THE ECONOMIC IMPACT OF LEGALISED GAMBLING IN SOUTH AFRICA

2013
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2013

Study commissioned by the NATIONAL GAMBLING BOARD
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- Executive and top management of the board for their guidance and leadership in terms of the scope and objectives of the research project;
- Members of the Research & Ethics Committee (NGB) for their feedback and guidance in terms of the finalisation of the report;
- Prof André Ligthelm (BMR, UNISA) for the professional and dedicated way in which the project was executed, the compilation of the report, as well as skills transfer on behalf of the board to an economic intern (Mr Tshediso Dlamini);
- IPSOS/Markinor who was responsible for fieldwork, collection and processing of some of the data in this report (Khayabus, wave 2 of 2012);
- Ms Erna Koekemoer for preparation of draft and final reports; and
- Mr Tshediso Dlamini for extracting data from secondary sources and constructing the tables from the Ipsos Omnibus survey. He was also involved in a skills transfer programme and assisted with the calculations of the variables in the study.

EXCLUSION OF CLAIMS

Despite all efforts to ensure accuracy in the assembly of information and data or the compilation thereof, the National Gambling Board is unable to warrant the accuracy of the information, data and compilations as contained in this report. Readers are deemed to have waived and renounced all rights to any claim against the abovementioned institutions and their officers for any loss or damage of any nature whatsoever arising from the use or reliance upon such information, data or compilations.
One of the mandatory functions of the National Gambling Board is to conduct research to determine the socio-economic impact of gambling in South Africa on a regular basis. The importance of this function can be illustrated by the fact that the gambling sector (excluding the National Lottery and illegal gambling) extracted almost R18.4 billion from the household expenditure stream in 2012. This implies that close to 1% of household expenditure was allocated to gambling. This may have a differentiated impact on household welfare specifically on less affluent households involved in gambling.

The Board deems it necessary to study the socioeconomic impact of gambling to ensure that there is a clear balance between encouraging responsible gambling and promoting the economic gains brought about by gambling activities. Positive economic benefits arising from gambling activities need to be balanced with the socio-economic impact.

As part of the bigger project, the NGB embarked on an economic impact of gambling study as a follow-up on studies previously conducted in 2002, 2005 and 2009. The main aim of the latest study was to monitor the economic impact of gambling on the South African economy, as well as on South African household welfare levels. Specific focus areas are the propensity to gamble; expenditure displacement effects; the redistributional effect of gambling; the impact of gambling on the less affluent; gamblers and social grants; macro-economic measurements in terms of revenue / taxes / employment and multiplier effects of the gambling sector.

The Bureau of Market Research (BMR), a unit of the University of South Africa, and more specifically Prof André Ligthelm, was commissioned to conduct the research. Research staff at the Board assisted in providing some of the information as required. The Board used this opportunity to transfer economic skills to a research intern (Mr Tshediso Dlamini) who also assisted the BMR in gathering and analyse required information. The Board would like to express its sincerest appreciation to Prof Ligthelm for the professional way in which this research was conducted and the findings presented to the Board.

PROF LINDA DE VRIES
Chairperson: National Gambling Board

CONTENTS
LIST OF TABLES AND FIGURES ............................................................................................................ v

EXECUTIVE SUMMARY ......................................................................................................................... vi

CHAPTER 1: INTRODUCTION, OBJECTIVE AND METHOD

1. INTRODUCTION .................................................................................................................................. 1

2. PURPOSE ............................................................................................................................................ 1

3. IMPACT OF GAMBLING ON HOUSEHOLD WELFARE LEVELS ....................................................... 2

3.1 INTRODUCTION .................................................................................................................................. 2

3.2 PROPENSITY TO GAMBLE ................................................................................................................ 2

3.2.1 Definition ........................................................................................................................................ 2

3.2.2 Calculation of propensity to gamble ................................................................................................. 3

3.2.3 Propensity to gamble by mode ......................................................................................................... 4

3.2.4 Longitudinal comparisons ............................................................................................................... 5

3.3 EXPENDITURE DISPLACEMENTS EFFECTS ...................................................................................... 6

3.4 THE REDISTRIBUTIONAL EFFECT OF GAMBLING ......................................................................... 10

3.5 THE LESS AFFLUENT AND GAMBLING ............................................................................................ 11

3.6 GAMBLERS AND SOCIAL GRANTS .................................................................................................... 13

3.7 CONCLUSION ..................................................................................................................................... 14

4. THE ROLE OF THE GAMBLING SECTOR IN THE SOUTH AFRICAN ECONOMY ............................. 15

4.1 INTRODUCTION .................................................................................................................................. 15

4.2 MEASUREMENT OF THE GAMBLING SECTOR ............................................................................... 16
4.2.1 Macro-economic measurement or market share ........................................16
4.2.2 Institutional measurement or market share ...........................................17
4.3 DATA COLLECTION ..................................................................................18
4.4 GAMBLING ACTIVITIES .........................................................................18
4.4.1 Gross Gaming Revenue (GGR) .............................................................18
4.4.2 Taxes paid by the gambling industry ....................................................19
4.4.3 Employment .......................................................................................19
4.5 MULTIPLIER EFFECTS OF THE GAMBLING SECTOR .........................21
4.5.1 Introduction .........................................................................................21
4.6 MULTIPLIER CALCULATIONS .................................................................22
4.6.1 GDP contribution ..................................................................................22
4.6.2 Employment contribution .....................................................................23
4.7 ADDITIONAL CONTRIBUTIONS BY THE GAMBLING SECTOR ..............23
4.8 CONCLUSION .........................................................................................23
5. CONCLUDING REMARKS ........................................................................24
BIBLIOGRAPHY ............................................................................................26
### LIST OF TABLES AND FIGURES

#### Table

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ESTIMATED GGR IN SOUTH AFRICA, 2012</td>
</tr>
<tr>
<td>2</td>
<td>COMPARISON OF PROPENSITY TO GAMBLE: NGB SURVEYS (% OF HOUSEHOLD INCOME)</td>
</tr>
<tr>
<td>3</td>
<td>TOTAL LOTTO TICKET SALES AND PRIZE POOL, SATURDAY 31 MARCH 2012</td>
</tr>
<tr>
<td>4</td>
<td>TOTAL LOTTO TICKET SALES AND PRIZE POOL, WEDNESDAY 7 MARCH 2012</td>
</tr>
<tr>
<td>5</td>
<td>GGR OF THE GAMBLING SECTOR BY MODE, 2012</td>
</tr>
<tr>
<td>6</td>
<td>PROVINCIAL TAX/LEVY BY GAMBLING MODE, 2012</td>
</tr>
<tr>
<td>7</td>
<td>ESTIMATED PERMANENT EMPLOYMENT BY GAMBLING MODE (^1)</td>
</tr>
<tr>
<td>8</td>
<td>EMPLOYMENT OF CASINOS (^1)</td>
</tr>
</tbody>
</table>

#### Figure

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ITEMS FROM WHICH GAMBLING MONEY IS DISPLACED (% OF RESPONDENTS)</td>
</tr>
<tr>
<td>2</td>
<td>BUDGET BEHAVIOUR RE GAMBLING EXPENDITURE</td>
</tr>
<tr>
<td>3</td>
<td>INCIDENCE OF IMPULSIVE GAMBLING EXPENDITURE, 2012</td>
</tr>
<tr>
<td>4</td>
<td>SOCIAL GRANTS AS SOURCE OF INCOME OF GAMBLERS, 2012</td>
</tr>
<tr>
<td>5</td>
<td>SOCIAL GRANTS AS SOURCE OF HOUSEHOLD INCOME</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

1. INTRODUCTION

The first study on the socio-economic impact of gambling in South Africa was conducted in 2002 (Ligthelm & Mabaso 2003). This initiative was followed up in 2005 with a similar study (Ligthelm, Mango & Jonkheid 2005). A somewhat more extensive study was conducted in 2009 during the height of the world recessionary period (Ligthelm & Jonkheid 2009). This 2012 report is only concerned with the size of the gambling sector and its impact on household welfare levels. These two aspects were incorporated in the previous three NGB reports. However, it is important to note that this research project forms part of a broader socioeconomic impact of gambling research project commissioned by the NGB in 2012.

