

## **CHAPTER 3**

### **IMPACT OF GAMBLING ON HOUSEHOLD WELFARE LEVELS AND RETAIL EXPENDITURE**

#### **3.1 INTRODUCTION**

The gambling industry is often accused of having a negative impact on household welfare levels and retail sector activities especially in the direct vicinity of newly established casinos. The NGB consequently requested that, as part of the analysis of the economic impact of gambling on the South African economy, information be collected to provide insight into the effect of gambling on household welfare levels and expenditure displacement.

This chapter focuses on the above issues in South Africa on a macro-level. No attempt will be made to investigate a specific micro-area such as a town that may be influenced negatively by, for example, the establishment of a casino in its area. However, it may well be that the localised economic effects of establishing a casino in a relatively small town differs from the economic impact of the casino industry on the South African economy as a whole.

#### **3.2 OBJECTIVE**

In an effort to comprehend the impact of the gambling industry on households, the following calculations are made:

- propensity to gamble (ie percentage of household expenditure allocated to gambling)
- expenditure items from which gambling expenditure may be displaced
- impact of the gambling industry on retail sales
- application of winnings

The above calculations are made for 2001 with some references to 2002. Calculations for previous years will not be undertaken due to the total absence or limited availability of

legal gambling activities such as casinos and the National Lottery during the pre-2000 period. The chapter commences with some international evidence of the impact of gambling on household expenditure behaviour and consequently also on retail profitability.

### 3.3 INTERNATIONAL EVIDENCE

On a worldwide scale, outside the United States, few references are available that provide comprehensive data on the impact of gambling expenditure on household welfare levels and retail profitability. Nevertheless, this section attempts to briefly identify key international trends regarding the effect of gambling on retail outlets in a few selected countries. (See Ligthelm 1999:18-23 for a more detailed discussion.)

#### 3.3.1 United States

The following are some of the key trends experienced in the USA:

- Casino takings are largely redirected from expenditure on other goods and services, particularly the entertainment industry, as time spent on gambling is not available to be spent in pursuit of other consumption activities (VCGA 1997:123).
- It was found that consumers take gambling money from purchases where postponement is possible, for example, clothing and apparel and consumer durables such as furniture (VCGA 1997:123).
- Casinos in the USA impacted negatively on other forms of entertainment, notably the greyhound racing industry, the lottery industry, movies, concerts, the horse racing industry and the restaurant industry, and cannibalised some of those existing businesses (Goodman 1995:32 as cited in VCGA 1997:125 & The Evans Group 1996:2-7).
- Research commissioned by the WEFA Group (Arthur Anderson 1996:35) focused on the effect of casinos on the fifteen largest supply industries. It was found that for every US \$100 million in gambling revenue, casinos made nearly US \$22,7 million in direct purchases from real estate, advertising, construction, maintenance, landscaping, banking, food and other industries.

- Casinos are responsible for considerable upstream expenditure in the form of the procurement of supplies, equipment and services that favours local and regional businesses. The economic impact of downstream expenditure in terms of induced expenditure (spending of wages and salaries by casino staff) should also not be neglected (AIGR 1998:269).
- Although substitution occurs between other discretionary expenditure and gambling, this tends to be concentrated within a year of increased gambling opportunities becoming available. It is claimed that this effect is negated in the longer term by overall income growth (VCGA 1997:126).

Case studies in the USA on the effect of the establishment of new casinos on existing retail businesses reveal positive and negative consequences. A report by the Victorian Casino and Gambling Authority (VCGA 1997:129), comparing the results of various case studies, argues as follows on the issue whether casinos engender economic development or a cannibalisation effect through the redistribution of expenditure.

Prior to the legalisation of gambling in 1991, Tunica County in Mississippi was known as the poorest county in the USA, almost totally dependent on agriculture as its economic base. Unemployed and welfare dependent residents have decreased dramatically since the establishment of casinos. Of particular importance is a market improvement in retail sales and other sectors that has lifted the county out of its previously destitute state. Atlantic City, (a well developed city in New Jersey) on the other hand, highlighted the more negative consequences of casino gambling. This form of gambling served only to cannibalise existing businesses and dominate the city's economy. A decline was experienced in sectors such as restaurant trade and food outlets. The retail market did not gain the spillover effects expected from the casino industry.

Casinos established as part of an economic development strategy have proven to be successful in some instances, particularly in Las Vegas. Las Vegas did not have an established economic base prior to the development of the casino industry. However, other examples have shown that communities generally only benefit from casinos if the money lost is being imported from outside. When casinos derive most of their money from locals, all you really have is a redistribution of expenditure from existing businesses.

### 3.3.2 Europe

Gambling research for European countries is not easily accessible and the situation therefore cannot be compared to experience in the United States, where extensive literature in that field is available. Literature focuses particularly on lotteries, as this is often the dominant form of gambling in European nations. The impact of lotteries and other forms of gambling on the retail sectors is often not made clear and therefore no solid conclusions can be drawn.

All European forms of gambling have been devised as either a form of fund raising or as a source of government revenue. Although gambling's role in the overall economic balance of European nations is difficult to determine, it appears to take less precedence than in many American states' economies (VCGA 1997:34-35).

### 3.3.3 **Australia**

A study on national trends in retail sales and gambling expenditure was conducted in Australia in 1997. This study covers the period 1989/90 to 1995/96 (VCGA 1997). During this period retail sales maintained their share of household disposable income, increasing slightly from 31,7 % in 1989/90 to 32,0 % in 1995/96. During the same seven-year period, gambling expenditure as a percentage of disposable income increased from 1,9 % in 1989/90 to 3,0 % in 1995/96.

The above data were calculated for individual Australian states as well. In New South Wales (responsible for 46 % of Australia's gambling turnover) retail expenditure as a percentage of household disposable income demonstrated a constant share of 31,1 % over the seven-year period. Percentage expenditure of disposable household income on gambling was consistently higher than in all other states and increased from 2,6 % in 1989/90 to 3,2 % in 1995/96. It should be emphasised that the Australian findings refer to the impact of gambling on national or state retail aggregates. The impact on smaller units, for example city economies where casinos are established, might show different results.

### 3.3.4 **Summary**

Cultural and socioeconomic differences complicate the extension of international analysis unreservedly to the South African context. Readers are also reminded that substantial differences may prevail regarding the structure and scale of the industry as well as the population sizes and income levels in the various countries and/or towns.

Generally, it seems that the many possible effects of casinos on households, retail and entertainment services may be largely localised. Businesses in the immediate or adjacent vicinity of casinos might experience negative or positive effects depending on the specific sector in which the business is located as well as the situation of a particular area in which a gambling facility is established. However, it is clear that some displacement of household expenditure in favour of gambling is inevitable. The larger the share of local residents in gambling the more severe the impact on local retail businesses. It is also possible that the effect of increased gambling opportunities on retail business may be negated in a relatively short period if overall economic and income growth is experienced. The substitution effect can, however, have disastrous effects in a stagnant or declining economy.

### 3.4 **METHODOLOGY**

Information sources on expenditure displacement and sectoral effects in South Africa are incomprehensive and often based on anecdotal evidence not necessarily representative of the macro-picture. For purposes of this report, the following data sources have been consulted:

- Income and expenditure surveys of the BMR in specific areas (Martins 2000; Martins 2001; Martins 2002(a)). Only surveys conducted from 2000 onwards were used to capture household expenditure on gambling, specifically procurement of lottery tickets.
- The total household income and expenditure database of the BMR to extract control totals.
- The omnibus expenditure surveys of AC Nielsen conducted in 2000 and 2001 (AC Nielsen 2001/2002).
- Information supplied by roleplayers in the gambling industry. (Unpublished information supplied by the NGB, Uthingo and casinos was particularly helpful.)

