Economic Value of Sport
South East
2003-2008

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Sport Industry Research Centre

Sheffield Hallam University

Contents

Definitions

1. National income accounting

The concepts of National Income Accounting were developed for macro-economic analysis in the 1930s and 1940s. The basic principle is that there is accounting equality between total output, total income and total expenditure. The most common definitions of total output in the economy as a whole are the Gross Domestic Product (GDP) and Gross Value Added (GVA). For example, assume that the total output in a factory producing football boots is £100m. This is equivalent to the income generated as wages (say £60m) as profits (say £10m) and as flow to the companies selling inputs (£30m) required in the production. In this example, GVA is the sum of wages and profits. Further, total income will also be identical to total expenditure because output that is not sold in the current financial year is treated as investment expenditure.

2. Gross Value Added (GVA)

GVA is the difference between total output (based on wages and profits) and the cost of inputs used in the production process (raw materials and services). Alternatively it can be expressed as:

GVA = GDP - taxes on products + subsidies on products.

GVA shows the contribution of the sports sector to the economy as a whole.

3. Sport

We follow the definition employed in the publication Sport Market Forecasts[1]. Sport is divided into the following sectors: Sport clothing and footwear, Sport equipment, Health and fitness, other participant sports, Boats, Spectator sports, Sport gambling, Sport TV and video, Sport related publications and sport related travel.

4. Employment

This is full time equivalent (FTE) jobs. In this case two half-time jobs are measured as one full time equivalent.

[1] *Sport Market Forecasts 2009-2013*, Sport Industry Research Centre (SIRC), 2009

Executive Summary

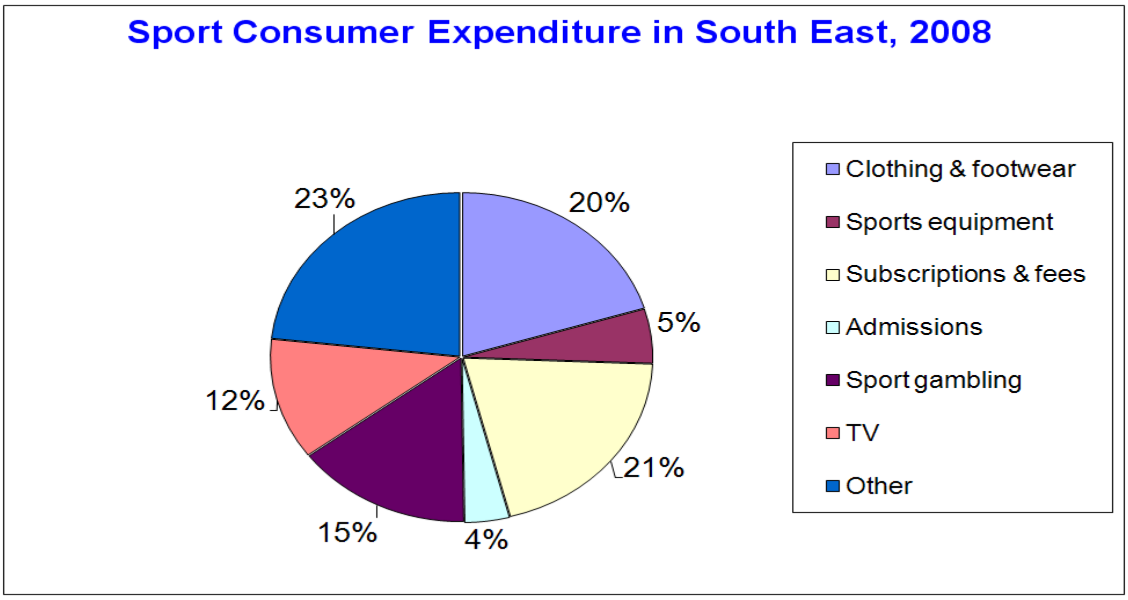
- This report is part of Sport England's ongoing commitment to build the evidence of the economic value of sport. The research has been carried out by The Sport Industry Research Centre (SIRC) as a follow up of the 2005 economic reports.

- The economic value of sport has been assessed across England as a whole and separately for each region. The 2008 economic recession has been a factor influencing the size of the sports sector nationally and within each region.

- This report focuses on the economic importance of sport to the South East region in 2008, providing comparisons with estimates from 2003, 2005 and the other English regions.

- The methodology employed in this report is based on national income accounting and the income and expenditure flows between sub-sectors of the economy. By using the latter we can derive a monetary value for the sport production (value added) which is consistent with the national statistics framework and crucially avoids the problem of double counting.

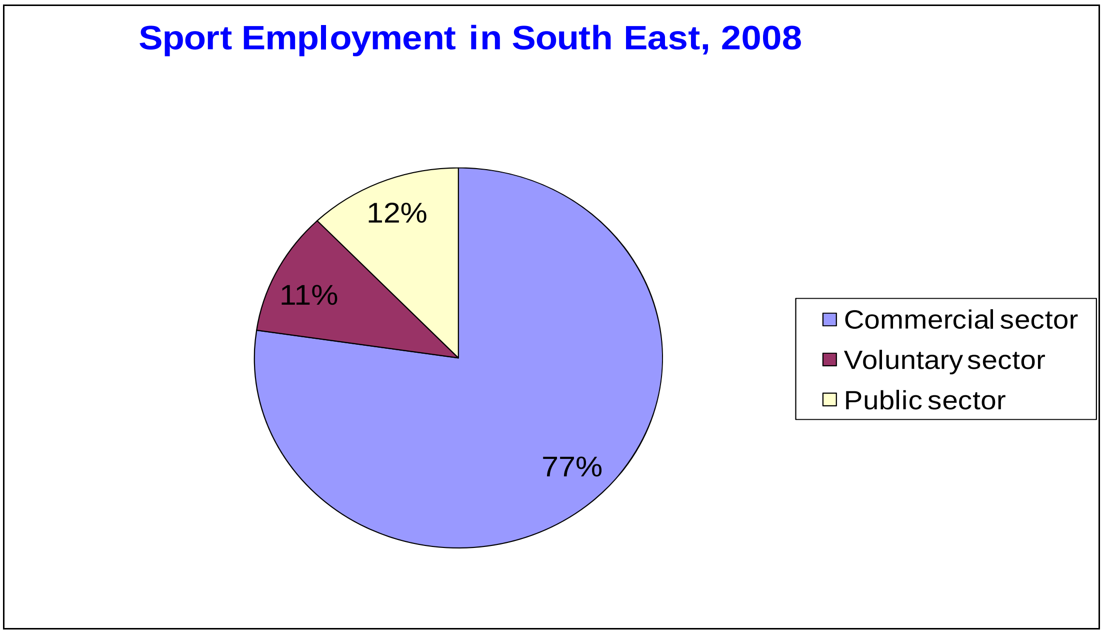
- In 2005 and 2008 consumers spent £2,784m and £2,568m on sport respectively. Consumer expenditure on sport as a percentage of total expenditure (2008):
- South East: 1.9%
- England: 2.3%



- There has been a 2% and a 22% increase in consumer spending on 'sport clothing and footwear' and sport related TV respectively over the period 2005-2008. Recession has caused temporal declines in most economic categories.

- Sport related economic activity generated £2,592m and £2,640m in 2008 and 2005 correspondingly. This is equivalent to 1.4% of total value added in the region (2008).

- 66,700 people are employed in sport related employment corresponding to 1.6% of total employment in the region (2008).



- During the period 2003-08, England's gross value added from sport increased by 22%. During the 2005-08 period, sport related GVA increased by 8% in terms of this methodology and 12% in terms of the ABI statistical definition of sport. This compares favourably with the corresponding growth in 'gambling' and 'motion picture and video activities', both decreasing because of the recession.

- The sport economy in the South East is boosted by the high level of incomes in the region, the proximity of the region to London and the close association with the motorsport industry. The South East has one of the strongest sport infrastructures in the UK, including a plethora of horse racing, greyhound racing, motorsport and speedway venues.