The main aim of the research was to analyse the impact of gambling on household welfare levels, as well as to estimate the size of the gambling sector in South Africa.

2. IMPACT OF GAMBLING ON HOUSEHOLD WELFARE

2.1 Propensity to gamble

Propensity to gamble is defined as the percentage of household expenditure allocated to gambling (i.e. gambling expenditure minus prizes paid out) (Ligthelm & Mabaso 2003). For South Africa as a whole, it is calculated that households allocated 0.97% of household income/expenditure to gambling in 2012. In 2009 it was at a low of 0.9% during the international recessionary period. The 0.97% calculated for 2012 can be disaggregated as follows by gambling mode:

<table>
<thead>
<tr>
<th>Propensity (%)</th>
<th>Allocation of each R100 spent on gambling</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Casinos</td>
<td>0.69</td>
</tr>
<tr>
<td>• Bingo</td>
<td>0.01</td>
</tr>
<tr>
<td>• Horse/sports betting</td>
<td>0.10</td>
</tr>
<tr>
<td>• LPMs</td>
<td>0.06</td>
</tr>
<tr>
<td>• National Lottery games</td>
<td>0.12</td>
</tr>
<tr>
<td>• Total gambling</td>
<td>0.97</td>
</tr>
</tbody>
</table>

The total amount forfeited on gambling by households amounted to R21 024 million in 2012.
Comparisons of the 2012 NGB study with previous NGB surveys suggest the following expenditure trends by mode (Ligthelm & Mabaso 2003; Ligthelm, Mango & Jonkheid 2005; Ligthelm & Jonkheid 2009):

- Casino gambling remains the most important gambling mode (from an expenditure point of view), attracting almost 70% of total legal gambling expenditure. Propensity to gamble at casinos decreased from 1.21% in the 2005 NGB survey to 0.69% in both the 2009 and 2012 surveys;
- Horse/sports betting stabilised at approximately 0.10% between 2005 and 2012.
- The allocation of household expenditure to lottery games shows a strong downward trend since 2005. The propensity to play lottery games declined from 0.38% in 2005 to 0.09% in 2009 with a slight increase to 0.12% in 2012;
- Bingo attracted only 0.01% of household expenditure and will probably remain on this relatively low level; and
- The propensity to play LPMs stood at 0.06%, slightly higher than the 0.03% in 2009.

Overall, it would seem that propensity to gamble stabilized at just below 1.0% of household income/expenditure. Future movements in gambling expenditure would probably move sideways in tandem with increases in labour remuneration.

### 2.2 Redistributional effect of gambling

Gambling has a significant redistributional effect. On average, a significant number of punters spend small amounts while only a small percentage receives large amounts of prize money. This is particularly true with regard to the lotto and can be illustrated as follows by using the lotto draw of 31 March 2012 as an example (www.nlbo.org.za):

- Total ticket sales: R22.4 million
- Total prize pool: R34.0 million
- Approximate number of participants: 2.2 million
- Average expenditure by participants: R10.00 (assumption)
- 1 person received: R25.6 million
- 2 persons each received: R202 387
- 123 participants each received: R7 404
- 425 participants each received: R1 190
- 7 446 participants each received: R227
- 10 592 participants each received: R105
- 107 420 participants each received: R33
- 94.4% of participants received no prizes
2.3 The less affluent and gambling

A clear indication emerges from the 2012 NGB Omnibus Survey that the less affluent groupings of the South African population are important participants in gambling activities. For example:

- 29.6% of gambling participants were unemployed
- 14.8% occupied part-time jobs
- 37.8% had no formal schooling, only primary education or some high school education (grade 12 excluded)
- 29.4% earned less than R1 000 per month

The question arises as to what gambling modes the gamblers in the less affluent groupings of the community participate in. Of those earning between R1 and R3 000 per month:

- 76.1% bought lotto tickets
- 30.9% gambled at illegal outlets
- 11.4% bought scratch cards
- 11.2% wagered on horses/sports events
- 0.8% frequented casinos

Of the unemployed gamblers:

- 76.8% bought lotto tickets
- 22.8% gambled at illegal outlets
- 11.8% bought scratch cards
- 3.6% visited casinos
- 6.2% participated in sports betting
- 12.8% wagered on horses/sports events
- 2.9 % played LPMs

3. THE CONTRIBUTION OF THE GAMBLING SECTOR TO THE SOUTH AFRICAN ECONOMY

The initial GDP (value added) generated by the gambling sector amounted to an estimated R10 968.8 million in 2012. This amount is multiplied by indirect and induced effects to a total GDP contribution of R21 937.6 million. This represents an initial GDP contribution of 0.39% with a further 0.38% indirect and induced contribution. The total GDP contribution was 0.77%, which will probably remain at this level for the foreseeable future. The GDP multiplier was 2.0 meaning that for every R100 value added created by the gambling sector itself, another R100 was generated in other sectors of the economy.
The employment multiplier is calculated at 5.6, implying that for every 100 jobs created directly by the gambling sector a further 416 are created indirectly in other sectors of the economy. A total of 166 202 jobs were created directly (29 679) and indirectly (136 523), contributing 1.7% of the non-agricultural formal employment in South Africa.

4. CONCLUDING REMARKS

The initial percentage of household expenditure on legalised gambling (due to its novelty effect) started tapering off from a high of 1.70% (of household income/expenditure) in 2005 to 0.97% in 2012. It is expected that movements in gambling expenditure would probably be sideways, implying that the magnitude of legal gambling expenditure would increase in tandem with household income growth. This implies a stabilisation of the propensity to gamble at approximately 1% of household income/expenditure with a nominal growth (without considering inflation) equivalent to growth in household income. The latter would probably be in the 6%-8% range during the next few years.

This forecast would also imply that the 0.77% contribution (directly and indirectly) of the gambling sector to the national economy will largely stabilise at this level.

It is recommended that the NGB’s initiative to measure the allocation of household income to gambling activities (i.e. the propensity to gamble) and the contribution of the gambling sector to the national economy be replicated in a two- to three-year cycle to serve as an information and/or warning signal on any possible changes in gambling behaviour of the South African population. The impact of gambling on the less affluent part of the population should also form an integral part of this exercise. This report highlights the active involvement of the less affluent households in gambling activities, specifically their disproportionate involvement in the national lottery and illegal gambling activities (albeit falling both outside the jurisdiction of the NGB).
ECONOMIC IMPACT OF LEGALISED GAMBLING IN SOUTH AFRICA

1. INTRODUCTION

The gambling industry in South Africa grew rapidly during the 1997 to 2002 period with various gambling modes and facilities being introduced. This resulted not only in the establishment and growth of a new industry in South Africa (with the exception of horse racing and a few casinos) over a relatively short period, but also resulted in changes in the spending behaviour of households. Households were trading off existing expenditure allocations for new (gambling) expenses. Since the rapid establishment phase of the gambling industry at the turn of the century, the creation of new access points for gambling have declined considerably while household gambling expenditure also reflects a more moderate trajectory.