- Trends in household expenditure in South Africa (Martins 2002(b)).
- Household expenditure surveys and the consumer price indexes (CPI) of Statistics South Africa (Stats SA 1991, Stats SA 1997 and Stats SA 2002(a)).

### 3.5 **STRUCTURAL CHANGES IN HOUSEHOLD EXPENDITURE**

Prior to a discussion of the allocation of household expenditure to gambling, some indication is given of structural changes that emerged in household expenditure over the past few years. This will indicate to what extent other expenditure changes coincided with the establishment of the legal gambling industry in South Africa.

#### 3.5.1 **Weights of the consumer price index (CPI)**

The CPI is a series of figures showing how the average price level of those goods and services (basket of goods and services) bought by a typical consumer or household changes over time. The expenditure on goods and services purchased by an average household is derived from the Survey of Income and Expenditure of Households (Stats SA 2002a). The results of this survey are used to determine the relative importance (weight) of each item in the 'basket' of goods and services purchased by an average household. The weight of a specific product/service is calculated by dividing the total amount spent by all households in South Africa on the specific product/group by the total amount spent on all goods and services by all households.

Changes in the weights over time therefore suggest changes in households' expenditure patterns. By comparing the weights calculated from surveys done over time it is possible to obtain an indication of changes in expenditure in monetary terms of households on main expenditure groups as well as on individual spending items (Martins 2002(b):119).

The general trend suggested by household expenditure calculations in South Africa over the past 25 years was a considerable increase in expenditure on services (eg communication, education, health, etc) and a corresponding decline in the relative expenditure on goods (eg food, clothing, etc). The following shows the increase in the

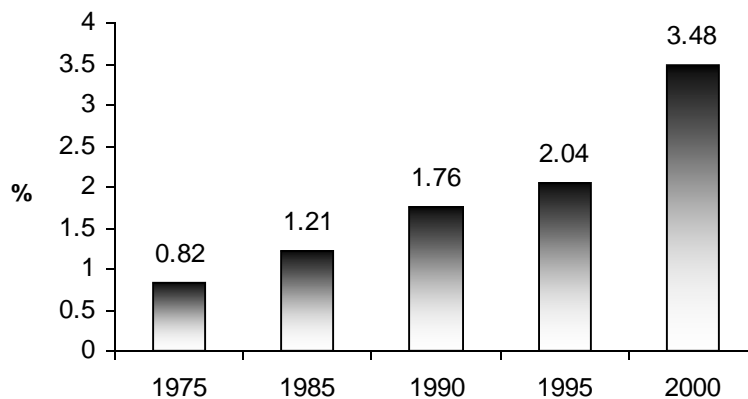
value of expenditure (or CPI weights) for a few selected expenditure items over the 25-year period from 1975 to 2000.

<b>Main expenditure group</b>	<b>% increase</b>
Education	324,4
Medical and health expenses	243,8
Communication	201,0
Household fuel and power	111,5
Housing	68,6
Personal care	25,8

The above shows a considerable increase in the expenditure on education, medical expenditure and communication. The above three items represent expenditure on services. Figures 3.1 to 3.3 provide graphical presentations of the changes in the percentage of household expenditure on education (figure 3.1), medical and health expenses (figure 3.2) and communication (figure 3.3) from 1975 to 2000.

Household expenditure on education increased from 0,82 % of total household expenditure in 1975 to 3,48 % in 2000, representing an increase of 324,4 % for the whole period. Major increases were evident especially from 1995 to 2000.

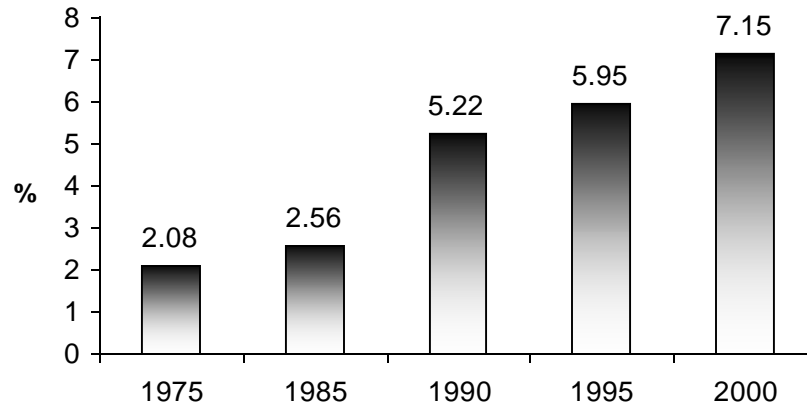
**FIGURE 3.1**  
**PERCENTAGE OF HOUSEHOLD EXPENDITURE ON EDUCATION, 1975 – 2000<sup>1)</sup>**



1) CPI weights for metropolitan areas

Household expenditure on medical and health services increased from 2,08 % of household expenditure in 1975 to 7,15 % in 2000. Sharp increases were evident from especially 1990 to 2000.

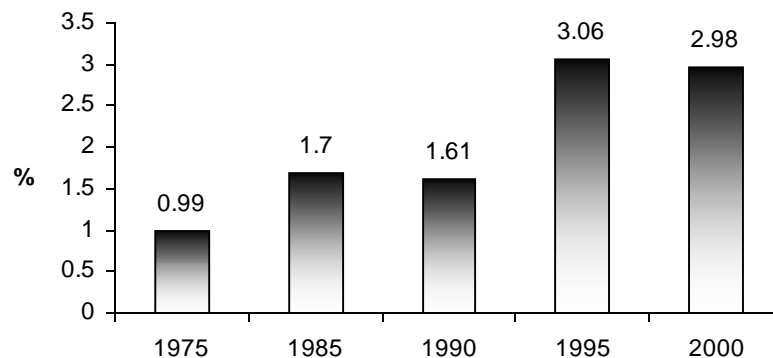
**FIGURE 3.2**  
**PERCENTAGE OF HOUSEHOLD EXPENDITURE ON MEDICAL AND HEALTH EXPENSES, 1975 – 2000<sup>1)</sup>**



1) CPI weights for metropolitan areas

Expenditure on communication, such as cellphones, increased from just less than one percentage point of household expenditure in 1975 to more than 3 % in 1995. A slight decrease to 2,98 % was experienced between 1995 and 2000.

**FIGURE 3.3**  
**PERCENTAGE OF HOUSEHOLD EXPENDITURE ON COMMUNICATION EXPENSES, 1975 – 2000<sup>1)</sup>**





## 1) CPI weights for metropolitan areas

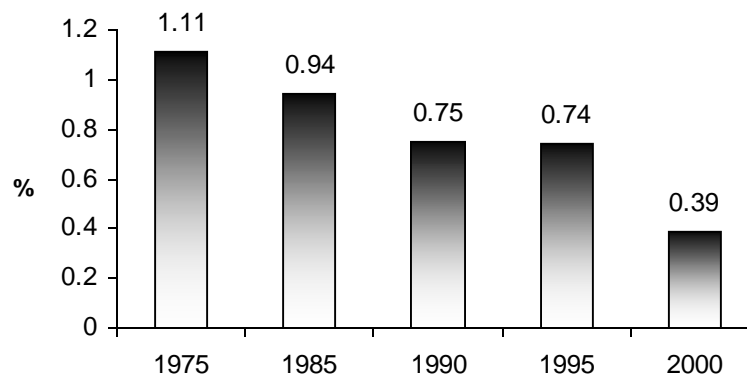
A decrease was experienced in the percentage of household expenditure on the following main expenditure groups in the past 25 years:

Main expenditure group	% decrease
Reading matter	64,9
Clothing and footwear	62,9
Furniture and equipment	57,6
Alcoholic beverages	32,7
Cigarettes and tobacco	32,5
Food	16,0

Figures 3.4 to 3.6 show the percentage of household expenditure allocated to reading matter, clothing and footwear and furniture and equipment from 1975 to 2000 respectively.