1. Introduction

1.1 Terms of reference

This report has been prepared by the Sport Industry Research Centre (SIRC) at Sheffield Hallam University on behalf of Sport England. The purpose of the report is to provide an estimate of the economic importance of sport in the South East region. It builds on similar research carried out by Cambridge Econometrics in 2000[2] and SIRC in 2003 and 2005 that measured the value of the sport economy in the nine English regions. Selected comparisons have been made with the 2003 and 2005 studies to illustrate the change in the importance of sport to the South East economy. This report informs of the direct economic contribution of sport to the regional economy. It also captures in percentage terms the effect of the 2008 recession.

1.2 Methodology

The SIRC model of economic impact assessment, uses as its basic input, where possible, economic variables from official statistics. Hence, with the sole exception of the voluntary sector, there is no need for collection of primary data. National income accounting provides the framework for this model, which is consistent with the UK National Accounts. It allows for a division of the sports economy into the seven sectors below:

- Consumers including the personal or household sector. Shows mainly sport related expenditure, e.g. spending on sports clothing and footwear.
- Commercial sport including spectator sport clubs, sports good manufacturers and retailers. In this sector we would classify companies such as Nike, JJB and football clubs. We also include a section of the media where a sport product/ service is produced such as sport TV, sport publications etc.
- Commercial non-sport including suppliers for the production of sport-related goods and services. This sector includes all companies of the commercial sector that do not provide a sport product, but they assist through supply of inputs or revenue in its production. An example is a beer company sponsoring a football club. The advertising revenue received by the club, represents a flow from the commercial non-sport to the commercial sport sector.

[2] Cambridge Econometrics: *The Value of the Sports Economy in the Regions in 2000*

- **Voluntary** including non-profit making sport organisations such as amateur clubs run by their participants. Professional football clubs are not included in this category even if they are managed on a non-profit basis.
- **Local Government** including income from local government sport facilities, sport related grants from the Central government and rates from the commercial and voluntary sector. The sector has expenses such as wages for labour (a flow towards consumers) and grants to the voluntary sector.
- **Central Government** including taxes, grants and wages on sport related activities. For example a person buying a ticket for a football match, records two flows: one towards the Government sector as VAT and another towards the Commercial sport sector for the remainder of the price.
- **Outside the area sector**. This includes all transactions with economies outside the region.

We record income and expenditure flows between the seven sectors above. As a result we can draw up a set of income and expenditure accounts for each sector. The 'double entry' accounting principle is applied, so every expenditure flow from sector A to sector B is also an income flow in the sector B accounts. The income and expenditure accounts are then used to derive estimates for the following economic impact indicators of the sport economy:

- Sport-related consumer expenditure
- Sport-related employment
- Sport-related value added

Sport-related value added is the most comprehensive statistic of economic value as it corresponds to the gross value added (GVA) in the economy as a whole. It shows the contribution of the sport industry to the regional economy. We measure it as the sum of wages and profit surplus in the sector, adjusted for the inclusion of value contributed from National Lottery projects.

We have also explicitly taken the motor sport cluster into account but our approach has been deliberately prudent to avoid double counting of generated added value. Inflation adjustment has not been used for comparisons between the years 2005 and 2008, as the general inflation rate is very low and the intervening period too small to make an impact. The inflation rate also varies between regions and between sport sectors. The sport generated product (GVA) as percentage of the total regional product is usually the most important statistic to consider.

The methodology used here does not account for indirect economic benefits of sport, through better health, better workplace productivity and well being, and the additional impacts of major sport events through multipliers. Each of the aforementioned factors can be approached individually on the basis of case studies and they are separate projects in their own right. The present study therefore is a prudent 'at least' indicator of the direct economic impact of sport in the economy.

1.3 Regional characteristics

Table 1.1 is a snapshot of the economic and social background of the South East region. It includes statistics such as the regional population and Gross Value Added, which have been used to estimate the economic impact of sport in the region in 2008. Note that the consumer spending estimate used here is a SIRC estimate, consistent with the corresponding ONS statistic as reported in Consumer Trends (code: ABPB).

According to Table 1.1, the South East has a noticeably lower unemployment rate (4.5%) compared with the UK as a whole (6.0%).

Gross value added per head in the South East is £21,896, representing 3% more than the UK level. An impact of the recession was to reduce the difference between GVA per head in the South East and the UK average. Similarly, average gross weekly earnings in the South East are approximately 4% higher than the UK average.

1.4 Sport in the region

Some of the key features of sport in the South East, in terms of the region's sporting infrastructure and representation, are illustrated in table 1.2 below.

Table 1.1 South East - regional profile, 2008

Resident population '000s	
Males	4,108
Females	4,272
All	8,380
Percentage of non-white groups	
Region	8.0%
Gross Value Added per head (£)	
Region	21,896
England	21,183
Gross Value Added (£m)	
Region	183,492
England	1,089,799
Percentage of working age population	
Region	61.1%
UK	62.1%
Unemployment % rate on working age population (Jun-Aug 2008 / Seasonally Adj.)	
Region	4.5%
UK	6.0%
Ec. active % rate of working age people (Jun-Aug 2008 / Seasonally Adj.)	
Region	83.2%
England	79.4%
People in employment aged 16 to 59/64 '000s, (Jun-Aug 2008 / Seasonally Adj.)	
Region	4,022
England	23,631
Average weekly paid working hours	
Male Full Time, Region	40.7
Male Full Time, UK	40.7
Female Full Time, Region	37.6
Female Full Time, UK	37.6
All Full Time & Part time, Region	33.7
All Full Time & Part time, UK	33.9
Average gross weekly earnings (£)	
Male Full Time, Region	673.4
Male Full Time, UK	634.0
Female Full Time, Region	491.0
Female Full Time, UK	484.4
All Full Time & Part time, Region	490.8
All Full Time & Part time, UK	473.2

Sources: ONS, Regional Trends, Labour Market Statistics, ASHE, Sport England, SIRC

Table 1.2 Sport profile of the South East Region*

Premiership football:	Portsmouth
Championship football:	Reading
League 1 football:	Brighton and Hove Albion Gillingham Milton Keynes Dons Southampton Wycombe Wanderers
League 2 football:	Aldershot
Rugby Union, premiership:	London Irish London Wasps
Cricket:	Hampshire Kent Surrey Sussex
Basketball:	Guildford Heat Milton Keynes Lions Worthing Thunder
Speedway:	Eastbourne Isle of Wight
Greyhound racing:	Brighton & Hove Crayford

Horse race tracks:	Ascot Brighton Epsom Downs Folkestone Fontwell Park Goodwood Kempton Park Lingfield Park Newbury Plumpton Sandown Park Windsor
Motor racing:	Brands Hatch Goodwood Lydden Ringwood Raceway PalmerSport Thruxton Buckmore Park
Ice hockey:	Guildford Flames Bracknell Bees Slough Jets Milton Keynes Lightning Basingstoke Bisons
Other:	National Badminton Centre (Milton Keynes) National Shooting Centre (Bisley) Horse shows at Hickstead Eton Dorney Rowing Centre Southampton Diving Academy Quay Diving Centre K2 Leisure Centre, Crawley Bisham Abbey National Sports Centre

* At the time of writing.

2. The Sport Economy in the South East

2.1 Summary of key indicators

Table 2.1 summarises the most important sport-related indicators for the South East, namely consumer expenditure, gross value added and employment for the years 2000, 2003, 2005 and 2008. The table also draws comparisons with England as a whole. The estimate for total regional consumption expenditure is derived using Family Spending and Consumer Trend Statistics. It is therefore consistent with the European System of Accounts 1995. The table shows that the effect of the 2008 recession, which due to the regional wealth, was more profound than elsewhere.

According to Table 2.1, almost £2.6 billion was spent on sport-related goods and services in the South East in 2008. In the same year, consumer expenditure on sport accounted for 1.9% of the total expenditure in the region, which is below the national average for England (2.3%). Compared with 2005, there was an 8% decline due to recession.

