Economic Value of Sport North East 2003-2008

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Sport Industry Research Centre

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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.

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

Executive Summary

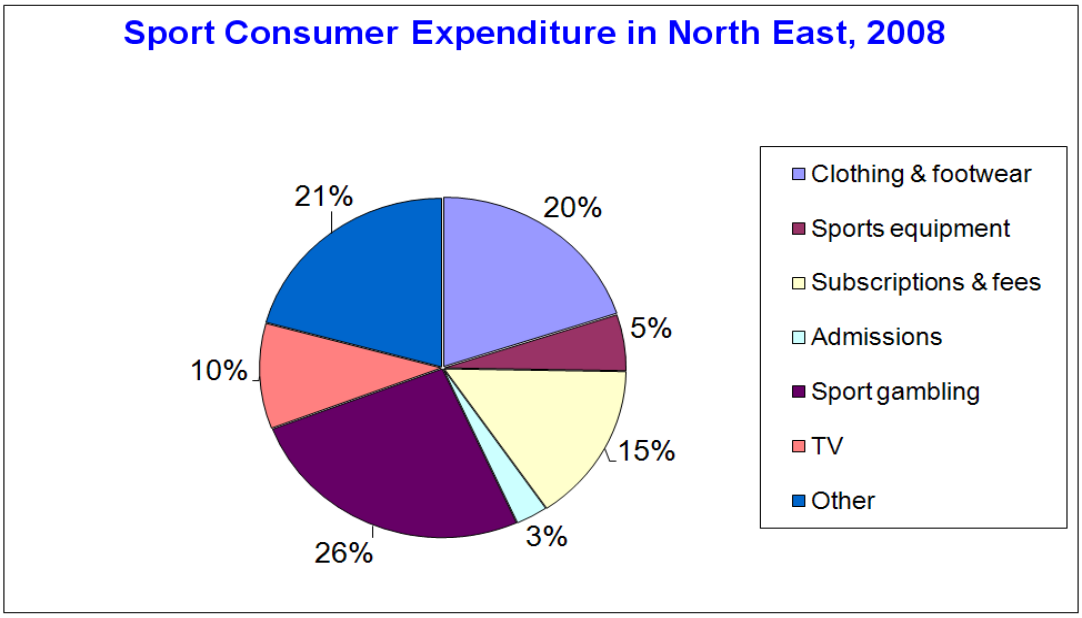
- This report is part of Sport England's ongoing commitment to build the evidence of the economic value of sport. The research has been carried out by The Sport Industry Research Centre (SIRC) as a follow up of the 2005 economic reports.

- 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 North 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.

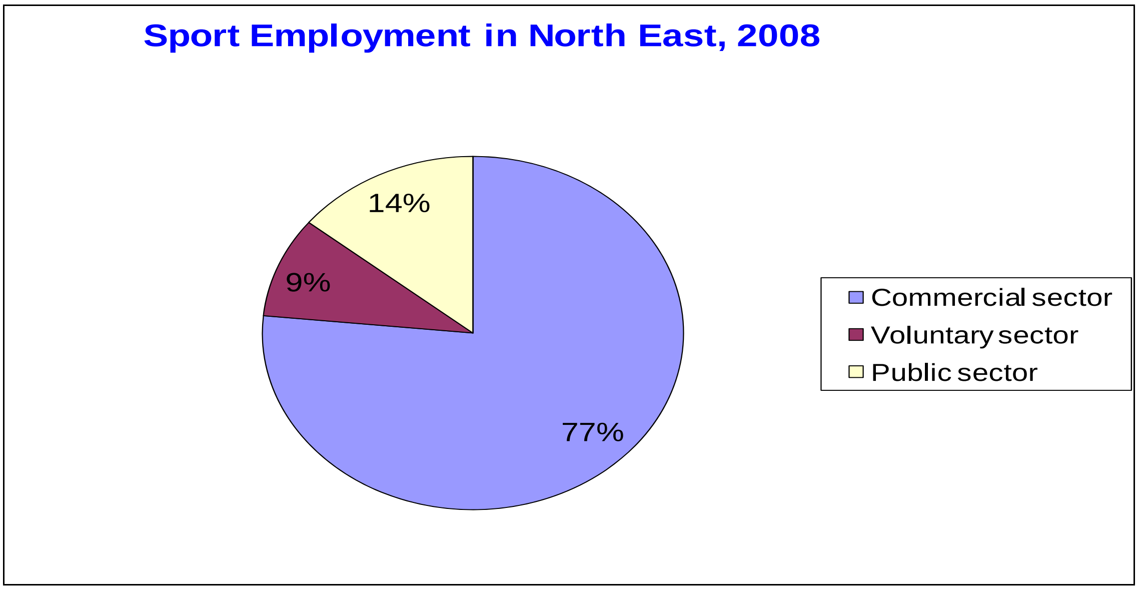
- In 2005 and 2008 consumers spent £774m and £829m on sport respectively. Consumer expenditure on sport as a percentage of total expenditure (2008):
  North East: 2.6%
  England: 2.3%



- The sports economy resisted the negative effects of the 2008 recession, especially in terms of GVA and consumer spending. During the period 2005-2008, sports related consumption and output increased by 7% and 13% respectively.

- Sport related economic activity generated £818m and £726m in 2008 and 2005 correspondingly. This is equivalent to 2.0% of total value added in the region (2008).

- 24,000 people are employed in sport related employment corresponding to 2.1% 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.