Within this context, the following questions are always relevant:

- What is the size of the gambling sector in terms of employment and GDP contribution; and
- What is the portion of household expenditure allocated to gambling or in a wider context, what is the impact of gambling-related expenditure on household welfare?

Several studies in this regard have been initiated by the NGB. The first study on the socio-economic impact of gambling was conducted in 2002 (Ligthelm & Mabaso 2003). The study found that the gambling industry showed typical characteristics of a developing gambling market with substantial volatility. This initiative was followed up in 2005 with a similar study (Ligthelm, Mango & Jonkheid 2005). During this study it was concluded that the gambling sector in South Africa attained a high level of maturity within a relatively short time span. These two studies were replicated with a somewhat more extensive study in 2009 during the height of the world recessionary period (Ligthelm & Jonkheid 2009). This 2012 report is only concerned with the size of the gambling sector and its impact on household welfare levels. These two aspects were incorporated in the previous three NGB reports. However, it is important to note that this research project forms part of a broader socioeconomic impact of gambling research project commissioned by the NGB.

2. PURPOSE

The purpose of this report is to analyse the impact of gambling on household welfare levels and secondly to estimate the size of the gambling industry in South Africa. The discussion on the impact of gambling on household welfare levels addresses the
following aspects: propensity to gamble (i.e. the percentage of household expenditure allocated to gambling), expenditure displacement effects, the redistributional effect inherent in gambling expenditure and the less affluent and gambling. The size of the gambling sector will be calculated in terms of its direct and indirect effect on employment and its contribution to the GDP of South Africa.

3. IMPACT OF GAMBLING ON HOUSEHOLD WELFARE LEVELS

3.1 INTRODUCTION

The gambling industry is often accused of having a negative impact on household welfare levels. Grinols (2007), for example, indicated that there is evidence in the United States that lends credence to arguments that legalised gambling activities eventually cause increased taxes, loss of jobs for the region, economic disruption of other businesses, social welfare costs for society in general and government agencies in particular. The NGB has to monitor the socio-economic impact of gambling activity within South Africa and consequently requested that information be collected to provide insight into the impact of gambling on household welfare levels. More specifically, the following aspects are addressed in this chapter:

- Propensity to gamble;
- Expenditure displacement in favour of gambling;
- The redistributional effect of gambling;
- The impact of gambling on the less affluent part of the community; and
- The contribution of social grants to household income of gamblers

3.2 PROPENSITY TO GAMBLE

This section highlights the methodology used in calculating the propensity to gamble. No exact data are available on the propensity to spend on gambling, implying that various assumptions are made in the calculation process. Information is sourced largely from the national and provincial boards and not directly from private sector role players within the gambling sector as well as from the website of the National Lotteries Board (NLB). The figures should therefore be regarded as estimates only.

3.2.1 Definition

Propensity to spend on gambling is defined as the percentage of household income/expenditure allocated to gambling. The amount of household budgets allocated to gambling is calculated as follows:
Total amount wagered by patrons/participants
- (minus) amount returned to players
= (equals) Gross Gaming Revenue (GGR) of gambling institutions.

The GGR amount divided by total household expenditure in South Africa equals the propensity to gamble.

The above calculation implies that the prize money paid out by gambling institutions to patrons reverts back to households as part of the household income and expenditure stream. However, it should be noted that the allocation of prize money is concentrated largely on a few households while gambling expenditure is incurred by a large number of households. This redistribution effect is discussed in the next section. Although jackpot money reverts back to the household expenditure stream, large jackpots are often invested and therefore do not form part of the normal household expenditure cycle.

3.2.2 Calculation of propensity to gamble

The propensity to gamble in South Africa can be calculated by using the gross gambling revenue (GGR) of all licensed gambling institutions in South Africa. GGR represents the amount retained by gambling institutions, and therefore the amount forfeited by households for gambling. Please note that gambling expenditure through non-licenced practices such as illegal, informal and internet gambling is excluded.

Table 1 shows the estimated GGR of licenced gambling institutions in 2012. This amounted to R21 024 million (scratch cards and lucky draws excluded). Almost three quarters (70.7%) of gambling expenditure by punters was allocated to casinos, 12.3% to lottery games and 10.3% to horse and sports betting.

<table>
<thead>
<tr>
<th>Gambling mode</th>
<th>GGR (Rm)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casinos</td>
<td>14 862</td>
<td>70.7</td>
</tr>
<tr>
<td>Horse/sports betting</td>
<td>2 155</td>
<td>10.3</td>
</tr>
<tr>
<td>LPMs</td>
<td>1 179</td>
<td>5.6</td>
</tr>
<tr>
<td>Bingo</td>
<td>239</td>
<td>1.1</td>
</tr>
<tr>
<td>Lottery(^1)</td>
<td>2 589</td>
<td>12.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21 024</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

\(^1\) Estimated at 45% of estimated ticket sales of lotto, lotto plus, Powerball and Sportstakes. Scratch cards and lucky draws are excluded (representing approximately 3% of expenditure on the National Lottery in 2012).

The average monthly expenditure reported by gamblers in the 2012 NGB Omnibus Survey amounted to R155.70. The calculated R21 024 million forfeited by punters (i.e. the GGR of gambling institutions) divided by the 2012 South African population 18 years plus (33 748 835) (BMR unpublished statistics), multiplied by the percentage of this population participating in gambling (14.3%) resulted in an average expenditure per punter of R363.00 per month. These amounts testify to substantial underreporting of gambling expenditure in surveys enquiring on only a selection of expenditure items (such as gambling) and therefore the inability to verify household expenditure in relation to household income. Household surveys also show a strong underreporting of expenditure on negatively perceived expenditure items such as tobacco, alcohol and gambling (Ligthelm & Jonkheid 2009).

The amount of R21 024 million allocated by households to legal gambling (divided by total household income of R2 162 067 million in 2012) (BMR unpublished statistics) gives rise to the following figure relating to the propensity to gamble for 2012:
- 0.97% of household income/expenditure.