Table 2.1: Main sport-related indicators for the South East

	2000	2003	2005	2008
Consumer expenditure on sport (£million)	2,156.0	2,549.8	2,784.4	2,568.4
percentage of South East total	2.3	2.4	2.5	1.9
national average (England)	2.2	2.5	2.6	2.3
Gross Value Added by sport (£million)	1,916.0	2,416.5	2,640.2	2,591.6
percentage of South East total	1.6	1.6	1.6	1.4
national average (England)	1.5	1.6	1.7	1.5
Sport related employment (thousands)	65.0	67.4	71.6	66.7
percentage of South East total	1.6	1.7	1.7	1.6
national average (England)	1.7	1.7	1.8	1.8

In 2008, sport-related economic activity added almost £2.6 billion to the South East economy, which represents an increase of 7% over the year 2003. Gross value added declined marginally over the 2005 level. The contribution to GVA by sport in the region was at 1.4% of economic activity (2008).

Sport-related employment in the South East reached 66,700 in 2008 representing a decline of 7% over the year 2005. As a percentage of total employment, it declined from 1.7% to 1.6% during the examined period.

2.2 Consumer spending

Table 2.2 summarises the value of sport-related consumer spending in the South East. The estimates are consistent with the total reported in the ONS publication Consumer Trends.[3]

Table 2.2: Sport-related consumer spending in the South East

	2000 £m	2003 £m	2005 £m	2008 £m
Sport clothing and footwear	436	525	511	520
Sports goods	152	226	195	137
Participation subscriptions and fees	559	538	642	524
Admissions to events	124	115	129	97
Sport-related gambling	269	333	480	386
TV/video rental, cable and satellite subscriptions		241	252	307
Other sport-related spending	616	572	575	597
Total	2,156	2,550	2,784	2,568

The summary table above shows that the total value of sport-related consumer spending was £2,568 million in 2008, representing a decrease of 8% over the year 2005 and a marginal increase over the year 2003. Participation (subscriptions and fees) is the single largest category of consumer spending on sport, accounting for £524 million or 20% of the market in 2008. The next largest categories are sport clothing and footwear (£520 million)

[3] *Consumer Trends, Quarter 1 2009 (ONS)*

and sport-related gambling (£386 million). The two participation-related sectors of sport clothing and footwear and participation subscriptions and fees account for 41% of the market. Spending on sport clothing and footwear is the one participation related category with a rising trend throughout the examined period. The role of sport in creating output and employment in the commercial non-sport sector is illustrated by the sports-related spending on 'TV and video rental, cable and satellite subscriptions', accounting for 12% of the market. Sport related TV remained unaffected by the 2008 recession. Other spending categories include publications, sport-related BBC licence fee, and sport travel.

2.3 Sport-related output

Estimates of sport-related output are based on value added by the sport sector. Value added is calculated as the sum of wages and profits generated in the sector. Table 2.3 summarises the value added by sport in the South East. According to the table, sport-related economic activity decreased from £2,640 million in 2005 to £2,592 million in 2008. The largest part of this economic activity (£1,273 million, 49%) is generated by the commercial non-sport sector. The next largest sector is commercial sport (£752 million, 29%); a large part (44%) of the valued added in this sector is attributable to spectator sports and retailing. The latter includes sport-related clothing and footwear, equipment and publications. Spectator sports and retailing represent a much greater share of output than in previous pre-recession years. The voluntary and public sectors account for the remainder (£566 million, 22%) of the sport-related economic activity in the region. Within the commercial sport sector, retailing decreased by 10%, while spectator sports increased by 11% from 2005 to 2008. Overall, commercial sport and public sector are the two sectors with increasing trend in the aforementioned period.

Public sector	151	183	200	234
Total	1,916	2,417	2,640	2,592
Commercial sport	707	687	731	752
of which:				
Spectator sports	111	105	123	136
Retailing	172	226	216	195
Commercial non-sport	852	1,210	1,280	1,273
Voluntary sector	206	336	429	332

2.4 Sport-related employment

Table 2.4 provides estimates for sport-related employment in the South East. The employment estimates are derived from calculations based on wage payments and average salaries per sector.

Sport and associated industries are estimated to employ 66,700 people in the South East, accounting for 1.6% of all employment in the region in 2008. This represents an increase of 3% since the year 2000 and a decline of 7% since the year 2005.

The largest sector in terms of employment is commercial non-sport, supporting 26,000 jobs or 39% of all sport-related employment in the South East. The commercial sport, public and voluntary sectors support 38%, 12% and 11% of the region's sport-related jobs respectively.

During 2003-08, the number of jobs in sport retailing decreased marginally by 1%. During the aforementioned period, there were significant rises in employment in the commercial sport sector and in the public sector.

Table 2.4: Sport-related employment in the South East

	2000 ('000)	2003 ('000)	2005 ('000)	2008 ('000)
Commercial sport	26.6	23.8	25.5	25.5
of which:				
Spectator sports	6.5	3.7	4.6	5.9
Retailing	4.8	6.7	6.1	5.8
Commercial non-sport	26.6	29.4	30.2	26.0
Voluntary sector	6.0	7.3	8.6	7.0
Public sector	5.8	6.9	7.2	8.1
Total	65.0	67.4	71.6	66.7

2.5 Summary of income and expenditure flows

Table 2.5 below summarises the income and expenditure flows for the seven sport-related sectors in 2008. A large part of income is generated in the commercial non-sport sector, accounting for £1,674 million. This is followed by the commercial sport sector (£1,391 million) and the consumer sector (£1,122 million).

Within the commercial sport sector, 56% of generated income comes from retailing. This consists mainly of sport equipment, clothing and footwear, and sales of sport related books, magazines, newspapers and DVDs.

On the expenditure side, by far the most important category is the consumer sector accounting for £2,568 million of expenditure. This is followed by the commercial non-sport (£1,627 million) and commercial sport (£1,330 million) sectors.

Over half of the expenditure within the commercial sport sector relates to current factor spending, such as wages, in the retailing sub-sector.

Table 2.5 Sport-related income and expenditure flows, 2008

	Income £m	Expenditure £m
Consumer	1,122	2,568
Commercial sport	1,391	1,330
of which:		
Spectator sports	154	197*
Participation sports	147	139*
Retailing	774	712*
Voluntary	545	385
Commercial non-sport	1,674	1,627
Central government	1,087	218
Local government	335	423
Outside the area	681	190

* Current factor expenditure (wages, other inputs)

3. The Sport Economy in Context

3.1 Spending, output and employment

Tables 3.1 to 3.9 compare the nine English regions in terms of sport-related consumer spending, value added and employment for the years 2003, 2005 and 2008. Tables 3.1 to 3.3 refer to consumer spending, Tables 3.4 to 3.6 refer to value added, while the remaining tables present the picture of sport related employment.

From Table 3.3 it can be seen that the South East has the second largest 'absolute' sport-related consumer spending (behind London) among the nine English regions. However, the proportion of total consumer expenditure made on sport in the region is ninth at 1.9%. This may be partly explained by a low propensity to gamble on sport. The average weekly household expenditure on gambling in the South East is £2.3[4] which is 27% below the UK average. This effect has been emphasised following the recession.

From Table 3.6 we can see that the sport-related value added in the South East (£2,592 million) is larger than any other English region. It is boosted by the presence of the motorsport industry. However, the sport-related output in the South East ranks low as a proportion of the regional GVA (1.4%), marginally below the English average.

According to Table 3.9, the South East has the greatest number of sport-related jobs in England (66,700). However, sport related employment as a percentage of total employment is at 1.6%, below the average English level.

3.2 Importance of sport in the South East

It should be noted that the South East economy, on the whole, compares favourably to the UK average, it is one of the richest areas in the UK. The average earnings for men and women in the South East are 6% and 1% higher than the national average respectively. Gross Value Added per head in the South East is 3% above the UK average and unemployment is very low at 4.5%, compared with 6% for the UK.

[4] *Family Spending , a report on the Expenditure and Food Survey (ONS)*

Reflecting the overall economic position, the sport economy in the South East is very strong in absolute terms. However it is underperforming when compared to proportional national averages for England. For example, the region has the highest sport related output (£2,592 million), but this is below average in terms of the proportion of total sport output (1.4%). This is consistent with the pattern that as a region becomes relatively richer, the size of its sport economy increases in absolute terms, but decreases in relative terms compared to the other regions. For example in the South East the amount of GVA per head is 35% above the North East level, but sport GVA as percentage of regional GVA is 1.4% in the South East, compared to 2.0% in the North East.