Expenditure on reading matter decreased from 1,11 % of total household expenditure in 1975 to 0,39 % in 2000, representing a total decline of 64,9 %.

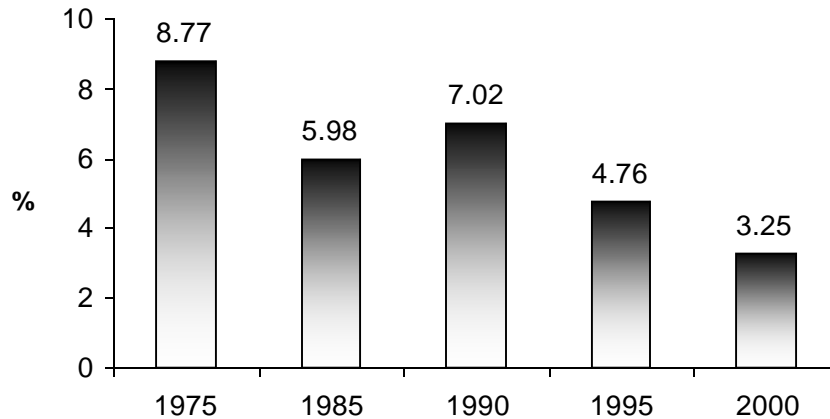
**FIGURE 3.4**  
**PERCENTAGE OF HOUSEHOLD EXPENDITURE ON READING MATTER,**  
**1975 – 2000<sup>1)</sup>**



## 1) CPI weights for metropolitan areas

A considerable decline in the percentage allocation of household expenditure to clothing and footwear was also experienced – from 8,77 % in 1975 to only 3,25 % in 2000.

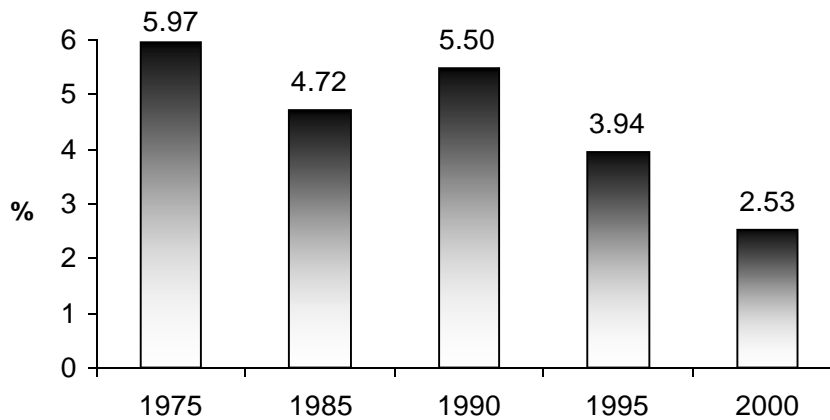
**FIGURE 3.5**  
**PERCENTAGE OF HOUSEHOLD EXPENDITURE ON CLOTHING AND FOOTWEAR, 1975 – 2000<sup>1)</sup>**



1) CPI weights for metropolitan areas

Figure 3.6 depicts a decline in household expenditure on furniture and equipment from 5,97 % in 1995 to 2,53 % in 2000.

**FIGURE 3.6**  
**PERCENTAGE OF HOUSEHOLD EXPENDITURE ON FURNITURE AND EQUIPMENT, 1975 – 2000<sup>1)</sup>**



1) CPI weights for metropolitan areas

It is important to mention that the changes indicated above refer to changes in monetary expenditure and do not measure changes in real terms. Average annual household expenditure for the quoted years was as follows (Van Wyk 2001:20): 1975 = R768; 1985 = R2 878; 1990 = R5 641; 1995 = R9 121 and 2000 = R13 502. As a result of this growth in the monetary value of average household expenditure, a decline in the percentage allocation to a particular item may still imply a growth in monetary terms. It should also be highlighted that the major changes, as indicated in figures 3.1 to 3.6, occurred from 1990 and especially from 1995 to 2000.

### 3.5.2 Implication

The above discussion highlights the changes in expenditure patterns of only a few products and services. However, these examples suffice to illustrate that major structural changes in household expenditure patterns coincided with the establishment of legal gambling in South Africa. It would seem that increases in expenditure on services, such as education, health and communication (mainly cellphones), coincided with the opening-up of expenditure possibilities on gambling. At the same time, expenditure on various tangible retail goods declined. Although this pattern is evident over the past two decades, it was accelerated after 1990 due to, inter alia, the introduction of new expenditure items such as cellphones and the Internet as well as changed government expenditure priorities, that resulted in larger private contributions to services such as education and health. The World Bank (2001:224) also confirms that the urbanisation process tends to produce lower-than-average shares for expenditure on retail items, such as food, and higher-than-average shares for services, such as rent, transport and communication. All these changes may contribute to decreased retail figures. It would be inappropriate to single out one service item such as gambling, cellphones or education as the sole culprit for lower retail expenditure on goods.

## 3.6 PROPENSITY TO GAMBLE

This section highlights the methodology used in calculating the propensity to gamble, disaggregated in terms of a few sociodemographic variables. It is important to state at the outset that exact data are not available in this respect. The gambling sector is still in its

development phase, implying some instability in household behaviour viz-a-viz gambling. Aspects such as the novelty effect, the incomplete process of establishing casinos and the fluctuating level of gambling advertising, to name but a few, may continuously influence households' propensity to gamble.

### 3.6.1 Household expenditure

Table 3.1 contains the household cash expenditure in South Africa by main expenditure group for 2000 to 2002. Total cash expenditure amounted to R492,0 billion in 2000 and increased to R558,5 billion in 2002.

Expenditure on gambling is included in the 'miscellaneous' expenditure group that amounted to R10,7 billion in 2000 and R11,7 billion in 2002. Expenditure items included in this expenditure group ('miscellaneous') are, apart from gambling, inter alia, the following: membership fees of organisations, professional fees, lawyer's fees and bank charges/interests, financial expenses and contributions and church contributions. The table shows that the share of this expenditure group amounted to just more than 2,0 % of household expenditure. The nature of items included in this expenditure group, suggests that the propensity to gamble may represent the major part of this expenditure group but would probably not exceed a figure of 2 % (except in 2002 that is based on estimates).

**TABLE 3.1**  
**TOTAL ANNUAL HOUSEHOLD CASH EXPENDITURE BY MAIN**  
**EXPENDITURE GROUP, 2000 - 2002**

Main expenditure group	2000		2001		2002	
	R'000	%	R'000	%	R'000	%
Food	103 225 525	20,98	110 729 792	21,09	119 542 590	21,40
Clothing, footwear & accessories	20 493 051	4,17	20 804 365	3,96	21 402 888	3,83
Housing	56 164 326	11,42	58 789 199	11,20	60 981 626	10,92
Fuel & light	3 246 690	0,66	3 545 170	0,68	3 797 386	0,68
Transport	44 916 787	9,13	48 339 747	9,21	51 378 374	9,20
Medical services	15 124 464	3,07	17 103 780	3,26	18 910 893	3,39
Education	10 527 709	2,14	11 833 901	2,25	12 650 555	2,27
Personal insurance	18 384 299	3,74	18 740 598	3,57	19 980 163	3,58
Recreation, entertainment & sport	3 643 056	0,74	3 771 541	0,72	4 017 173	0,72
Household furniture	12 618 901	2,56	13 511 291	2,57	14 182 451	2,54
Alcoholic beverages	13 017 954	2,65	14 181 039	2,70	15 487 109	2,77
Cigarettes & tobacco	10 768 395	2,19	12 034 787	2,29	12 870 861	2,30
Washing & cleaning materials	5 571 591	1,13	6 104 733	1,16	6 687 002	1,20
Dry-cleaning & laundry	1 143 170	0,23	1 212 717	0,23	1 334 616	0,24