### 3.2.3 Propensity to gamble by mode

By using the GGR of the various gambling modes, the following propensity-to-gamble estimates can be presented by mode for 2012:

<table>
<thead>
<tr>
<th>Mode</th>
<th>(%)</th>
<th>Allocation of each R100 spent on gambling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casinos</td>
<td>0.69</td>
<td>R 71.10</td>
</tr>
<tr>
<td>Bingo</td>
<td>0.01</td>
<td>R 1.00</td>
</tr>
<tr>
<td>Horse/sports betting</td>
<td>0.10</td>
<td>R 10.30</td>
</tr>
<tr>
<td>LPMs</td>
<td>0.06</td>
<td>R 5.70</td>
</tr>
<tr>
<td>Lottery games</td>
<td>0.12</td>
<td>R 11.40</td>
</tr>
<tr>
<td><strong>Total gambling</strong></td>
<td><strong>0.97</strong></td>
<td><strong>R100.00</strong></td>
</tr>
</tbody>
</table>

The above suggests that casinos represented by far the most important form of gambling in 2012. R71.10 in every R100 spent on gambling was allocated to casinos, followed by lottery games receiving R11.40 in every R100. Horse/sports betting represented the third most important mode, attracting R10.30 in every R100 gambled by patrons. Bingo attracted a minute volume of R1.00 for every R100 gambling expenditure.
3.2.4 Longitudinal comparisons

Table 2 shows the results of previous NGB studies (Ligthelm & Mabaso 2003, Ligthelm, Mango & Jonkheid 2005, Ligthelm & Jonkheid 2009), with regard to the propensity to gamble. The propensity calculations were similar in all four reports. The following inferences are put forward:

- Casino gambling remains the most important gambling mode (from a GGR point of view), attracting just more than 70% of total legal gambling income. Propensity to gamble increased from 0.91% of household income in 2003 to 1.21% in 2005 but decreased to 0.69% in 2009 and remained on this level in 2012;
- Horse/sports betting shows a decline from 0.20% in 2003 to 0.11% in 2005 and 0.08% in 2009, increasing slightly to 0.10% in 2012;
- The allocation of household income to lottery games shows a downward trend since 2003. The propensity to play lottery games increased from 0.19% in 2003 to 0.38% in 2005 and declined to 0.09% in 2009 with a slight increase to 0.12% in 2012;
- Bingo attracted only 0.01% of household income in 2009 and 2012 and will probably remain at this low level;
- The propensity to play LPMs increased from its 2005 level of 0.003% to 0.03% in 2009. In 2005 only LPMs in Mpumalanga, the Western Cape and Eastern Cape were operational but have since expanded to other provinces, with propensity to play increasing to 0.06% in 2012; and
- Overall, it would seem that propensity to gamble stabilised just below 1.0% of household income. In 2009 it was at a low of 0.91% during the international recessionary period but increased slightly to 0.97% of household income in 2012.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Casinos</td>
<td>0.91</td>
<td>1.21</td>
<td>0.69</td>
<td>0.69</td>
</tr>
<tr>
<td>Bingo</td>
<td>0.002</td>
<td>0.003</td>
<td>0.006</td>
<td>0.01</td>
</tr>
<tr>
<td>Horse/sports betting</td>
<td>0.20</td>
<td>0.11</td>
<td>0.08</td>
<td>0.10</td>
</tr>
<tr>
<td>LPMs</td>
<td>-</td>
<td>0.003</td>
<td>0.03</td>
<td>0.06</td>
</tr>
<tr>
<td>Lottery games</td>
<td>0.19</td>
<td>0.38</td>
<td>0.09</td>
<td>0.12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1.30</strong></td>
<td><strong>1.70</strong></td>
<td><strong>0.91</strong></td>
<td><strong>0.97</strong></td>
</tr>
</tbody>
</table>

3.3 EXPENDITURE DISPLACEMENT EFFECTS

Household expenditure patterns are experiencing structural changes, especially since the beginning of the 1990s. Households are trading off existing allocations for new expenditure avenues. Priorities change in tandem with new lifestyles and product and service alternatives. Items that show favourable expenditure growth are mobile phones, education, medical and dental services, household computers and security. Increased expenditure on these items could either be financed by increased income or displacing existing expenditure in favour of the above items.

Any calculation of expenditure displacement should be handled with extreme caution. Households (gamblers) find it difficult to indicate what household items are forfeited in favour of gambling. Furthermore, when asked about displacement, reference is normally made to only one or two items forfeited while there could have been several small cuts with regard to various items. Household budget behaviour often consists of small cuts on various discretionary expenditure items rather than substitution of one item by gambling. Gambling expenditure could also result in dissaving, implying no immediate displacement but the postponement of the purchase of durable goods, frequently funded from accumulated savings.

Substitution can, therefore, be effected with regard to the following broad product/service categories:
- Other forms of gambling expenditure (from casinos to the lottery or vice versa, for example);
- Household necessities;
- Luxury goods;
- Savings;
- Discretionary expenditure; and
- Income increases.

The magnitude of expenditure displacement may be minimised in a regime of reasonable to high salary increases implying that the allocation to gambling expenditure may be sourced from salary or income increments.

It is also important to keep in mind that gambling represents an expenditure item for households as well as an income flow resulting from winnings. However, a significant number of persons spend numerous (small) amounts on gambling while the income stream is concentrated in one or two large amounts and payouts to fewer persons than originally participating in gambling expenditure.
To determine possible displacement effects the following question was included in the 2012 NGB Omnibus Survey: ‘If you were not gambling, on what would you have spent the gambling amount instead?’ Although various responses such as ‘household necessities’ (food, electricity, clothes, transport), ‘luxury items’, ‘savings’ ‘pay my debt/loan/bond/accounts’ and ‘entertainment’ were provided in the questionnaire, interviewers were requested not to read out these alternatives, in order not to influence the reaction of respondents.

The result of the responses is shown in figure 1. Household necessities (44.8%) are mentioned by the majority, followed by savings (35.4%), other entertainment (20.5%) and payment of debt/loan/bond/accounts (19.2%). Note that the percentages refer to the number of respondents that displaced some of their gambling money from the mentioned items. Since most respondents mentioned more than one item and did not indicate which percentage of money would be sourced from which item, it was not possible to determine the relative importance of the items. The response to this question therefore provides only the items from which displacement takes place and not the proportion of gambling money sourced from expenditure intended for the various items mentioned.

A restriction on respondents to mention only one expenditure item for displacement could also not necessarily have portrayed a full picture.

FIGURE 1
ITEMS FROM WHICH GAMBLING MONEY IS DISPLACED (% OF RESPONDENTS), 2012
Displacement by demographic variable reveals, inter alia, the following:

- Age differentials do not exert a substantial influence on displacement choices. However, what is clear is that the 60 year plus age group displaces less from household necessities, savings and luxury items than the other age groups;
- Some differences present themselves by work status. Unemployed and part-time employed respondents report far more displacement from household necessities than other employment categories. Displacement from luxury items and savings is far lower among pensioners than in other work categories;
- Displacement by level of education reveals substantially higher displacement from household necessities among those with no formal schooling or only primary education than among those with a tertiary qualification;
- Displacement from household necessities is substantially higher among Africans than among Whites;
- Displacement by gender is largely similar; and
- A negative correlation presents itself between income level and the percentage displacement from household necessities.

The above patterns were confirmed by previous NGB surveys and clearly suggest a far more negative influence of gambling among less affluent households compared to more affluent households. Displacement from household necessities to gambling featured more prominently among younger respondents, the unemployed and part-time employed persons, those with no formal schooling and the lowest income category.

The above information suggests that no exact displacement figures can be presented. Households do not always follow an approach of a pro-rata down-scaling of all their expenditure items to generate sufficient money for gambling, nor do they always substitute only one item in favour of gambling. In addition, some household expenditure items, such as income tax and insurance premiums, cannot be down-scaled.

The following items can therefore be regarded as important displacement items in favour of gambling and may differ substantially by income level of the gambler or his/her household:

- Savings;
- Postponement of procuring luxury items;
- Other entertainment; and
- Household necessities.