The health and fitness sector in the South East is well developed. Surrey and Hampshire are two of the most important areas for this sector in the UK. The South East as a whole has 820 operational health and fitness suites available for community use. This is the largest number of health and fitness suites in the UK (16%).

The South East features a plethora of sports venues including twelve horse racing, and seven motor racing venues. Motorsport is an important component of its sport economy. The South East is the backbone of the UK motorsport industry, with seven Formula 1 teams and three major component manufacturers based in the region. This generates sport-linked value added without being influenced by any variation in regional consumer spending.

Although the Olympics of 2012 are to be held in London, the geographical proximity of the South East region to London means that it is likely to benefit economically from the Games. Further benefit will be delivered by the Crossrail project which will run from Abbey Woods in Kent.

Table 3.1: Summary of sport-related consumer spending in the English Regions in 2003

	East (£m)	East Midlands (£m)	London (£m)	North East (£m)	North West (£m)	South East (£m)	South West (£m)	West Midlands (£m)	Yorkshire & Humber (£m)	England (£m)
Sport clothing and footwear (£m)	332.3	219.2	592.8	144.7	434.2	525.0	257.9	333.7	275.4	3115.2
Sports goods (£m)	107.0	120.5	112.6	67.9	119.6	226.3	133.3	91.2	65.6	1044.0
Participation subscriptions and fees (£m)	336.7	224.3	621.2	116.5	369.4	538.0	286.1	240.8	214.1	2947.1
Admissions to events (£m)	71.9	47.9	132.7	24.9	78.9	114.9	61.1	51.4	45.7	629.4
Sport-related gambling (£m)	255.4	210.5	284.4	195.5	383.6	333.3	206.2	263.3	344.3	2476.5
Other sport-related spending (£m)	486.4	381.1	765.4	203.4	587.2	812.4	454.1	389.7	363.0	4442.7
Total expenditure on sport (£m)	1589.7	1203.4	2509.1	752.9	1972.9	2549.8	1398.8	1370.1	1308.2	14654.9
Per capita sport spending (£)	291.0	283.0	339.6	296.5	289.9	315.6	279.8	257.5	261.2	294.0
Proportion (%) of total consumer expenditure	2.3%	2.5%	2.5%	3.0%	2.6%	2.4%	2.4%	2.4%	2.4%	2.5%

Table 3.2: Summary of sport-related consumer spending in the English Regions in 2005

	East (£m)	East Midlands (£m)	London (£m)	North East (£m)	North West (£m)	South East (£m)	South West (£m)	West Midlands (£m)	Yorkshire & Humber (£m)	England (£m)
Sport clothing and footwear (£m)	389.4	247.9	599.8	159.6	443.3	511.4	270.2	330.2	306.5	3,258.3
Sports goods (£m)	145.5	170.4	114.9	45.9	136.7	194.6	147.8	92.6	145.1	1,193.5
Participation subscriptions and fees (£m)	425.5	270.3	576.1	133.1	460.9	642.1	331.4	323.7	305.6	3,468.7
Admissions to events (£m)	85.8	54.5	116.2	26.8	93.0	129.5	66.8	65.3	61.6	699.5
Sport-related gambling (£m)	306.9	252.9	340.7	218.9	494.0	479.5	229.6	306.1	441.9	3,070.5
Other sport-related spending (£m)	592.9	421.6	806.5	189.5	661.2	827.3	506.4	418.6	465.6	4,889.6
Total expenditure on sport (£m)	1,946.0	1,417.6	2,554.2	773.9	2,289.0	2,784.4	1,552.3	1,536.5	1,726.4	16,580.1
Per capita sport spending (£)	351.1	329.2	339.7	302.5	334.4	341.1	306.3	286.4	340.9	328.8
Proportion (%) of total consumer expenditure	2.6%	2.7%	2.3%	2.9%	2.8%	2.5%	2.4%	2.4%	2.9%	2.6%

Table 3.3: Summary of sport-related consumer spending in the English Regions in 2008

	East (£m)	East Midlands (£m)	London (£m)	North East (£m)	North West (£m)	South East (£m)	South West (£m)	West Midlands (£m)	Yorkshire & Humber (£m)	England (£m)
Sport clothing and footwear (£m)	429.6	293.0	633.0	164.9	417.6	520.2	347.6	441.4	290.6	3,537.9
Sports goods (£m)	155.6	118.2	229.2	44.3	133.9	137.0	115.7	100.6	81.0	1,115.5
Participation subscriptions and fees (£m)	443.6	248.1	518.8	126.1	379.0	524.2	396.2	279.6	258.9	3,174.5
Admissions to events (£m)	82.1	45.9	96.1	23.4	70.2	97.1	73.4	51.8	47.9	587.9
Sport-related gambling (£m)	350.13	237.5	369.5	214.6	350.2	385.8	278.0	610.7	303.7	3,100.1
Other sport-related spending (£m)	854.6	455.6	882.5	255.2	710.1	904.2	600.6	651.9	553.0	5,867.7
Total expenditure on sport (£m)	2,315.6	1,398.4	2,729.1	828.5	2,060.9	2,568.4	1,811.6	2,135.9	1,535.2	17,383.6
Per capita sport spending (£)	404.2	315.5	358.1	321.7	299.7	306.5	347.8	394.7	294.5	337.9
Proportion (%) of total consumer expenditure	2.6%	2.4%	2.1%	2.6%	2.2%	1.9%	2.3%	2.9%	2.2%	2.3%

Table 3.4: Summary of sport-related output in the English Regions in 2003

	East (£m)	East Midlands (£m)	London (£m)	North East (£m)	North West (£m)	South East (£m)	South West (£m)	West Midlands (£m)	Yorkshire & Humber (£m)	England (£m)
Commercial sport	473.6	294.4	628.5	122.9	370.7	686.7	273.6	317.8	192.2	3,360.4
of which:										
Spectator sports	*61.1*	*47.1*	*129.1*	*32.5*	*97.7*	*105.2*	*53.1*	*61.6*	*47.8*	*635.2*
Participation sports	*48.5*	*31.9*	*164.1*	*14.2*	*59.4*	*79.3*	*44.3*	*34.0*	*20.7*	*496.4*
Retailing	*122.4*	*102.8*	*226.9*	*53.5*	*146.2*	*226.1*	*123.9*	*103.0*	*79.1*	*1,183.9*
Manufacturing	*33.8*	*23.9*	*50.7*	*11.0*	*36.4*	*59.2*	*29.3*	*22.7*	*21.6*	*288.6*
TV and Radio	*24.0*	*18.7*	*57.2*	*11.4*	*30.1*	*35.1*	*22.4*	*23.0*	*22.1*	*244.0*
Commercial non-sport	779.0	604.3	1,118.8	401.4	1,017.8	1,210.2	681.1	722.5	702.7	7,237.8
Voluntary sector	212.7	139.7	402.0	80.1	238.4	336.4	175.8	144.8	141.3	1,871.2
Public sector	134.3	98.8	163.5	71.8	161.6	183.2	106.2	118.1	142.5	1,180.0
Total sport-related economic activity	1,599.6	1,137.2	2,312.7	676.2	1,788.4	2,416.5	1,236.6	1,303.1	1,178.8	13,649.1
Sport GVA as % of total GVA	1.7%	1.8%	1.4%	2.1%	1.8%	1.6%	1.6%	1.7%	1.7%	1.6%