(continued)

**TABLE 3.1 (CONTINUED)**

Personal care	13 388 998	2,72	14 531 650	2,77	15 743 181	2,77
Communication	2 438 343	0,50	2 607 015	0,50	2 786 614	0,50
Reading matter & stationery	2 521 446	0,51	2 750 032	0,52	3 043 236	0,54
Servants	9 826 900	2,00	10 714 943	2,04	11 370 705	2,04
Support of relatives (cash)	2 565 265	0,52	2 756 505	0,53	2 944 419	0,53
Holiday (excluding transport)	6 355 181	1,29	6 785 193	1,29	7 211 766	1,29
Income tax	72 703 899	14,78	77 612 406	14,79	82 518 845	14,77
Miscellaneous	10 679 622	2,17	10 910 618	2,08	11 653 304	2,09
Savings	12 104 738	2,46	12 906 616	2,46	13 684 312	2,45
Household utilities	32 816 076	6,67	34 593 622	6,56	36 214 748	6,48
Household equipment & appliances	7 748 091	1,57	8 052 245	1,53	8 379 483	1,50
<b>Total</b>	<b>491 994 488</b>	<b>100,0</b>	<b>524 923 515</b>	<b>100,0</b>	<b>558 504 311</b>	<b>100,0</b>

Source: Martins 2000; Martins 2001; Martins 2002(a)

### 3.6.2 Definition of propensity to gamble

Propensity to gamble is defined as the percentage of household cash expenditure allocated to gambling. The amount of household budgets allocated to gambling is calculated as follows:

$$\begin{aligned}
 & \text{Total amount wagered by patrons/participants} \\
 & - \text{(minus) amount returned to players} \\
 & = \text{(equals) Gross Gaming Revenue (GGR) of gambling institutions. This amount} \\
 & \quad \text{(GGR) divided by total household expenditure equals propensity to gamble.}
 \end{aligned}$$

The above calculation implies that the prize money allocated to patrons or participants by gambling institutions reverts back to households as part of their income stream. However, it should be noted that the allocation of prize money is largely concentrated on a few households while gambling expenditure is effected by a large number of households.

In this report, the GGR of casinos, bingo and horse racing is used for calculating propensity to gamble. Propensity to buy lottery tickets is calculated somewhat differently.

Expenditure on lottery tickets constitutes, on average, R10 per buyer per draw (unpublished information, Uthingo). Although the National Lottery maintains a large prize pool (50 % of lottery ticket sales should be allocated to prizes over the seven-year license term of Uthingo) winnings are highly concentrated in a few households. A calculation of the distribution of prizes on 1 June 2002, for example, suggests that

approximately 6 % of lottery ticket buyers received prizes. Almost 90 % of these winners received R28 back as prizes while the jackpot, received by one person, stood at R20 million. The jackpot prize should constitute 18,25 % of the prize pool over the license period of Uthingo (see section 3.8.2).

On the basis of the above argument, the propensity to buy lottery tickets is calculated as follows in this report:

Total value of procured lottery tickets  
 - (minus) 40,875 % of the above amount, constituting the total prize pool, minus  
 the division 1 prize (ie the jackpot)  
 = (equals) the amount forfeited by households to lottery tickets (59,125 % of  
 sales)

The rationale for excluding the lottery jackpot from the prize pool reverting back to the household income stream is that the jackpot is normally invested and does not, therefore, form part of normal household expenditure cycle. Although the above argument also holds true for casinos, for example, information on the jackpots paid out by the various casinos over a year period is not available.

### 3.6.3 Calculation of propensity to gamble

The majority of data sources utilised for the calculation of the propensity to gamble contain information for 2001. However, the volatility in the propensity to gamble and hence, changing percentages over time, are discussed in the next section.

The community survey conducted as part of the NGB study suggested that the population participating in gambling spent R83,38 per household per month in the month preceding the survey (ie for April 2002). This amounted to R1 000,56 for the whole year. It was further established that the participation rate in gambling amounted to 72,5 % of households, implying that the average expenditure for the population as a whole amounted to R725,41 for 2002 (ie for gamblers and nongamblers). Given the total number of

households in South Africa of 9 799 535 and an annual gambling expenditure of R679,22<sup>1</sup> for 2001, the propensity to gamble can therefore be calculated as R6 656 040 163, constituting 1,27 % of total household expenditure for 2001. This percentage represents approximately three fifths of the expenditure on the miscellaneous expenditure group in table 3.1. This figure will be verified and adjusted further in the next section, taking into account, inter alia, the factors described below.

The following two factors may have a bearing on the above calculation. The first is that respondents often try to impress interviewers by exaggerating or reporting imaginary expenditure on status items. Conversely, expenditure is frequently underreported on items such as alcoholic beverages, since excessive purchases of this item are socially less acceptable. The market potentials for various expenditure items are often calculated to evaluate the correctness of household survey responses. It was found, for example, that households probably report correctly on the purchases of essential items, such as food, but tend to overstate expenditure on items such as expensive clothing and certain items of furniture (Martins 2001). Expenditure on socially less acceptable items such as cigarettes and tobacco was underreported by 88 % and on alcoholic beverages by over 200 %. A comparison of the NGB survey data with household expenditure surveys conducted by the BMR suggests some underreporting of gambling expenditure that may be in the region of 15 to 25 % (Martins 2001; Martins 2002(a)). The relatively short existence of legal gambling in South Africa precludes any final judgement on the precise extent of underreporting on gambling expenditure during household income and expenditure surveys.

Secondly, households tend to overstate expenditure if asked for expenditure on only one or two items, as was the case in the NGB questionnaire. If household expenditure is recorded for a total budget and verified with household disposable income, much more accurate data are provided for the various expenditure items. This factor may therefore result in some overreporting of gambling expenditure in the NGB survey.

The above arguments suggest some degree of underreporting in gambling expenditure as calculated above. The degree of underreporting due to the social status of gambling is

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<sup>1</sup> The R725,41 expenditure in 2002 deflated by a CPI of 6,8 % to arrive at an expenditure figure of R679,22 for 2001.

probably larger than the overreporting resulting from enquiring on gambling expenditure as a single expenditure item. The following section is aimed at verifying the propensity to gamble with available secondary data.

#### 3.6.4 **Verification: propensity to gamble**

The propensity to gamble, as calculated in section 3.6.3, can be verified by the gross gambling revenue (GGR) and lottery ticket sales less division 2 to division 7 prizes (see section 3.8.2) as reported by roleplayers in the gambling industry. GGR is defined as the total amount wagered by punters minus the amount returned to players. GGR, therefore, represents the amount retained by gambling institutions and therefore represents the amount forfeited by households for gambling.

The following GGR figures and lottery ticket sales less division 2 to division 7 prizes are available. Some of the figures refer to the financial year 1 April 2000 to 31 March 2001 and some cover the 2001 calendar year (unpublished information NGB and Uthingo).

##### (a) **Casinos**

The GGR figures reported by the 28 operational casinos for the period 1 April 2000 to 31 March 2001 amounted to R4 788 781 278. (Information for the 2001/2002 financial year was not available at the time of the compilation of the report.)

##### (b) **Bingo**

The GGR for the seven licensed Bingo Halls in Gauteng amounted to R8 548 000 for the period 1 April 2000 to 31 March 2001.