The reality of household expenditure displacement from other items in favour of gambling is clearly illustrated by the response to the questions related to budgetary
behaviour included in the 2012 NGB Omnibus Survey. Figure 2 shows the response to the question: ‘Is money used for gambling a specific amount budgeted for in your budget or not budgeted for?’ Just more than a quarter of respondents (26.5%) confirmed that they budgeted a specific amount for gambling. In contrast, almost two thirds (63.7%) confirmed that no provision was made for gambling expenditure in their budgets.

FIGURE 2
BUDGET BEHAVIOUR RE GAMBLING EXPENDITURE, 2012

A follow-up question enquired on the level of impulsive (unforeseen, quick) gambling expenditure. The 63.7% of respondents who did not budget for gambling were prompted on their impulsive behaviour – whether this occurred regularly or only on an occasional basis. More than two thirds of respondents (70.9%) confirmed their engagement in impulsive gambling on an occasional basis while 29.1% said they gamble impulsively on a regular basis (figure 3).

FIGURE 3
INCIDENCE OF IMPULSIVE GAMBLING EXPENDITURE, 2012

The noncompliance with personal budgetary discipline to budget for specific expenditure items, confirmed that expenditure displacement has to be effected by gamblers to participate in gambling, which can be regarded as a discretionary expenditure item.
3.4 THE REDISTRIBUTIONAL EFFECT OF GAMBLING

Gambling activities have a significant redistributional effect. On average, a significant number of punters spend small amounts while only a small percentage receives large amounts of prize money. This is particularly true with regard to the National Lottery. Due to the electronic availability of information on the National Lottery, this mode of gambling will be used to illustrate the redistributional effect.

The redistributional effect of gambling is illustrated in tables 3 and 4. The tables show the total ticket sales and prize pool for the Saturday 31 March 2012 draw with a large jackpot and the ‘normal’ draw of 7 March 2012.

On the assumption of an average expenditure of approximately R10 per buyer per draw, table 3 shows that approximately 2.2 million people contributed to the ticket sales of R22.5 million for the 31 March 2012 draw. Only 126 009 people (5.6% of buyers) received something back in the form of prizes. One person received the jackpot of R25 million, two persons received R202 387 each and 123 received division 3 prizes to the amount of R7 404 each. No less than nine in every 10 winners (85.3%) each received R33 (division 7 prizes). An extremely large number of people (almost 2.1 million) each spent on average small amounts while the prizes were heavily concentrated in only three people (division 1 and 2 prizes).

TABLE 3
TOTAL LOTTO TICKET SALES AND PRIZE POOL, SATURDAY 31 MARCH 2012

<table>
<thead>
<tr>
<th></th>
<th>Total amount</th>
<th>Total number of participants/winners</th>
<th>Individual payout</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td></td>
<td>R</td>
</tr>
<tr>
<td>Total ticket sales</td>
<td>22 487 489</td>
<td>2 248 748(^{(1)})</td>
<td>-</td>
</tr>
<tr>
<td>Total prize pool</td>
<td>33 797 449</td>
<td>126 009</td>
<td></td>
</tr>
<tr>
<td>Division 1</td>
<td>25 628 971</td>
<td>1</td>
<td>25 628 971</td>
</tr>
<tr>
<td>Division 2</td>
<td>404 774</td>
<td>2</td>
<td>202 387</td>
</tr>
<tr>
<td>Division 3</td>
<td>910 692</td>
<td>123</td>
<td>7 404</td>
</tr>
<tr>
<td>Division 4</td>
<td>505 750</td>
<td>425</td>
<td>1 190</td>
</tr>
<tr>
<td>Division 5</td>
<td>1 690 242</td>
<td>7 446</td>
<td>227</td>
</tr>
<tr>
<td>Division 6</td>
<td>1 112 160</td>
<td>10 592</td>
<td>105</td>
</tr>
<tr>
<td>Division 7</td>
<td>3 544 860</td>
<td>107 420</td>
<td>33</td>
</tr>
</tbody>
</table>

1) Total sales ÷ R10, implying an estimated average ticket sale of R10 per player.
Source: www.nlb.org.za
The same pattern emerges from table 4, illustrating the redistributional effects of a typical draw. Approximately 1.5 million people bought lotto tickets while only 5.1% received something back. Two persons received division 2 prizes to the amount of R134 636 and 67 875 (89.1%) received division 7 prizes to the amount of R33 each.

**TABLE 4**

**TOTAL LOTTO TICKET SALES AND PRIZE POOL, WEDNESDAY 7 MARCH 2012**

<table>
<thead>
<tr>
<th>Total amount R</th>
<th>Total number of participants/winners</th>
<th>Individual payout R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total ticket sales</td>
<td>14 959 581</td>
<td>1 495 958(^1)</td>
</tr>
<tr>
<td>Total prize pool</td>
<td>5 453 310</td>
<td>76 164</td>
</tr>
<tr>
<td>Division 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Division 2</td>
<td>269 272</td>
<td>2</td>
</tr>
<tr>
<td>Division 3</td>
<td>605 820</td>
<td>69</td>
</tr>
<tr>
<td>Division 4</td>
<td>336 528</td>
<td>144</td>
</tr>
<tr>
<td>Division 5</td>
<td>1 127 366</td>
<td>3 733</td>
</tr>
<tr>
<td>Division 6</td>
<td>738 699</td>
<td>4 371</td>
</tr>
<tr>
<td>Division 7</td>
<td>2 375 625</td>
<td>67 875</td>
</tr>
</tbody>
</table>

1) Total sales ÷ R10. An average of R10 expenditure per draw is assumed for this calculation.

Source: www.nlb.org.za

The redistributional effect is far less marked with regard to casinos. Only a small percentage of the amount returned to players by casinos constituted large jackpot prizes.

### 3.5 THE LESS AFFLUENT AND GAMBLING

A clear indication emerges from the 2013 NGB Omnibus Survey that the less affluent groupings of the South African population are important participants in gambling activities. For example:

- 29.6% of gamblers were unemployed;
- 14.8% occupied part-time jobs;
- 37.8% had no formal schooling, only primary education or some high school education (grade 12 excluded); and
- 29.4% of those who disclosed their household income, earned less than R3 000 per month.
The following three socio-economic variables were selected to illustrate their involvement in gambling: earning a personal income of less than R3 000 a month, being unemployed and having only a primary school certificate.

In terms of participation in gambling by those earning between R1 and R3 000 per month, the following materialised from the Omnibus Survey:

- 76.1% bought lotto tickets;
- 30.9% gambled at illegal outlets;
- 11.4% bought scratch cards;
- 11.2% wagered on horses/sports events;
- 7.1% participated in lucky draws; and
- 0.8% frequented casinos.

Unemployed respondents confirmed the following participation patterns:

- 76.8% bought lotto tickets;
- 22.8% gambled at illegal outlets;
- 12.8% wagered on horses/sports events;
- 11.8% bought scratch cards;
- 4.0% participated in lucky draws;
- 3.6% frequented casinos; and
- 1.9% played LPMs.

Respondents with an educational level of primary school showed the following participation levels:

- 63.7% bought lotto tickets;
- 27.7% gambled at illegal outlets;
- 21.7% wagered on horses/sports events;
- 17.8% bought scratch cards;
- 5.1% participated in lucky draws; and
- 0.0% frequented casinos or LPMs.