Table 3.5: Summary of sport-related output in the English Regions in 2005

	East (£m)	East Midlands (£m)	London (£m)	North East (£m)	North West (£m)	South East (£m)	South West (£m)	West Midlands (£m)	Yorkshire & Humber (£m)	England (£m)
Commercial sport	563.7	341.4	682.6	136.1	487.5	730.5	308.6	385.8	287.4	3,923.6
of which:										
Spectator sports	*75.3*	*50.2*	*163.2*	*46.6*	*155.8*	*123.1*	*61.2*	*91.2*	*57.4*	*824.0*
Participation sports	*64.8*	*37.0*	*140.8*	*16.1*	*73.9*	*105.8*	*48.4*	*53.0*	*38.4*	*578.2*
Retailing	*161.9*	*125.0*	*240.1*	*46.0*	*164.3*	*215.8*	*130.9*	*107.3*	*123.7*	*1,315.0*
Manufacturing	*57.2*	*34.9*	*63.7*	*12.0*	*53.5*	*72.1*	*38.4*	*28.4*	*38.6*	*398.8*
TV and Radio	*31.1*	*24.3*	*74.4*	*14.7*	*39.0*	*45.4*	*29.2*	*29.7*	*28.7*	*316.5*
Commercial non-sport	892.0	676.5	1,157.8	409.4	1,129.7	1,279.9	722.9	765.0	853.5	7,886.7
Voluntary sector	283.2	177.7	371.6	96.2	318.2	429.4	208.9	209.0	217.9	2,312.1
Public sector	155.5	125.4	185.6	84.1	185.0	200.4	123.5	120.2	161.1	1,340.8
Total sport-related economic activity	1,894.4	1,321.1	2,405.2	725.9	2,120.4	2,640.2	1,363.8	1,480.0	1,519.9	15,470.9
Sport GVA as % of total GVA	1.8%	1.9%	1.3%	2.0%	2.0%	1.6%	1.6%	1.7%	1.9%	1.7%

Table 3.6: Summary of sport-related output in the English Regions in 2008

	East (£m)	East Midlands (£m)	London (£m)	North East (£m)	North West (£m)	South East (£m)	South West (£m)	West Midlands (£m)	Yorkshire & Humber (£m)	England (£m)
Commercial sport	664.9	358.8	740.3	190.9	496.0	752.0	344.2	470.1	309.8	4,327.0
of which:										
Spectator sports	*83.9*	*66.8*	*178.7*	*73.7*	*187.2*	*135.5*	*75.64*	*90.0*	*55.7*	***947.1***
Participation sports	*67.4*	*31.5*	*121.9*	*15.4*	*55.9*	*80.6*	*60.43*	*43.7*	*26.3*	***503.1***
Retailing	*215.7*	*112.6*	*282.1*	*60.3*	*149.6*	*194.6*	*135.82*	*180.6*	*136.7*	***1,468.0***
Manufacturing	*77.2*	*46.2*	*75.6*	*24.7*	*58.9*	*65.8*	*39.5*	*54.9*	*58.5*	***501.3***
TV and Radio	*34.6*	*27.0*	*81.2*	*15.9*	*42.6*	*50.0*	*32.3*	*32.4*	*31.6*	***347.6***
Commercial non-sport	1,085.6	705.8	1,294.8	444.7	1,085.5	1,273.4	858.1	1,115.2	772.5	8,635.6
Voluntary sector	302.6	160.7	333.4	91.6	247.7	332.4	260.6	214.4	166.5	2,109.9
Public sector	187.4	150.1	222.1	90.6	253.0	233.9	143.1	139.9	175.6	1,595.7
Total sport-related economic activity	2,240.5	1375.3	2590.5	817.8	2,082.3	2,591.6	1,606.0	1,939.6	1,424.5	**16,668.1**
Sport GVA as % of total GVA	2.0%	1.7%	1.0%	2.0%	1.7%	1.4%	1.6%	2.0%	1.6%	**1.5%**

Table 3.7: Summary of sport-related employment in the English Regions in 2003

	East ('000)	East Midlands ('000)	London ('000)	North East ('000)	North West ('000)	South East ('000)	South West ('000)	West Midlands ('000)	Yorkshire & Humber ('000)	England ('000)
Commercial sport	16.5	11.6	17.4	4.5	12.4	23.8	9.9	12.4	7.3	115.8
of which:										
Spectator sports	*2.4*	*2.3*	*3.3*	*1.4*	*3.6*	*3.7*	*2.5*	*2.8*	*2.4*	*24.4*
Participation sports	*1.9*	*1.6*	*4.3*	*0.6*	*2.2*	*2.8*	*2.1*	*1.6*	*1.0*	*18.1*
Retailers	*3.6*	*3.1*	*7.4*	*1.6*	*4.3*	*6.7*	*3.7*	*3.0*	*2.4*	*35.8*
Manufacturing	*1.0*	*0.8*	*1.0*	*0.5*	*1.2*	*1.7*	*0.9*	*0.7*	*0.7*	*8.5*
TV and Radio	*0.6*	*0.7*	*1.4*	*0.4*	*1.1*	*1.0*	*0.7*	*0.8*	*0.8*	*7.5*
Commercial non-sport	22.0	17.5	21.5	12.4	28.8	29.4	19.2	20.7	20.4	191.9
Voluntary sport	5.1	4.5	5.8	2.4	5.7	7.3	5.4	4.7	5.0	45.9
Public sector	5.4	4.4	5.0	3.2	6.5	6.9	4.6	5.2	6.6	47.8
Total jobs in sport	49.0	38.0	49.7	22.5	53.4	67.4	39.1	43.1	39.2	401.4
Proportion (%) of total employment in sport	1.8%	1.9%	1.5%	2.1%	1.7%	1.7%	1.6%	1.8%	1.7%	1.7%

Table 3.8: Summary of sport-related employment in the English Regions in 2005

	East ('000)	East Midlands ('000)	London ('000)	North East ('000)	North West ('000)	South East ('000)	South West ('000)	West Midlands ('000)	Yorkshire & Humber ('000)	England ('000)
Commercial sport	21.5	12.5	18.0	5.7	15.9	25.5	10.3	14.1	10.4	133.9
of which:										
Spectator sports	*3.3*	*2.3*	*4.2*	*2.7*	*5.9*	*4.6*	*2.6*	*3.7*	*2.9*	*32.2*
Participation sports	*2.8*	*1.7*	*3.8*	*0.9*	*2.8*	*4.0*	*2.1*	*2.2*	*2.0*	*22.3*
Retailers	*4.5*	*3.6*	*7.1*	*1.3*	*4.6*	*6.1*	*3.7*	*3.0*	*3.5*	*37.4*
Manufacturing	*1.3*	*0.9*	*1.0*	*0.4*	*1.3*	*1.7*	*0.9*	*0.7*	*1.1*	*9.3*
TV and Radio	*0.8*	*0.8*	*1.8*	*0.5*	*1.3*	*1.2*	*0.9*	*1.0*	*1.0*	*9.3*
Commercial non-sport	22.2	18.4	21.1	11.5	30.0	30.2	19.5	20.5	23.3	196.7
Voluntary sport	6.7	4.7	5.3	3.2	6.6	8.6	5.2	5.0	6.3	51.6
Public sector	6.1	5.1	5.5	3.9	6.8	7.2	4.8	4.6	7.2	51.2
Total jobs in sport	56.5	40.7	50.1	24.3	59.4	71.6	39.9	44.2	47.2	433.9
Proportion (%) of total employment in sport	2.1%	1.9%	1.4%	2.2%	1.9%	1.7%	1.6%	1.8%	2.0%	1.8%