##### (c) **Horse betting (including sports and other betting)**

The turnover of horse betting for the period 1 April 2000 to 31 March 2001, amounted to the following:

- Bookmakers                      R2 138 750 000



- Totalisators                    R2 970 383 000
- **Total**                            **R5 109 133 000**

GGR figures are not reported as such by Bookmakers and Totalisators. However, it is estimated by the NGB (unpublished information) that the return to punters amounted to approximately 80 %, resulting in a GGR of approximately 20 % of turnover, namely R1 021 826 600.

(d) **National Lottery**

Sales of lottery tickets amounted to R1 645 415 743 for the period January to December 2001. The amount forfeited by households as discussed in section 3.6.2 amounted to R972 852 058 (ie 59,125 % of R1 645 415 743).

(e) **Summary**

In summary, the following items constitute the components of the propensity to gamble by gambling mode, on the basis of the above secondary data:

- Casinos                            R4 788 781 278
- Bingo                                R    8 548 000
- Horse betting                    R1 021 826 600
- National lottery                R  972 852 058
- **Total**                            **R6 792 007 936**

This amount of R6 792 million is approximately R136 million or 2,1 % higher than the amount calculated in section 3.6.3. This discrepancy can be attributed largely to underreporting by households on their gambling expenditure. The fact that this figure is somewhat lower than expected (underreporting was estimated at between 15 % and 25 % in section 3.6.3), is probably due to the practice that the NGB survey enquired on a single expenditure item without the benefit of verifying total expenditure with disposable income.

The R6 792 million gambling expenditure represents a **propensity to gamble of 1,30 %** compared to the earlier calculation of 1,27 %.

The expenditure of R6 792 million and propensity of 1,30 % are used for the rest of the report as the amount allocated to gambling in 2001.

A comparison of the R6 792 million with household expenditure by main expenditure group in table 3.1 reveals the following:

- Expenditure on gambling (1,30 % of total household expenditure) correlates closely with expenditure on the following expenditure groups: holidays excluding transport (1,29 %); household equipment and appliances (1,53 %); washing and cleaning materials (1,16 %), including items such as soap, soap powder, softeners, bleach and flour and shoe polish.
- Expenditure on gambling is almost twice as high as expenditure on recreation and entertainment and sport (0,72 %) (which includes, inter alia, club fees, TV license, TV rental, admission to bioscope, drive-in, dances, opera, concerts and sports events, sporting equipment, records and tapes, photography, toys and games and purchases of pets).
- Expenditure on gambling is almost three times as high as expenditure on reading matter and stationery (0,52 %) (which includes newspapers, magazines, books (not school), writing paper and pens and pencils) and expenditure on communication (0,50 %).

### 3.6.5 Propensity to gamble by mode

By using the GGR of casinos, bingo and horse racing as well as the lottery figures, calculated in section 3.6.4, the following propensity-to-gamble figures can be presented by gambling mode for 2001:

	<b>Propensity</b>	<b>Allocation for each R100 spent on gambling</b>
• Casino	0,91 %	R70
• Bingo	0,002 %	15c
• Horse betting	0,20 %	R15
• National lottery	0,19 %	R15
• <b>Total Gambling</b>	<b>1,30 %</b>	<b>R100</b>

The above suggests that casinos represented by far the most important form of gambling in terms of expenditure in 2001. Almost three quarters of gambling expenditure (R70 out of every R100) is allocated to casinos, followed by the horse racing and the National Lottery, each receiving R15 of every R100 spent on gambling in 2001.

### 3.6.6 Propensity to gamble by province

GGR and lottery sales are available by province. Table 3.2 shows the distribution of lottery ticket sales and the amount forfeited by households by province for 2001. Gauteng attracted 40,1 % of all ticket sales followed by KwaZulu-Natal and the Western Cape with close to 14 % each. The Northern Cape received 1,7 % while the other five provinces each attracted between 5 and 7 %.

**TABLE 3.2**

**SALES OF LOTTERY TICKETS BY PROVINCE, JANUARY 2001 – DECEMBER 2001**

Province	Sales	Amount forfeited by households	% Contribution
Eastern Cape	100 122 800	59 197 606	6,1
Free State	82 807 345	48 959 842	5,0
Gauteng	660 062 303	390 261 836	40,1
KwaZulu-Natal	236 628 328	139 906 499	14,4
Mpumalanga	110 484 563	65 323 998	6,7
North West	109 877 933	64 965 328	6,7
Northern Cape	27 438 783	16 223 180	1,7
Northern Province	95 823 798	56 655 820	5,8
Western Cape	222 169 893	131 357 949	13,5
<b>Grand Total</b>	<b>1 645 415 743</b>	<b>972 852 058</b>	<b>100,0</b>

The development levels of casinos in the provinces differ considerably, impacting on the distribution of casino GGR by province. The GGR by province in 2000/01 is contained in table 3.3. This may change as casinos are erected and become fully operational in the various provinces. In the said year, Gauteng generated more than half (51,2 %) the casino GGR, followed by KwaZulu-Natal (17,4 %) and North West (11,0 %).

**TABLE 3.3**

**CASINO GGR BY PROVINCE, 1 APRIL 2000 – 31 MARCH 2001**

Province	Gross Gambling Revenue (GGR) (Rand)	%
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Eastern Cape	2 Casinos	338 951 859	7,0
Free State	2 Casinos	84 113 000	1,8
Gauteng	5 Casinos	2 442 000 000	51,2
KwaZulu-Natal	2 Casinos	831 336 631	17,4
Mpumalanga	3 Casinos	231 517 344	4,9
Northern Cape	1 Casino	7 578 114	0,2
Northern Province	1 Casino	25 691 558	0,5
North West	5 Casinos	524 257 110	11,0
Western Cape	3 Casinos	291 239 662	6,1
<b>Total</b>	<b>24 Casinos</b>	<b>4 771 685 278</b>	<b>100,0</b>

Table 3.4 confirms the dominance of Gauteng and, to a lesser extent, KwaZulu-Natal and the Western Cape, in horse betting. These three provinces generated 97,8 % of the turnover of bookmakers (Gauteng 58,5 %, Western Cape 23,6 % and KwaZulu-Natal 15,7 %) and 84,5 % of the turnover of totalisators (Gauteng 43,8 %, KwaZulu-Natal 28,3 % and Western Cape 12,4 %).

**TABLE 3.4**  
**GGR FROM HORSE BETTING (INCLUDING SPORTS BETTING),**  
**1 APRIL 2000 - 31 MARCH 2001**

<b>Province</b>	<b>Turnover: Bookmakers (R000)</b>	<b>%</b>	<b>Turnover: Totalisators (R000)</b>	<b>%</b>
Eastern Cape	30 000	1,4	117 000	3,9
Free State	4 200	0,2	143 000	4,8
Gauteng	1 252 000	58,5	1 300 000	43,8
KwaZulu-Natal	366 000	15,7	840 000	28,3
Mpumalanga	10 000	0,5	100 000	3,4
Northern Cape	250	0,01	15 383	0,5
Northern Province	1 300	0,1	88 000	3,0
North West	1 000	0,05	0	0,0
Western Cape	504 000	23,6	367 000	12,4
<b>Total</b>	<b>2 138 750</b>	<b>100,0</b>	<b>2 970 383</b>	<b>100,0</b>

### 3.6.7 Volatility of gambling expenditure

Although one tends to assume that the propensity-to-gamble figures arrived at in the preceding calculations are fairly fixed percentages valid for an extended period, it would seem that propensity to gamble in South Africa is highly volatile, especially with regard to expenditure on the National Lottery. The other gambling markets, such as casinos, also show some structural changes. This can be attributed largely to the opening of new gambling facilities and not necessarily to changes within an already established market. Volatility in this section will only be illustrated by referring to the lottery market due to the availability of lottery sales data on a weekly basis. The development phase of the gambling market precludes any final conclusions based on cycles in the propensity to gamble in, for example, casinos.