The above clearly suggests that the less affluent gambling participants were overwhelmingly involved in lottery games followed by gambling at illegal outlets. Only a small minority participated in any of the gambling modes regulated by the NGB during the twelve months preceding the 2012 Omnibus Survey commissioned by the NGB.
3.6 GAMBLERS AND SOCIAL GRANTS

The November 2012 NGB Omnibus Survey enquired on the possible role played by social grants as a source of money for gambling. Figure 4 shows the response to the following question: ‘Do you receive any social grants from government?’ The figure confirms that almost three in every four gamblers (73.7%) did not receive any social grants from government in 2012. However, it is also important to note that one in every five (20.9%) of gamblers received social grants from government. The most important of these were child support grants (8.0% of gamblers) and old age pensions (7.1%).

FIGURE 4
SOCIAL GRANTS AS SOURCE OF INCOME OF GAMBLERS, 2012

The one in every five of gamblers admitting to receiving social grants from government were requested to indicate what portion of their total household income was represented by social grants. A full 25.7% admitted that more than half of household income was generated through social grants (figure 5). A further 26.3% indicated that social grants attributed between a quarter and half of the household income.
This implies that almost one in every 10 (10.9%) gamblers received at least a quarter of their household income through social grants.

3.7 CONCLUSION

Household expenditure patterns are continuously changing due to the availability of new products and services. During the past decade numerous alternative expenditure possibilities have emerged, such as new communication and IT products and services. Changing government priorities favour the less affluent communities in terms of education and health expenditure but exercise greater demand on the more affluent communities, especially with regard to expenditure on health, educational and security services. It is therefore clear that expenditure on gambling is but one of the factors contributing to changed household expenditure patterns.

Total gambling expenditure amounted to R21 024 million in 2012. Almost three in every four (70.7%) gambling rands were expended on casino gambling. This was followed by lottery games that attracted only 12.3% of household gambling money. It is important to note that almost R6 was spent in casinos for every R1 expended on the National Lottery. The following shows the relative shares of casinos and the lottery by gamblers and their expenditure:

- Casino gamblers represented 8.9% of all gamblers but expended 70.7% of gambling money; and
- Lottery gamblers represented 77.0% of all gamblers but attracted only 12.3% of gambling money.
The propensity to gamble was calculated at 0.97% of household income with casino gambling being the major gambling mode with a propensity of 0.69% in 2012. It is expected that the propensity of South African households to gamble will stabilise at just below 1.0% of household income. It has remained on this level for the past three years with a somewhat lower level (0.91%) during the height of the international recessionary period.

Gambling expenditure is financed from displacement from other household expenditure items and/or from increased household income. The impact of such redirection of household budgets is much more critical in the case of less affluent households.

Gambling expenditure is also characterised by huge redistributional effects. Relatively small amounts are spent by millions of gambling participants while only a small minority benefit from prizes. This is particularly true for lottery games.

A full 10.9% of gamblers in South Africa sourced at least a quarter of their income from social grants.

Gambling activities are exercised by the whole community, from the less affluent to the more affluent. National lottery games are favoured by the less affluent segment of the population while the higher income groups favour casino gambling as an important leisure activity.

4. THE ROLE OF THE GAMBLING SECTOR IN THE SOUTH AFRICAN ECONOMY

4.1 INTRODUCTION

Major developments in the gambling industry followed the promulgation of the National Gambling Act in 1996. Considerable investments have taken place in especially the casino industry with the establishment of new casinos, often accompanied by large supplementary investments such as hotels, convention centres, sports facilities and shopping and other retail facilities. A major event was also the launching of the National Lottery in 2000. As part of this study, an attempt was made to calculate the size of the gambling sector and its contribution to the South African economy. However, it is important to note that the calculation is only concerned with the gambling modes under the jurisdiction of the NGB. This implies that the activities of the National Lottery as well as illegal gambling activities were excluded from the calculations.
4.2 MEASUREMENT OF THE GAMBLING SECTOR

Prior to measuring the size of the gambling sector, this section provides an exposition of different approaches towards market sizing of an economic sector. Synonyms describing the measurement of an economic sector (e.g. the gambling sector) include, inter alia, the contribution, market share, market size or impact of the particular sector. Measurement can be undertaken on two levels, namely:

- On a macro-economic or external level; or
- On an institutional or internal level.

It is important to note that different variables are measured within each of these two levels.

4.2.1 Macro-economic measurement or market share

Macro-economic measurement is usually conducted by applying an econometric input-output model aimed at determining the economic impact or size of a particular sector or industry. The following economic variables can, inter alia, be measured with this methodology:

- Contribution of the gambling sector to the South African economy or GDP (Gross Domestic Product). This encapsulates the market share of the gambling industry in the South African economy;
- Contribution to total employment in South Africa;
- Contribution to government taxes; and
- Contribution to capital formation in South Africa.

In applying the input-output modelling process it is also possible to calculate the multiplier or spillover effects of the gambling sector. The input-output model comprises mathematical equations linking the economic flows between sectors, e.g. between the gambling industry and the beverage industry, where beverages are sourced from soft drink and liquor-related companies or between the gambling industry and the security industry where security services are sourced from security companies. The so-called multiplier effect can be defined as additional economic production, employment and government taxes emanating from the initial economic action (say the establishment of a casino). For example, the establishment of a casino creates demand for cement and bricks (during the construction phase) and beverages, electricity and security services (during the operational phase). This additional demand results in expanded production in the other industries with the concomitant expansion of employment, government taxes, etc.
In addition, economic expansion due to casino development also results in increased demand for goods and services as a result of income earned by employees and shareholders of the gambling industry as well as income arising from the backward linkages of spending in the economy. Backward linkages are, for example, the additional employment created by retailers (e.g. Pick n Pay), resulting from the increased demand for their products that, in turn, stimulate production in the agricultural sector supplying fresh produce to Pick n Pay.

Macro-economic measuring can also be termed external measurement due to the sizing of the gambling sector relative to the external economic environment.

4.2.2 Institutional measurement or market share

The macro-economic analysis of the gambling industry should be contrasted with the institutional or internal analysis thereof. Institutional measurement or analysis refers to, inter alia, the company and share ownership structures within the gambling sector.

Variables such as the following may be investigated in this regard:
- Shareholder structures/major shareholders;
- Casino company structures;
- Power groups within the gambling industry;
- Casino operators and management companies;
- Subsidiaries, associates and investments;
- Capital structure;
- BEE;
- Local/foreign ownership; and
- JSE listed and unlisted companies.

The gambling industry in South Africa portrays a fairly complicated and extensive institutional network, ranging from a few JSE listed companies with numerous subsidiaries, associates and investments (with full to limited ownership holding by the relevant JSE companies) to hundreds of small operators and JSE unlisted companies. The latter may include LPM site and route operators, bingo halls, racecourses, totalisator branches and agencies, on-course and off-course licensed bookmakers as well as casino management companies and operators.

In general, this approach boils down to ‘who owns whom’ within the gambling sector. This analysis does not form part of this socio-economic impact study.
4.3 DATA COLLECTION

For purposes of the 2012 study, information on the gambling sector was sourced from the NGB database. These data reflect mainly the direct contribution of the NGB regulated gambling sector to the South African economy. Due to the magnitude of the 2012 study the calculation of the indirect and multiplier effects of the gambling sector will be derived from previous NGB studies, the reason being that the calculation of indirect effects of an economic sector requires extensive and detail data as well as economic modelling. These activities are cost, labour and time intensive and are not included in the 2012 project description.