Table 3.9: Summary of sport-related employment in the English Regions in 2008

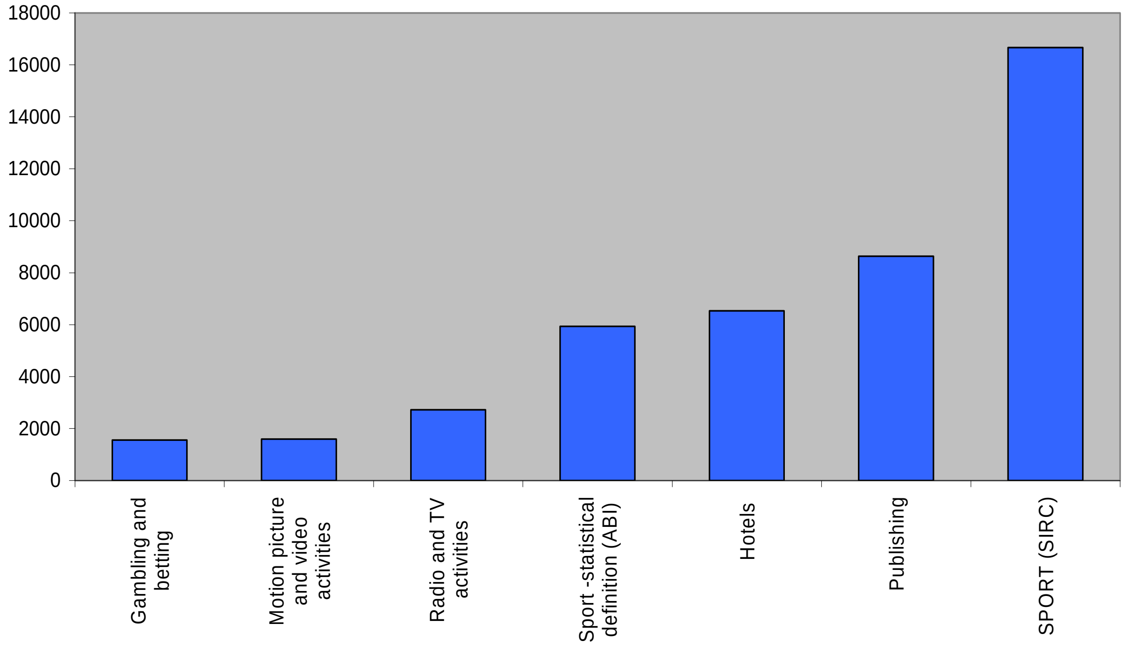
	East ('000)	East Midlands ('000)	London ('000)	North East ('000)	North West ('000)	South East ('000)	South West ('000)	West Midlands ('000)	Yorkshire & Humber ('000)	England ('000)
Commercial sport	25.2	12.5	20.9	7.2	18.8	25.5	12.7	18.1	9.8	150.7
of which:										
Spectator sports	*3.9*	*2.9*	*5.5*	*3.7*	*9.0*	*5.9*	*3.7*	*4.2*	*2.9*	*41.7*
Participation sports	*3.0*	*1.3*	*3.6*	*0.7*	*2.5*	*3.3*	*2.8*	*1.9*	*1.3*	*20.4*
Retailers	*6.5*	*3.4*	*8.6*	*1.8*	*4.5*	*5.8*	*4.1*	*5.4*	*4.0*	*44.1*
Manufacturing	*2.3*	*1.0*	*1.5*	*0.6*	*1.6*	*1.3*	*0.9*	*1.8*	*0.5*	*11.5*
TV and Radio	*0.8*	*0.8*	*1.7*	*0.5*	*1.2*	*1.2*	*1.2*	*1.2*	*1.2*	*9.9*
Commercial non-sport	23.8	16.5	20.7	11.1	25.3	26.0	20.1	26.1	18.5	188.1
Voluntary sport	6.2	3.4	4.9	2.2	5.8	7.0	5.7	4.9	4.5	44.6
Public sector	6.8	5.4	6.3	3.4	9.7	8.1	5.5	5.1	7.0	57.3
Total jobs in sport	62.1	37.9	52.8	24.0	59.5	66.7	44.0	54.2	39.8	441.0
Proportion (%) of total employment in sport	2.2%	1.8%	1.4%	2.1%	1.9%	1.6%	1.7%	2.2%	1.6%	1.8%

3.3 Sport and the leisure industries

Figure 4.1 below provides a comparison between the Gross Value Added produced by Sport and the Gross Value Added produced by other Leisure related Industries in England. The statistics are taken directly from the Annual Business Inquiry (ABI). They are based on UK figures and have been adjusted by a factor of 0.85 to bring them down to an English level. Sport is represented in the diagram in two ways: Firstly, as Gross Value Added derived from SIRC for the benefit of this report, and secondly as the sum of the sport related categories identified by ABI. This is often called the statistical definition of sport. It includes the following categories: sporting activities (mainly operation of sport arenas and stadiums), physical well being activities, manufacture and retail of sport goods. The ABI derived sport GVA equals £5.9 billion in 2008, equivalent to 36% of the total sport GVA estimated at £16.7 billion. Sport (using the ABI definition) has greater economic importance than the sum of 'Motion picture & video activities', 'Radio and TV activities', and 'Gambling and betting'. Further, the sport sector (using the SIRC model estimation) is approximately equivalent to the sum of 'Hotels' and 'Publishing' sectors.

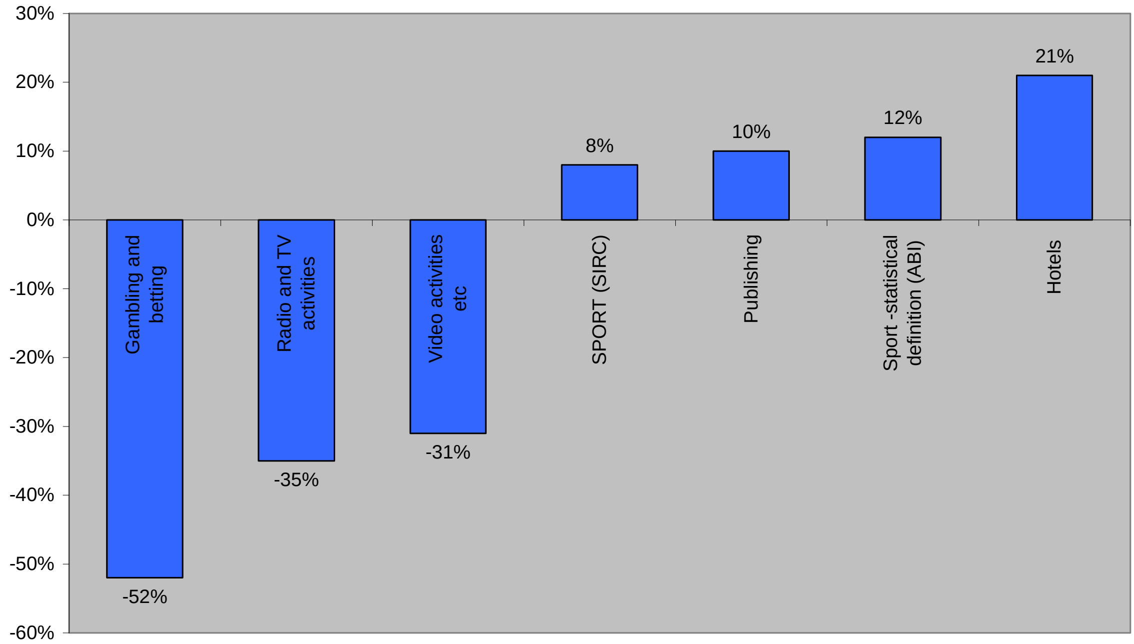
Figure 4.2 illustrates the GVA growth rates of the selected leisure sectors over the period 2005-2008. We consider this short period in order to focus more on the impact of the recession. The sector 'Hotels' has the largest growth over the examined period. This is partly because of the reversal of a very low growth pattern that accompanied the aforementioned sector during the first half of the decade. This is followed by 'Sport', as defined statistically by ABI, at 12% and 'Publishing' at 10%. Sport, as defined by SIRC in this report, during the period 2005-2008 grew by 8%. The remaining considered categories: 'Video activities', 'Radio and TV activities', and 'Gambling' all declined considerably over the examined period. 'Gambling and betting activities' lost more than 50% of its Gross Value Added over the examined period 2005-2008. Hence, despite the decline of the sport economy as a percentage of the whole economy, the sport economy did not suffer the full effect of the recession as shown in the cases of Motion pictures and video activities or Gambling. Under both definitions considered, Sport increased considerably, driven by investment directed towards the London Olympics and a long-term Sport England policy to increase sport participation. Had these policies not been in place, the negative effect on the sport sector would have been considerable. When the economy declines, the sectors that suffer before all are leisure related. Finally, the resistance of the sport sector to the recession effect reflects a greater importance of sport participation in the living standards experienced in the UK. A great proportion of the population consider sports participation as being more a basic need than a luxury.

