boost tax collections.
- Finally, there is need to strengthen capacity to track gambling businesses that are involved in tax avoidance and evasion.

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8 APPENDICES

Appendix 1: Description of variables used in the probit model

Variable	Measure	Proportion (%)
Dependent variable		
Participation in gambling	Yes=1, No=0	
Independent variables		
		Mean
Age	Age in completed years	29.5
Age squared	Square of age in years	
Education	Years of education	10.7
Distance form household to nearest gambling outlet	Distance in kilometers	0.6
		Proportion (%)
Gender	1= Male, 0= Female	51.2
Work status	1=Employed, 0=Not employed	71.1
Marital status	1=Single, 0=others	38.9
	1=Married/cohabiting 0=others	53.7
	1=Separated/divorced/widow, 0=others	4.9

Appendix 2: Definition of the different types of gambling

Lottery: Game for distributing prizes by chance whether by throwing or casting of dice, tickets, cards lots, numbers or figures.

Casino: Private club or establishment where gambling takes place or place where people gamble by playing card games, roulette, slot machines etc.

Promotional Competitions: These are competitions that are conducted for the purpose of promoting a producer, distributor, supplier or the sale of any goods or services and participants participate by sending SMS messages. The prizes are distributed by conducting random draws, examples include promotional competitions offered by telecom companies, beverage companies etc.

Sports Betting: This is the activity of predicting sports results and placing a wager on the outcome.

Betting on animals: This is the activity of predicting animal race results and placing a wager on the outcome. Online/Internet gambling: This refers to gambling that takes place over the internet

Ludo: This is a board game for two to four players, in which the players race their tokens from start to finish according to die rolls. In this study, it was considered to be gambling only if money was staked by the players involved.

Appendix 3: Key informants

S/N	Name	Designation
1	Mr. Manzi Tumubweinee	Chairman, National Lotteries Board
2	Mr. Dennis Kikonyogo	Chairman, Uganda Sports Betting Association and Public Relations Officer Royal Sports Betting
3	Mr. Bob Kabonero	CEO Audley Limited (Owner Kampala Casino)
4	Mr. Emmanuel Kamugira	Domestic Taxes (Lottery and Casino taxes), URA
5	Mr. Solomon Kajura	CEO, Play Lotto Uganda
6	Mr. Henry Nsubuga	Counselor, Makerere University

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