4.4 GAMBLING ACTIVITIES

4.4.1 Gross Gaming Revenue (GGR)

Table 5 depicts the GGR of gambling institutions under the jurisdiction of the NGB by mode. Total GGR amounted to R18 435 million, representing the rand value of the gross win of operators (i.e. total turnover, less winnings paid to players). In addition to the above figures, the National Lottery also sold approximately two billion boards to the value of approximately R4 710 million (excluding scratch cards and lucky draws) in 2012 (www.nlb.org).

<table>
<thead>
<tr>
<th>Mode</th>
<th>Gross Gaming Revenue</th>
<th>% return to players</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rm</td>
<td>%</td>
</tr>
<tr>
<td>Casinos</td>
<td>14 862</td>
<td>80.6</td>
</tr>
<tr>
<td>Bingo</td>
<td>239</td>
<td>1.3</td>
</tr>
<tr>
<td>Betting (Bookmakers &amp; Totalisators)</td>
<td>2 155</td>
<td>11.7</td>
</tr>
<tr>
<td>LPMs</td>
<td>1 179</td>
<td>6.4</td>
</tr>
<tr>
<td>Total</td>
<td>18 435</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: NGB data, 2012
4.4.2 Taxes paid by the gambling industry

The gambling industry makes substantial contributions to government income. Table 6 shows the tax/levy contribution of NGB regulated modes to provincial governments for 2012. A total of R1 834 million was transferred to provincial governments. The contribution of casinos to the amount of R1 405 million represented 76.6% of the total provincial government gambling transfers.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Tax levy (Rm)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casinos</td>
<td>1 405</td>
<td>76.6</td>
</tr>
<tr>
<td>Bingo</td>
<td>29</td>
<td>1.6</td>
</tr>
<tr>
<td>Betting (Bookmakers &amp; Totalisators)</td>
<td>259</td>
<td>14.1</td>
</tr>
<tr>
<td>LPMs</td>
<td>139</td>
<td>7.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 834</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: NGB 2012 (Unpublished information)

The figures above exclude any contributions made by activities originating from the National Lottery as well as company tax and net VAT payments of private sector operators in the gambling industry. The latter two tax sources are not available from secondary sources and have to be collected directly from companies. However, this information is normally treated as highly confidential and sensitive especially by unlisted JSE companies. JSE listed companies such as Tsogo Sun Holdings and Sun International are large conglomerates with a proliferation of activities, including non-gambling-related operations such as hotels and catering (McGregor – BFA). The apportionment of tax payments by type of activity also has to be sourced from the companies themselves. In the most recent survey of the Casino Association of South Africa (CASA 2012) it was indicated that the casino industry paid R5 billion in state and provincial taxes and R1 billion in casino levies to government in 2012.

4.4.3 Employment

Employment numbers by the gambling industry (excluding the National Lottery) are discussed in this section. Table 7 shows the number of employees by mode in 2012. Total permanent employment amounted to 29 679, with casinos responsible for the bulk of employment.
TABLE 7
ESTIMATED PERMANENT EMPLOYMENT BY GAMBLING MODE\(^1\), 2012

<table>
<thead>
<tr>
<th>Mode</th>
<th>Number of employees</th>
<th>% distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casinos(^2)</td>
<td>23 609</td>
<td>79.6</td>
</tr>
<tr>
<td>LPMs</td>
<td>950</td>
<td>3.2</td>
</tr>
<tr>
<td>Horse/sports betting</td>
<td>4 410</td>
<td>14.9</td>
</tr>
<tr>
<td>Bingo</td>
<td>260</td>
<td>0.9</td>
</tr>
<tr>
<td>Regulators</td>
<td>450</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29 679</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

\(^1\) Excluding the National Lottery

\(^2\) Including casinos and related development such as cinemas and conference facilities.

Sources: NGB 2012 (Unpublished information), CASA 2012

Table 8 shows the employment of casinos and related activities as established during the CASA Survey in 2012. This survey reported full-time casino employment of 13 792 as well as additional full-time employment of 9 568 in related activities. The table also confirms an additional 28 901 casual and indirect employment opportunities in the casinos and their related activities.

TABLE 8
EMPLOYMENT OF CASINOS\(^1\), 2012

<table>
<thead>
<tr>
<th>Type</th>
<th>Full-time employees</th>
<th>Casuals/Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casinos</td>
<td>13 792</td>
<td>20 227</td>
<td>34 019</td>
</tr>
<tr>
<td>Theatres</td>
<td>111</td>
<td>886</td>
<td>997</td>
</tr>
<tr>
<td>Restaurants</td>
<td>3 533</td>
<td>1 772</td>
<td>5 305</td>
</tr>
<tr>
<td>Fast food outlets</td>
<td>732</td>
<td>106</td>
<td>838</td>
</tr>
<tr>
<td>Cinemas</td>
<td>148</td>
<td>178</td>
<td>326</td>
</tr>
<tr>
<td>Entertainment areas</td>
<td>672</td>
<td>587</td>
<td>1 259</td>
</tr>
<tr>
<td>Retail outlets</td>
<td>609</td>
<td>92</td>
<td>701</td>
</tr>
<tr>
<td>Hotels</td>
<td>1 348</td>
<td>857</td>
<td>2 205</td>
</tr>
<tr>
<td>Conference facilities</td>
<td>286</td>
<td>2 697</td>
<td>2 983</td>
</tr>
<tr>
<td>Sporting events</td>
<td>2 129</td>
<td>1 499</td>
<td>3 628</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23 360</strong></td>
<td><strong>28 901</strong></td>
<td><strong>52 261</strong></td>
</tr>
</tbody>
</table>

\(^1\) Two casinos in the Northern Cape are not members of CASA. Their employment amounted to 249 in 2012.

Source: CASA 2012
4.5. MULTIPLIER EFFECTS OF THE GAMBLING SECTOR

4.5.1 Introduction

In addition to the normal operational and investment activities of the gambling sector as discussed above, previous NGB studies confirm large multiplier effects of the gambling sector. Calculations of the multiplier effects of the gambling sector were derived from a multi-sectoral gambling input-output table compiled in 2005 (Ligthelm, Mango & Jonkheid 2005), and from the application of the Cobb-Douglas function, which measures the structure of production with particular reference to the utility of labour and capital in an economic sector in 2009 (Ligthelm & Jonkheid 2009). These calculations were used as a basis for estimating the multiplier and spillover effects of the gambling sector in 2012. These effects can be summarised briefly as follows:

(a) **Initial impact**
   The initial impact of the gambling sector is calculated as the impact of a particular project/sector on the economy. The initial impact on GDP of operating or constructing a casino, for example, is equivalent to the direct expenditure undertaken by the casino operator as discussed in section 4. (This impact is sometimes referred to as the direct impact.)

(b) **Indirect impact**
   Indirect impacts are determined from the activities of suppliers. For example, suppliers include those industries that deliver goods and services to a casino and include, for example, suppliers of cement, bricks and trusses in the construction phase and food and security services during the operational phase. Activities of the latter industries are expanded as a result of establishing a casino. These industries are referred to as first-round suppliers that could in turn stimulate further demand in, for example, the electricity sector supplying additional electricity to cement and other producers (the first-round suppliers), etc. All these transactions originate from the initial establishment or management of a casino or any other gambling facility and can be attributed to the gambling sector.