Figure 4.1: GVA England , 2008, £m



Sources: Annual Business Inquiry, SIRC

Figure 4.2: GVA England % change 2005-08



Sources: Annual Business Inquiry, SIRC

Appendices

LIST OF TABLES

A1: Statistical Sources

Sources of data used in the model include the following publications:

- Consumer Trends
- Travel Trends
- Family Spending
- Regional Trends
- 'Focus on...' reports
- Annual Business Inquiry
- ASHE
- Sport England Annual Report
- Regional Accounts
- Leisure and Recreation Statistics
- General Household Survey
- National Travel Survey
- Housing and Construction Statistics
- UK National Accounts
- BBC Annual Report and Accounts
- PRODCOM Annual Industry Reports
- HM Customs and Excise Report
- Monthly Digest of Statistics
- Financial Statement and Budget Report
- Horserace and Betting Levy Board Report
- Government's Expenditure Plans
- Deloitte: Annual Review of Football Finance
- BSkyB Annual Report
- Labour Trends

A2: Model Output

Consumer expenditure on sport related goods & services, 2008	
	£million
Admissions	97.1
Sports goods	137.0
Bicycles	3.6
Boats	162.7
Participants sports subscriptions & fees	524.2
Clothing sales	355.3
Footwear sales	164.9
Repairs and laundry	6.1
Travel	125.3
Books and magazines	29.0
Newspapers	52.1
Video: purchase and rental	3.6
BBC licence	49.7
TV and video rental, cable & satellite subscriptions	306.9
Internet subscriptions	1.0
Skiing holidays	139.5
Public schools	24.6
Gambling: Football pools	5.8
Horse racing	343.9
Raffles and gaming	36.1
Total	2,568.4

Commercial sport income, 2008	
	£ million
Spectator Clubs:	
Admissions	92.8
Sponsorship & advertising	26.0
Corporate entertainment	21.6
Horserace Betting Levy	12.5
Cost of the rights to top league matches	45.4
Participation clubs:	
Subscriptions & fees	146.6
Retailers (net of Vat):	
Equipment	228.6
Clothing and footwear	460.9
Books, newspapers and magazines & videos	84.1
Exports and manufacturers' sales of	
clothing, footwear & equipment	156.5
TV and radio:	
BBC	49.7
Commercial	45.4
Exports	3.7
Internet subscriptions	0.9
Lottery awards	2.6
Lottery partnerships	0.9
Total Income	1,378.0

Commercial sport expenditure, 2008	
	£ million
Current factor expenditure	
Spectator clubs:	
Wages	131.4
Other inputs	65.5
Participation:	
Wages	73.3
Other inputs	66.0
Retailers:	
Wages	132.7
Other inputs	579.0
Manufactures:	
Wages	35.6
Other inputs	90.7
TV and radio:	
Wages	47.7
Other inputs	26.1
Total Factor Expenditure	
Total wages	420.6
Total other inputs	827.3
Total factor surplus	105.8
Total value added	526.4
Current transfers	
Corporation tax	15.1
Rates	15.8
Capital expenditure	
Investment	51.5
Total Expenditure Leaving Sector	1,330.4

Voluntary sector income, 2008	
	£ million
Factor income (monetary)	
Players' subscriptions and match fees	293.5
Equipment	1.5
Sponsorship and advertising	17.7
Raffles and gaming machines	36.1
Bar receipts	348.9
Subtotal (factor income)	697.7
Other monetary income	
Grants	31.1
Foundation for Sport and Arts	2.5
Employers' subsidies	27.1
Interest	11.4
Lottery awards via Sport England	10.4
Lottery partnerships	9.2
Total Monetary Income (excluding bar receipts)	440.5

Voluntary sector expenditure, 2008	
	£million
Factor expenditure	
Wages	177.0
Ground hire and rents	12.2
Equipment	1.7
Other	115.4
(Bar purchases)	244.2
Subtotal (factor expenditure)	550.6
Rates	13.8
Interest	5.0
Investment	60.2
Total Monetary Expenditure (excluding bar purchases)	385.3

Commercial non-sport income, 2008

	£million
Receipts net of tax from consumer spending:	
Travel	46.7
Gambling	310.0
Skiing	63.3
Public schools	20.3
TV rental, cable & satellite subscriptions	253.2
Sales of current inputs to:	
Central government	14.9
Local government	41.8
Commercial sport	623.6
Voluntary sector	101.4
Interest from voluntary sector	5.0
Sales of capital inputs to:	
Local government	112.0
Commercial sport	31.9
Voluntary	49.7
Promotion expenditure for sponsorship (intra-sectoral flow)	61.0
Total income	1,673.6

Commercial non-sport expenditure, 2008	
	£million
Producers of inputs to sport:	
wages	817.2
imports	417.4
(factor surplus)	456.2
(value added)	1,273.4
Corporation tax	65.2
Rates	38.2
Purchases of inputs from sport:	
Sponsorship and advertising	74.3
ITV and radio advertising	45.4
Corporate entertainment at sports events	21.6
Employees' sports subsidies	13.3
Horserace Betting Levy	12.5
Interest payments to voluntary sector	11.4
Promotion expenditure for sponsorship: (to elsewhere in CNS sector)	61.0
Cost of the rights to top league matches	45.4
Lottery awards via Sport England	29.8
Lottery partnerships	35.2
Total expenditure leaving sector	1,626.7

Central Government income, 2008	
	£ million
Taxes :	
on expenditure	444.3
on incomes generated in:	
commercial sport	154.4
voluntary sector	59.9
commercial non-sport	354.7
local government	70.3
Total income	1,086.8
Lottery awards	4.5
Lottery partnerships	2.7

Central Government expenditure, 2008	
	£ million
Transfer Payments	
Grants via Sport England	19.8
Grant support for local government expenditure on:	
sport (net spending)	60.1
education	94.8
Foundation for Sport and Arts	3.3
Factor Expenditure	
Sport England: wages and other inputs	18.2
Prison service, MOD, royal parks:	
wages and other inputs	5.9
Total	218.3

Local Government income, 2008	
	£ million
Local authority sports facilities:	
fees and charges	43.7
sales of equipment	21.8
ground hire	6.1
Grants from central government:	
to fund net expenditure on sport	60.1
sport education	94.8
via Sport England	3.0
via FSA	0.8
Rates:	
voluntary sector	13.8
commercial sport	15.8
commercial non-sport	38.2
Payments for policing	2.0
Lottery awards	12.3
Lottery partnerships	22.3
Total income	334.7

Local Government expenditure, 2008	
	£ million
Current expenditure	
Direct gross expenditure:	
Wages	75.1
Other current expenditure	64.0
Education:	
Wages	117.7
Research	0.9
Local transport and policing:	
Wages and other inputs	15.0
Grants to voluntary clubs	14.3
Capital expenditure	
Investment	135.7
Total expenditure	422.7

Outside the area income, 2008	
	£ million
Sports, clothing, footwear and equipment	144.4
Import content of skiing	51.8
TV imports	6.5
Prize income	28.1
Import content of UK production of:	
Sport related goods and services	33.2
Commercial non-sport sector output	417.4
Total income	681.4

Outside the area expenditure, 2008	
	£ million
Sports, clothing, footwear and equipment	142.4
Admissions to sports events	15.4
TV exports	3.7
Prize income	28.1
Total expenditure	189.5

Value added by sport related economic activity, 2008

	£million	Index
Commercial sport:		
Wages	644.6	
Surplus	105.8	
Lottery projects	1.5	
Total	752.0	29.0
Voluntary sector:		
Wages	177.0	
Surplus	147.1	
Lottery projects	8.2	
Total	332.4	12.8
Commercial non-sport:		
Wages	817.2	
Surplus	456.2	
Total	1,273.4	49.1
Central Government:		
Wages	8.6	
Lottery projects	3.0	
Total	11.6	0.4
Local Government:		
Wages (education)	117.7	
Wages (sports facilities)	75.1	
Wages (transport and policing)	15.0	
Lottery projects	14.5	
Total	222.3	8.6
Total Value Added	2,591.6	100.0