Table 3.5 shows the amount spent on lottery tickets for the periods March to December 2000, January to December 2001 and January to 19 October 2002. Expenditure for the three periods fluctuated considerably. It decreased from R2,3 billion for the 2000 period to R1,6 billion for the whole of 2001 and increased considerably for the first nine and a half months of 2002 to R5,7 billion. The relatively large amount spent during the last ten months of 2000 can be attributed to the novelty effect of introducing a new National Lottery in South Africa. The extremely high expenditure growth of 245,3 % between 2001 and the first nine and a half months of 2002 can be attributed to the introduction of a second weekly draw (on Wednesdays) and the mega-prizes offered as jackpots (between R20 million and R30 million jackpots in some draws).

**TABLE 3.5**  
**SALES OF LOTTERY TICKETS, 2000 - 2002**

Period	R	Amount forfeited by households (59,125 % of sales)	% change
March 2000 – Dec 2000	2 285 429 965	1 351 260 467	..
January 2001 – Dec 2001	1 645 415 743	972 852 058	-28,0
January 2002 – 19 October 2002	5 682 252 270	3 359 631 655	+245,3

The propensity to buy lottery tickets for the three periods in table 3.5 reveals the following:

	<b>Propensity to buy lottery tickets<sup>2</sup></b>
• March 2000 – Dec 2000	0,27 %
• January 2001 – Dec 2001	0,19 %
• January 2002 – 19 October 2002	0,60 %
• January 2002 – December 2002 (based on the assumption that lottery sales will continue on its January to October level.)	0,75 %

The above shows a 245 % increase in the propensity to buy lottery tickets from 2001 to the first nine and a half months of 2002. If the same level of ticket purchasing is maintained for the rest of 2002, the propensity to buy lottery tickets would increase to over 0,75 % of household expenditure (only for illustrative purposes).

A perspective on 2002 would be the following. Adding the propensity to gamble on non-lottery modes of 1,11 % (0,91 % for casinos and 0,20 % for horse wagering) in 2001 to the estimated 0,75 % for lottery ticket purchases (plus the fact that new casinos will be opened during 2002) would result in a propensity to gamble of more than 1,86 % for 2002. This is almost 45 % higher than for 2001.

The above suggests that South Africa portrays typical characteristics of a developing gambling market with substantial volatility. Gambling market maturity will probably only be achieved after the various gambling modes have established their physical presence. Volatility can probably be attributed to, inter alia, the following factors:

- The novelty effect of opening up access to new gambling facilities, which may create an initial high expenditure level. A fully established market will probably only materialise after the development phase of new facilities has run its course.
- The enthusiastic reaction of the population to high jackpot prizes. UK evidence confirms that low prizes result in low levels of gambling expenditure. No unlimited payout machines are

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<sup>2</sup> Amount forfeited by households as a percentage of household expenditure for the relevant year.

allowed in the UK. The highest prize that a gambling machine can pay out is £1 000 and these machines are restricted only to casinos (BACTA 2001).

- Fantasising about winning large sums of money that may be tempered over time as the low odds become obvious.
- Chasing gambling losses.
- Internet or on-line gambling, which may further stimulate gambling expenditure.

### 3.7 **EXPENDITURE DISPLACEMENT EFFECTS**

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:

- (a) other forms of gambling expenditure (from casinos to the lottery or vice versa for example)
- (b) retail spending on goods
- (c) spending on services such as entertainment expenditure, communication or health
- (d) savings

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 large number of persons spend numerous (small) amounts on gambling while the income stream is concentrated in one or two large amounts and payouts to a far smaller number of persons than originally participating in gambling expenditure.

In illustrating possible displacement effects, two scenarios are presented in this report. The first portrays the effect if only small pro-rata cuts are effected to household expenditure items. The second is based on the responses emanating from the NGB community survey.

### 3.7.1 Expenditure displacement: pro-rata cuts

Table 3.6 shows the cuts that would have been effected if expenditure was displaced from existing household expenditure items to gambling. For purposes of the calculations it was assumed that a large percentage of gambling expenditure and expenditure on other entertainment were already reported by households under the 'miscellaneous' item. Only the additional amount spent on gambling therefore had to be displaced from other household expenditure items. It is assumed that 1,27 % of household expenditure on gambling is already reported in household surveys as part of the 'miscellaneous' expenditure item and warrants no additional displacement from other household expenditure items. It is therefore assumed that only the difference between 1,30 % and 1,27 % demands additional cuts from other items to gambling. The calculation in table 3.6 does not portray the possible displacements within the 'miscellaneous' spending group, for example, from restaurants to gambling. The table shows that the displacement from other items to gambling would be in the same ratio as the composition of household expenditure. Expenditure on food for example, representing 21,09 % of household expenditure, would decline by R29 million.

**TABLE 3.6**  
**DECREASE IN HOUSEHOLD EXPENDITURE DUE TO PRO-RATA**  
**EXPENDITURE CUTS CAUSED BY GAMBLING EXPENDITURE, 2001**

Main expenditure group	Expenditure structure		Displacement <sup>1)</sup>	Postdisplacement structure	
	R'000	%		R'000	R'000
Food	110 729 792	21,09	-29 378	110 700 414	21,09
Clothing, footwear & accessories	20 804 365	3,96	-5 519	20 798 846	3,96
Housing	58 789 199	11,20	-15 601	58 773 598	11,20
Fuel & light	3 545 170	0,68	-941	3 544 229	0,68
Transport	48 339 747	9,21	-12 826	48 326 921	9,21
Medical services	17 103 780	3,26	-4 533	17 099 247	3,26
Education	11 833 901	2,25	-3 139	11 830 762	2,25
Personal insurance	18 740 598	3,57	-4 974	18 735 624	3,57



Recreation, entertainment & sport	3 771 541	0,72	-1 000	3 770 541	0,72
Household furniture	13 511 291	2,57	-3 585	13 507 706	2,57
Alcoholic beverages	14 181 039	2,70	-3 762	14 177 277	2,70
Cigarettes & tobacco	12 034 787	2,29	-3 192	12 031 595	2,29
Washing & cleaning materials	6 104 733	1,16	-1 620	6 103 113	1,16
Dry-cleaning & laundry	1 212 717	0,23	-321	1 212 396	0,23
Personal care	14 531 650	2,77	-3 857	14 527 793	2,77
Communication	2 607 015	0,50	-691	2 606 324	0,50
Reading matter & stationery	2 750 032	0,52	-730	2 749 302	0,52
Servants	10 714 943	2,04	-2 842	10 712 101	2,04
Support of relatives (cash)	2 756 505	0,53	-730	2 755 775	0,52
Holiday (excluding transport)	6 785 193	1,29	-1 801	6 783 392	1,29
Income tax	77 612 406	14,79	-20 185	77 592 221	14,78
Miscellaneous	10 910 618	2,08	+135 968	11 046 586 <sup>2)</sup>	2,10
Savings	12 906 616	2,46	-3 425	12 903 191	2,46
Household utilities	34 593 622	6,59	-9 180	34 584 442	6,59
Household equipment & appliances	8 052 245	1,53	-2 136	8 050 109	1,53
<b>Total</b>	<b>524 923 505</b>	<b>100,0</b>	<b>0</b>	<b>524 923 505</b>	<b>100,00</b>

- 1) The displacement column shows a decline in expenditure on all expenditure items except for 'miscellaneous', which increases by the same amount as the collective decrease in the other items.
- 2) Gambling expenditure constitutes R6 792 million of the R11 656 million spent on 'miscellaneous', representing 1,30 % of total household expenditure.