(c) **Induced impact**
   Induced impacts are the impacts on the economy due to increased demand for goods and services by households from the income earned due to the establishment of a gambling institution, i.e. the income of employees and shareholders of the project (say a casino) as well as the income arising through the backward linkages of this spending in the economy. Backward linkages are,
for example, the additional employment created by retailers (e.g. Pick ‘n Pay), resulting from the increased demand for their products that in turn stimulates production in the agricultural sector supplying fresh produce to Pick ‘n Pay.

In summary, it can be stated that the initial impact can be regarded as the actual economic contribution of the gambling sector, while the indirect and induced impacts can be regarded as the spill over or multiplier effects of the gambling sector to other sectors of the economy.

4.6 MULTIPLIER CALCULATIONS

The application of the input-output modelling exercise and the Cobb-Douglas production equation and the usage of its utility functions resulted in the following multipliers for 2009. As discussed in section 4.5.1 these multipliers were also applied in 2012.

- GDP multiplier 2.0
- Employment multiplier 5.6

4.6.1 GDP contribution

A GDP multiplier of 2.0 means that for every initial R100 value added (GDP) generated by the gambling sector, a further R100 value added (GDP) is produced through the indirect and induced effects of the initial gambling activity. This is slightly higher than the average economy-wide multipliers of around 1.5.

The contribution of the gambling sector (excluding the National Lottery) to the South African economy can be estimated as follows for 2012:

- GGR of the gambling sector (NGB modes): R18 435 million
- Gross Value Added (GVA) based on a ratio of 59.5:40.5 (total output:GVA) of the hotel and restaurant sector of SA: R10 968.8 million
- GDP multiplier: 2.0
- Total GVA of gambling sector (direct, indirect and induced): R21 937.6 million
- GVA at basic prices: South Africa (SARB 2013): R 2 835 087 million
- Contribution of the gambling sector (NGB modes): 0.77%

The above estimates show that the gambling sector (excluding the National Lottery) contributed just less than one percent (0.77%) to the South African economy in 2012.
4.6.2 Employment contribution

The employment multiplier of 5.6 implies that for every 100 jobs created directly by the gambling sector a further 460 are created through indirect and induced effects.

The above suggests that the initial employment of the gambling sector (excluding the National Lottery) of 29 679 resulted in an additional 136 523 employment opportunities through the indirect and induced employment effects of the gambling sector and its related activities. This amounted to a total estimated employment figure of 166 202 contributing 1.73% to total non-agricultural formal employment in South Africa (of 9 611 000 in 2012) (Stats SA 2012).

4.7 ADDITIONAL CONTRIBUTIONS BY THE GAMBLING SECTOR

In addition to the direct and indirect effects of the gambling sector on the South African economy as calculated above, several of the major private sector role players (especially casino companies) are active participants in corporate social investment programmes. Millions of rands are allocated to, inter alia, support of old age homes, donations to charity institutions, support of SMMEs, support of crèches, donations to the South African Red Cross, donations to upliftment trusts, support of HIV/AIDS programmes, meals projects at schools, building of classrooms, and many more (see CASA 2008, CASA 2010 and CASA 2012 for a detailed exposition of the casino industry’s social investment programmes).

4.8 CONCLUSION

The following reflects the contribution of the gambling sector (excluding the National Lottery) in South Africa in 2012:

- The initial GDP (value added) generated by the gambling sector amounted to an estimated R10 968.8 million in 2012. This amount is multiplied by indirect and induced effects to a total GDP contribution of R21 937.6 million. This represents an initial GDP contribution of 0.39% with a further 0.38% indirect and induced contribution. The total GDP contribution was 0.77%, which will probably remain at this level for the foreseeable future. The GDP multiplier was 2.0 meaning that for every R100 value added created by the gambling sector itself, another R100 was generated in other sectors of the economy; and
- In total, 29 679 permanent job opportunities were created in the gambling sector in 2012. With an employment multiplier of 5.6, an additional 136 523 employment opportunities in South African can be ascribed indirectly to the gambling sector.
resulting in a total employment figure of 166,202. Direct employment contributed 0.31% to total nonagricultural formal employment in South Africa in 2012. It increased to 1.73% if the indirect and induced effects are also considered.

In addition to the above, the large private sector role-players (mainly casinos) in the gambling industry show a high degree of sensitivity regarding corporate social investment, especially in their neighbouring, less developed communities. BEE and HDI ownership is also prominent in the casino industry.

5. **CONCLUDING REMARKS**

The following reflect the major findings of this report:

- The propensity to gamble (i.e. the percentage of household income/expenditure allocated to legalised gambling) stood at 0.97% in 2012.
- The bulk of legalised gambling expenditure (71.1%) was allocated to casinos, followed by lottery games (11.4%), horse/sports betting (10.3%), LPMs (5.7%) and bingo (1.0%).
- Just more than a quarter of gamblers (26.5%) confirmed that they budgeted a specific amount for gambling. Almost two in every three (63.7%) made no budgetary provision for gambling.
- Gambling activities have a significant redistributational effect. On average, a significant number of punters spend small amounts on gambling while only a small percentage receives large amounts of prize money.
- The less affluent groupings of the South African population are important participants in gambling activities. They were particularly involved in lottery games and illegal gambling activities.
- Almost three in every four gamblers (73.7%) did not receive any social grants from government in 2012. The 20.9% of gamblers who received social grants confirmed that the most important of these grants were child support grants and old age pensions. Almost one in every 10 (10.9%) gamblers received at least a quarter of their household income through social grants.
- The initial percentage of household expenditure on legalised gambling (due to its novelty effect) started tapering off from 1.70% (of household income/expenditure in 2005) to reach a gambling propensity of approximately 0.97% of household income/expenditure in 2012. Future movements in gambling expenditure would probably be sideways, implying that the magnitude of gambling expenditure would increase in tandem with household income growth. The nominal growth (without considering inflation) of the latter would probably be in the 6%-8% range during the next few years. Although the average propensity to gamble would
remain at (or just below) 1% of total household income/expenditure, gambling (especially illegal gambling and national lottery games) will exert a disproportionally negative impact on less affluent households/individuals participating in gambling.

- The gambling sector, with a GDP multiplier of 2.0, contributed (directly and indirectly) 0.77% to the national economy.
- The employment multiplier of the gambling sector was calculated at 5.6. This implies that the 29,679 permanent employment opportunities created by the gambling sector in 2012 were multiplied by an additional 136,523 opportunities that can be ascribed indirectly to the gambling sector resulting in a total employment figure of 166,202. This represents 1.73% of nonagricultural formal employment in South Africa.

It is recommended that the NGB’s initiative to measure the allocation of household income to gambling activities (i.e. the propensity to gamble) and the contribution of the gambling sector to the national economy be replicated in a two- to three-year cycle to serve as an information warning signal on any possible changes in gambling behaviour of the South African population. The impact of gambling on the less affluent part of the population should also form an integral part of this exercise. This report highlights the active involvement of less affluent households in gambling activities, specifically their disproportionate involvement in the national lottery and illegal gambling activities (albeit both falling outside the jurisdiction of the NGB).
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