Employment, 2008	
	Employment ('000s)
Sector	
Commercial Sport:	
Spectator clubs	5.9
Participation clubs	3.3
Retailers	5.8
Manufacturing	9.3
TV and Radio	1.1
Subtotal	25.4
Voluntary sport	7.0
Commercial non-sport	26.0
Central Government:	
Administration	0.2
Subtotal	0.3
Local Government:	
Sports facilities	3.4
Education	4.0
Transport/police	0.5
Subtotal	7.8
Total	66.7

The expenditure flows matrix, 2008 (£m)

Flows from:	Flows to: CON	CS	VOL	CNS	CG	LG	OV
Consumer sector	0.0	1049.5	331.2	693.5	366.5	65.4	51.8
Commercial sport	278.3	0.0	0.0	655.5	166.4	17.9	212.2
Voluntary sector	117.1	1.4	0.0	156.0	90.9	19.9	0.0
Commercial non-sport	552.2	167.6	62.0	0.0	354.7	72.8	417.4
Central government	8.6	3.1	33.1	14.9	0.0	158.7	0.0
Local government	138.0	11.0	14.3	153.8	105.5	0.0	0.0
Overseas	28.1	158.7	0.0	0.0	2.7	0.0	0.0

A3: Sources and Methods

This section attempts to explain how the estimates are derived. Many are generated through the flows in the model. The flows among the sectors in the SIRC model are based on a double entry principle between income and expenditure. Data sources mostly relate to the expenditure side, especially in the case of consumers. The Overseas sector is treated as residual in the flow system. No data exist to adequately describe the Voluntary sector; for this reason we use relationships that arise from previous studies and surveys to relate the Voluntary sector to the sport economy. The estimation of the remaining five sectors is explained below:

Consumer expenditure

Many items of sport related consumer expenditure are located in the Family Expenditure Survey (FES) at the UK level. Only broader categories of spending exist for the Regions. The latter are used to extract the relative statistics from the UK figures in a proportionate manner.

Admissions: They are estimated from FES. Data exist for 'Spectator sports - admission charges' for the UK as a whole and for 'Sports admissions and subscriptions' for the regions. Our estimate comes from the UK figure, using the regional proportions.

Sports goods: Expenditure is estimated from FES 'Sports and camping equipment' and annual reports of major sports companies.

Bicycles: The basis of the estimate comes from Consumer Trends. This is filtered regionally according to FES and the proportion of sport related bicycle journeys form the National Travel Survey (NTS).

Boats: The estimate is derived from a SIRC model for the sector based on statistics from the British Marine Federation.

Participant sports subscriptions and fees: Expenditure is estimated using the FES categories: 'participant sports excluding subscriptions' and 'subscriptions to sports and social clubs'.

Clothing and footwear sales: The estimate is based on a SIRC model, annual reports from sports companies and statistics from Consumer Trends and FES.

Sport related travel: This is derived from a SIRC model based on NTS statistics.

Books, magazines and newspapers: Statistics are based on FES and Consumer Trends.

Video and DVDs purchase and rental: Based on statistics from FES and the British Video Association.

BBC licence: Expenditure is derived from the sport related content of the BBC licence. It is based on data from the BBC annual report, a SIRC model and the number of households.

TV rental, cable and satellite subscriptions: The basic estimate is derived from FES. Its sport related estimate is filtered by using BSkyB and BBC statistics.

Sport related gambling: The basis of the estimates is the UK figure which is derived from official HM Customs and Excise data. A model by SIRC is used to ensure that the value of the overall gambling sector corresponds to the Consumer Trends statistic. Subsequently the regional element is derived by using FES and the number of households.

Commercial sport income

Spectator club admissions: This is a flow of income coming from the domestic consumer sector and the overseas visitors to the region. Data from FES and HM Customs and Excise have been used. Income from Tourists is estimated from Travel Trends and the Digest of Tourist Statistics.

Sponsorship: Most of this income comes from the Commercial Non Sport sector. Various sources are used from the SIRC archive. We also assume that the sponsorship market is associated with the size of the spectator sports industry.

Horserace betting levy: This statistics is calculated using data from the Horserace Betting Levy Board Annual Report and population statistics from Population Trends.

Cost of the rights to top league matches: The basic estimate is derived from BSkyB statistics.

Subscriptions and fees: This is derived from the income and expenditure flows in the model.

Retailing: Income from retailing is associated with consumer expenditure on sport related equipment, clothing, footwear, books, newspapers, magazines and DVDs. A part of this expenditure is flowing towards Local Authorities, while VAT is going to the Central Government.

Exports: Income from exports is estimated using trade assumptions based on Input-Output tables for wider (than sport) sections of the economy. These ratios are applied on the sport related consumer spending.

TV and radio: Income in the case of BBC comes directly from the licence fee. Only the sports-related part is considered.

Commercial sport expenditure

Wages: The calculation of wages is based on the flow of income to the sector and estimated statistics (on the basis of the old Business Monitors and the Annual Business Inquiry) that relate wages to total income. This method of calculating wages is repeated in all sectors at a regional level.

Other inputs: In the case of spectator and participation clubs an estimation of profits is required. Then 'other inputs' is the residual income after profits and wages have been accounted for. In the case of retailers, 'other inputs' can be estimated directly through statistics from the Input-Output tables and the ABI at a regional level.

Investment: In a similar way investment is estimated as a ratio of the generated value added in each sub sector. We do some assumptions so that we end up with the best possible estimates given the existing information. For example the share of investment out of value added in the sport retailing sector is assumed to be the same as in the retailing sector as a whole.

Commercial non-sport income

Income coming from consumer spending (net of tax): This is determined according to the flows of consumer expenditure. For example in the case of gambling, consumer spending is directed towards the Government as taxes and towards the Commercial Non-Sport sector as income.

Sales of current inputs to other sectors: These are determined again from the flows of the model. For example sales to the commercial sport sector are identified from a part of the commercial sport spending. The latter is directed either to the Commercial Non-Sport sector or overseas. This distribution is determined from the Input-Output tables.

Sales of capital inputs to other sectors: They are related to the capital expenditure of the Local Government, Commercial Sector and Voluntary sectors.

Commercial non-sport expenditure

Wages: Spending on wages is calculated as a percentage of total income accruing to the sector. This income can be expressed as wages, profits, or imports (before tax and investment decisions). The part of turnover directed towards wages can be estimated from a SIRC model based on the Input-Output tables for the UK.

Imports: They are estimated using the same method as above (wages).

Corporation tax: It is derived from the profits accruing to the sector (factor surplus, estimated as above) and the tax rate, estimated from the National Accounts (Blue Book).

Rates: The estimate is based on the value added generated in the sector and a model estimating rates as a percentage of value added for the two commercial sectors.

Sponsorship and advertising: They are estimated using non-official statistics and a SIRC model.

Lottery awards: They are estimated using data from DCMS and the Lottery Fund Accounts of the Sports Council.

Central Government income

Income accruing to the Central Government is mainly in the form of taxation. These estimates are determined from the tax rates and the flows within the SIRC model.

Central Government expenditure

Grants via Sports Council: Data are provided by the Sports Council's annual accounts.

Wages: Estimates are provided from the Sport Council's annual accounts.

Support for local government expenditure: It is determined in the local government income below.

Local Government income

Fees and charges: The estimates are based on the CIPFA publication Leisure and Recreation Statistics and on a SIRC model for the sector.

Sales of equipment: This is derived from a part of consumer spending on sport equipment above.

Grants from Central Government: Using the HM Treasury Budget Report, an estimate of grants from Central Government as a percentage of Local Authority receipts is derived. This is then applied to Local Government expenditure categories.

Rates: This is tax income received from the voluntary, commercial sport and commercial non-sport sectors. The estimates are derived from the flows of the SIRC model.

Local Government expenditure

Total expenditure on sport services: This is derived from CIPFA's Leisure and Recreation Statistics and a SIRC model for processing the data. This is then distributed into wages and other inputs.

Education: Spending on Education is derived from the Blue Book and the Government's Expenditure Plans (DES).

Capital expenditure: This is based on statistics from the Blue Book (table 5.3.7).