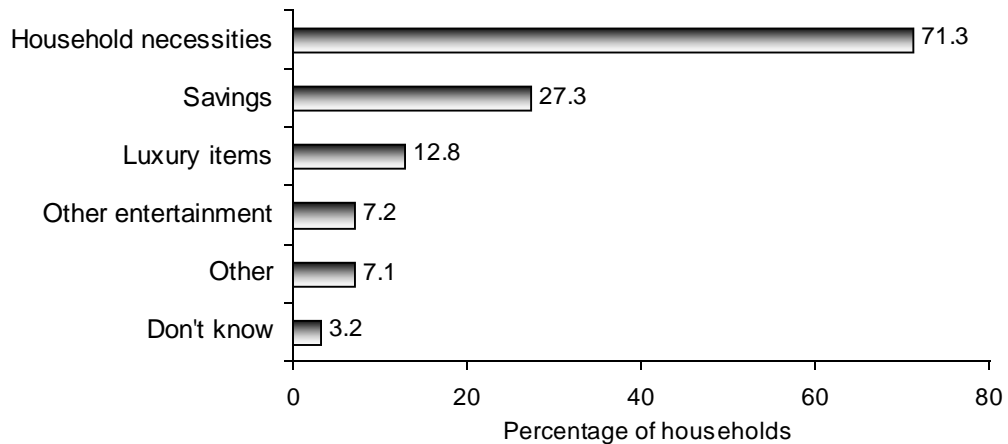
### 3.7.2 Expenditure displacement: survey results

The following question was posed in the NGB community survey: 'If you were not gambling, on what would you have spent the gambling amount instead?' Although various responses such as 'household necessities' (food, soap, etc), 'luxury items', 'savings' and 'other entertainment' were provided in the questionnaire, interviewers were requested not to read out these alternatives, so as not to influence the reaction of respondents.

The result of the responses is shown in figure 3.7. Household necessities (71,3 %) are mentioned by the majority, followed by savings (27,3 %), luxury items (12,8 %) and other entertainment (7,2 %). Note that the percentages refer to the number of households 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 the various mentioned items. However, a restriction on respondents to mention only one expenditure item for displacement would also not necessarily have portrayed a full picture.

**FIGURE 3.7**  
**‘IF YOU WERE NOT GAMBLING, ON WHAT WOULD YOU HAVE SPENT THE AMOUNT GAMBLED INSTEAD?’**



The results of the NGB survey differ to some degree from a survey conducted among casino patrons in Mpumalanga in 2000. However, the reader should bear in mind that the Mpumalanga survey was conducted among casino patrons (approximately 20 % of population) while the NGB survey included all persons participating in gambling (approximately 70 % of the population). Furthermore, the Mpumalanga survey requested only one displacement item from respondents while the NGB survey allowed for more than one alternative. The results of the Mpumalanga survey reveal the following displacement effects. The percentages refer to the number of households that displaced some of their gambling expenditure from the mentioned items.

- Household necessities 41,6 % of households
- Savings 32,6 % of households
- Other entertainment 12,6 % of households

- Luxury items 10,6 % of households
- Don't know/can't say 3,8 % of households

Comparison clearly reveals a measure of correlation for savings (27,3 % and 32,6 %), luxury items (12,8 % and 10,6 %) and other entertainment (7,2 % and 12,6 %) between the two surveys. The discrepancy with regard to household necessities (71,3 % and 41,6 %) is probably due to the fact that the NGB survey allowed for multiple choices and the Mpumalanga survey for a single choice. If only one alternative is allowed, respondents probably mention only the item to which the largest amount would be allocated. More than one alternative allows multiple choices that do not necessarily represent equal amounts.

In a 1997 Niagara Falls survey in Canada, respondents were specifically asked to estimate how much of the money spent at Casino Niagara they would have spent on entertainment, another form of gambling or household necessities. Responses that added up to more than 100 % were excluded. The following was found on displacement. On average, these respondents reported that 80 % of the money spent at Casino Niagara was diverted from some other type of expenditure: 62 % from entertainment, 11 % from other forms of gambling and 8 % from necessities of life (food, rent, etc). This finding was also confirmed by another survey in Canada (Turner 1999:46). Note that the above percentages are based on the items from which displacement was effected while the percentages in the NGB study are based on households that indicated displacement from certain items.

### 3.7.3 Summary

The above information suggests that no exact displacement figures can be presented. The answer probably lies between the pro-rata allocation and the community survey results. 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, however, be regarded as important displacement items in favour of gambling:

- savings
- postponement of procuring luxury items
- other entertainment
- household necessities

It should also be kept in mind that the retail market is highly dynamic and continuously in a process of structural adjustment. The legalisation of gambling is not the only factor that may impact on the retail trade. The introduction of new goods, such as cell phones, may result in a measure of displacement, the establishment of a new shopping complex or shop in a particular area may lead to the liquidation of existing businesses, and so forth. In addition, private consumption expenditure is showing long-term changes away from retail goods. Services, such as communication and security have increased their share in household expenditure while the share of traditional items has declined (see section 3.5).

The above discussion suggests that gambling cannot be isolated as the sole cause for expenditure displacement. It is surely one component contributing to changed expenditure structures. However, it would seem that the impact is not that severe on a macro-level. On a micro-level, some types of businesses may experience cannibalisation of their market, while the same type of business in another area may benefit from the opening of a gambling outlet.

### **3.8. IMPACT OF GAMBLING ON RETAIL SALES**

This section examines the possible impact of gambling expenditure on retail outlets. In conclusion, reference will also be made to the sectoral impact of gambling expenditure.

#### **3.8.1 Relationship between gambling and retail sales**

Gambling expenditure by households can be sourced from the following:

- a decline in savings
- displacement or substitution from other expenditure items
- an increase in current income

Only the displacement or substitution of expenditure will have a direct impact on the turnover of existing retail outlets. However, a decline in savings could reduce expenditure on durable goods in the long term since such expenditure is often funded from accumulated savings.

It is also important to mention that the mode of gambling may also impact differently on retail outlets.

### 3.8.2 National lottery

Expenditure on lottery tickets constitutes, on average, R10 per buyer per draw (unpublished information, Uthingo) and is dispersed all over the country. Expenditure on lottery tickets of R1,6 billion resulting in a propensity to procure lottery tickets of R973 million in 2001, representing on average 0,19 % of household expenditure in almost every urban and rural area, would probably not have any substantial impact on individual retail outlets. For example, the buying of lottery tickets would imply a displacement of R185 away from retail for every R100 000 business turnover. Since lottery ticket outlets are spatially widespread, no significant geographical concentration of displacement is probably experienced. Retailers participating in the selling of lottery tickets also receive 5 % commission on ticket sales. Small informal outlets such as spaza shops may experience a negative effect due to their small sales turnover.

As indicated in sections 3.6.2 and 3.6.5, propensity to buy lottery tickets amounted to 0,19 % that is substantially lower than the amount allocated to ticket procurement due to the relatively high lottery prize pool. The license contract of Uthingo stipulates that 50 % of sales should be paid out as prizes over the seven-year license term. The breakdown of prizes is as follows:

- Division 1 prize (jackpot) : 18,25 %

• Division 2	:	4,00 %
• Division 3	:	9,00 %
• Division 4	:	5,00 %
• Division 5	:	16,75 %
• Division 6	:	11,00 %
• Division 7	:	36,00 %
• <b>Total</b>	:	<b>100,00 %</b>

The distribution of prizes varies from draw to draw. The distribution for 1 June 2002 was, for example, as follows:

	<b>Number of winners</b>	<b>Payment per winner</b>
• Division 1	1	R20 000 000
• Division 2	8	R 322 668
• Division 3	364	R 15 956
• Division 4	909	R 1 774
• Division 5	21 331	R 253
• Division 6	27 685	R 128
• Division 7	404 026	R 28

On the basis of average lottery expenditure of R10 per buyer per draw, the R71 704 148 spent on lottery tickets for the 1 June 2002 draw, translates into just more than 7 million punters. With the exclusion of Division 1 and 2 prizes, a total of 454 315 (approximately 6 %) punters received an amount close to R30 million back in prizes. This amount represents 77,75 % of the total prize money. On a national scale it is probably safe to conclude that the National Lottery did not impact significantly on individual retailers in 2001. The substantially higher lottery ticket sales in 2002 may impact negatively on especially small informal retailers.

### 3.8.3 Casinos

Before examining the impact on retail sales of the access to casino gambling in South Africa, a framework will be presented as background to interpret any decline in retail sales.

It is useful to distinguish between the following sources of casino gambling expenditure:

- gambling by residents residing in areas within which a particular gambling facility is located
- gambling by residents residing outside the casino location or
- gambling by foreign residents

It is important to acknowledge that retail businesses are also supported by expenditure from the above three sources.

On a macro-level (South Africa), the first two sources imply a direct displacement of gambling expenditure while casino gambling by foreigners implies a net importation of money from outside without any direct displacement within South Africa.

On a micro-level, casino gambling by residents residing within the town in which the casino is located implies a direct displacement of expenditure within that town. Gambling by residents from other towns implies a displacement within their areas of location but an 'importation' of money to the casino town. The above confirms that casino gambling may cause a substitution effect if gambling is conducted by residents or a zero substitution effect in the casino town if gambling is conducted by nonresidents. The substitution effect of the latter is located outside the casino town.

The economic development impact or alternatively the cannibalisation effect through substitution of expenditure on the local retail sector (in the area in which a casino is located) is not always fully recognised.

According to international experience, the substitution effect on the retail market can range from highly negative to fairly positive. Factors contributing to a positive impact are, inter alia, the following (Ligthelm 1999:54).

- The incidence of nonlocal patronage of casinos. The larger the percentage of gambling money ‘imported’ from outside the less significant the displacement effect on existing retail expenditure.
- The length of stay of visiting patrons in the host (casino) city. The impact of day visitors to casinos is extremely limited and largely benefits only the casinos. The spillover effect on the retail market is limited to those businesses that have a direct relationship with casinos such as restaurants.
- The establishment of casinos in areas with a limited or even no economic base prior to the introduction of casinos.
- The procurement policy of casinos. Upstream expenditure by casinos for supplies, equipment and services could benefit the local economy if focused on a ‘buy local’ policy.
- The size of the local economy in relation to the amount gambled in casinos. The smaller the local economy the greater the impact on existing retail spending.
- Although substitution occurs between household expenditure items and gambling, this can be mitigated over a relatively short period by overall income growth especially if a positive growth is experienced in a particular town or area.

A positive developmental effect on any surrounding retail market will be determined largely by the extent to which the above factors prevailed in that specific area or town.

On a macro-level (South Africa), casino gambling has had a more marked effect on retail activities than other forms of gambling in 2001. The propensity to gamble at casinos of 0,91 % in 2001 implies that close to 1 % of household expenditure was allocated to casino gambling. The effect of this substitution differs considerably from location to location. An area without casinos would experience a minute impact as a result of the opening of casinos in South Africa. On the other hand, a town within which a new casino has opened may experience a significant impact, especially those in markets from which substitution is effected. The factors mentioned above would play a major role in the extent of the positive (developmental) or negative (cannibalisation) effect.

#### 3.8.4 **Horse racing**



The horse racing industry is a fairly established industry dating back to 1882. Although the legalisation of gambling from 1994 onwards changed the system of control within which the industry operates, this did not have any major impact on the industry.

Although substitution of household expenditure takes place in allocating a certain portion of household expenditure to horse betting, no new or substantial increases have been experienced since the introduction of the new gambling dispensation.

### 3.9 APPLICATION OF WINNINGS

In the NGB survey respondents were requested to indicate what would they spend their winnings on (see also section 2.3.9). They were allowed to indicate more than one item but were not requested to indicate the relative percentage of winnings that they would spend on these items. A respondent mentioning, for example, savings and payment of debt would not necessarily allocate equal amounts to the two mentioned items.

The following were the most frequently mentioned items. The percentages refer to the number of respondents who would spend some of his/her winnings on a particular item.

- purchase of necessities                      52,7 %
- savings    44,8 %
- purchasing of luxury items                  34,5 %
- payment of bond/debt                        32,1 %
- entertainment                                    8,3 %
- gambling    5,9 %

A detailed description of the allocation of winnings is contained in section 3.10 of the NGB report entitled 'Gambling in South Africa: A national survey'.

### 3.10 CONCLUSION

South Africa portrays typical characteristics of a developing gambling market with substantial volatility. Gambling market maturity will probably only be achieved after the various gambling modes have established their physical presence. The novelty effect of

opening up access to new gambling facilities and modes may create initial high expenditure levels implying some instability in household gambling behaviour.

The propensity to gamble for 2001 has been calculated at 1,30 % of household expenditure (section 3.6.4). This propensity to gamble for 2001 cannot necessarily be regarded as a fixed percentage valid for an extended period. It would seem that expenditure on the National Lottery is highly flexible while the other gambling markets, such as casinos, are still in a development phase. The propensity to gamble may increase to more than 1,90 % for 2002. Some fluctuation in the propensity to gamble may, therefore, be expected in the next few years. It should also be realised that the 1,30 % for 2001 and +1,90 % for 2002 refer to a national propensity of South Africa as a whole. On a micro-spatial level, some deviations may occur from the national average.

For every R100 gambled by households in 2001, R70 was allocated to casinos, R15 to the procurement of lottery tickets, R15 to horse betting (including sports betting) and 15c to bingo.

Although the provinces received varying amounts of gambled money in 2001, Gauteng, followed by KwaZulu-Natal and the Western Cape, received the overwhelming majority. The following portrays the shares of provinces by gambling mode.

	<b>Lottery</b>	<b>Casinos</b>	<b>Bookmakers</b>	
<b>Totalisators</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
Gauteng	40,1	51,2	58,5	43,8
KwaZulu-Natal	14,4	17,4	15,7	28,3
Western Cape	13,5	6,1	23,6	12,4
Eastern Cape	6,1	7,0	1,4	3,9
Free State	5,0	1,8	0,2	4,8
<b>Totalisators</b>	<b>Lottery</b>	<b>Casinos</b>	<b>Bookmakers</b>	
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>

Mpumalanga	6,7	4,9	0,5	3,4
North West	6,7	11,0	0,05	..
Northern Province	5,8	0,5	0,1	3,0
Northern Cape	1,7	0,2	0,01	0,5

Gambling expenditure is financed through displacement from expenditure on other household items to gambling. Household budget behaviour often consists of small cuts on various discretionary expenditure items rather than substitution of one item by gambling. Gambling expenditure may also result in dissaving, implying no immediate displacement but the postponement of the purchase of durable goods, frequently funded from accumulated savings. Survey results confirmed that the following could be regarded as important displacement items in favour of gambling: savings, postponement of procuring luxury items, other entertainment and household necessities.

Generally, household consumption expenditure is showing long-term changes away from retail goods. In addition to gambling, items such as cell phones, communication and security have increased their share in household expenditure. Gambling can therefore not be isolated as the sole cause for expenditure displacement. The impact of gambling is not that serious on a macro-level. However, on a micro-level, some types of businesses (especially in the close vicinity of casinos) may experience cannibalisation of the market.