- During the period 2003-08, the sport economy in the North East was driven by consumer expenditure more than any other English region. Despite being the most deprived area in England in terms of average earnings, the popularity of sport has resulted in sport-related expenditure at 2.6% of total spending, the second highest in England (2008). The strong export orientation of manufacturing is one of the advantages of the regional economy.

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 North 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 North East economy. This report informs of the direct economic contribution of sport. 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.

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 North 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[1] (code: ABPB).

According to Table 1.1, the North East has a significantly greater unemployment rate (7.8%) compared with the UK as a whole (6.0%). The North East economy as a whole performs below the level of the UK. For example, gross value added per head in the North East is £16,276, representing 77% of the UK level. Similarly, average gross weekly earnings in the North East approximate 86% of the UK average.

1.4 Sport in the Region

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

Table 1.1 North East - regional profile, 2008

Resident population '000s	
Males	1,260
Females	1,316
All	2,576
Percentage of non-white groups	
Region	4.5%
Gross Value Added per head (£)	
Region	16,276
England	21,183
Gross Value Added (£m)	
Region	41,911
England	1,089,799
Percentage of working age population	
Region	62.0%
UK	62.1%
Unemployment % rate on working age population (Jun-Aug 2008 / Seasonally Adj.)	
Region	7.8%
UK	6.0%
Ec. active % rate of working age people (Jun-Aug 2008 / Seasonally Adj.)	
Region	76.1%
England	79.4%
People in employment aged 16 to 59/64 '000s, (Jun-Aug 2008 / Seasonally Adj.)	
Region	1,113
England	23,631
Average weekly paid working hours	
Male Full Time, Region	41.0
Male Full Time, UK	40.7
Female Full Time, Region	37.5
Female Full Time, UK	37.6
All Full Time & Part time, Region	33.8
All Full Time & Part time, UK	33.9
Average gross weekly earnings (£)	
Male Full Time, Region	538.0
Male Full Time, UK	634.0
Female Full Time, Region	432.2
Female Full Time, UK	484.4
All Full Time & Part time, Region	406.1
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 North East Region*

Premiership football:	Sunderland
Championship football:	Newcastle United Middlesbrough
League 1 football:	Hartlepool United
League 2 football:	Darlington
Rugby Union Premiership:	Newcastle Falcons
Cricket:	Durham County Cricket Club
Basketball:	Newcastle Eagles
Ice Hockey:	Newcastle Vipers
Speedway:	Berwick Newcastle Redcar
Greyhound racing:	Newcastle Pelaw Grange (Durham) Sunderland
Horse racing:	Hexham Newcastle Redcar Sedgefield
International athletics stadium:	Gateshead
Other:	Canoeing course (Tees Barrage) Silksworth artificial ski slope (Sunderland) C2C cycling route (National Cycle Network) The 'Great North Run'

* At the time of writing.

2. The Sport Economy in the North East

2.1 Summary of key indicators

Table 2.1 summarises the most important sport-related indicators for North 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 the effect of the 2008 recession on the regional sport economy.

According to Table 2.1, £829 million was spent on sport-related goods and services in the North East in 2008. Consumer expenditure on sport accounts for 2.6% of their total expenditure in the region, which compares favourably with the national average for England (2.3%). Following the 2008 recession, there is a decline of sport spending as a percentage of total spending. However, compared to 2005, there is an increase of 7% in sport-related consumption in value terms.

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

	2000	2003	2005	2008
Consumer expenditure on sport (£million)	587.0	752.9	773.9	828.5
percentage of North East total	2.7	3.0	2.9	2.6
national average (England)	2.2	2.5	2.6	2.3
Gross Value Added by sport (£million)	489.0	676.2	725.9	817.8
percentage of North East total	1.7	2.1	2.0	2.0
national average (England)	1.5	1.6	1.7	1.5
Sport related employment (thousands)	19.6	22.5	24.3	24.0
percentage of North East total	2.0	2.1	2.2	2.1
national average (England)	1.7	1.7	1.8	1.8

In 2008, sport-related economic activity added £818 million to the North East economy, which represented an increase of 13% over the year 2005. The contribution to GVA by sport in the region has increased from 1.7% in 2000 to 2.0% in 2008.

Sport-related employment in the North East grew from 22,500 in the year 2003 to 24,000 in 2008. As a percentage of total employment, it remained unchanged at 2.1% in the same period. This compares favourably with the situation in England as a whole, where sport employment as a percentage of total employment was at 1.8%. Overall, the regional sport economy has resisted the economic pressure, and maintained its size relatively to the regional economy as a whole, in terms of GVA and sport related employment.

2.2 Consumer spending

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

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

	2000 £m	2003 £m	2005 £m	2008 £m
Sport clothing and footwear	129	144.7	159.6	164.9
Sports goods	24	67.9	45.9	44.3
Participation subscriptions and fees	89	116.5	133.1	126.1
Admissions to events	20	24.9	26.8	23.4
Sport-related gambling	138	195.5	218.9	214.6
TV/video rental, cable and satellite subscriptions		78.2	81.8	83.4
Other sport-related spending	187	125.2	107.7	171.9
Total	587	752.9	773.9	828.5

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

The summary table above shows that the total value of sport-related consumer spending was £829 million in 2008, representing increases of 7% and 10% over the years 2005 and 2003 respectively. Gambling is the single largest category of consumer spending on sport, accounting for £215 million or 26% of the market in 2005. The considerable increase in sport-related gambling expenditure during the period 2000-05 can be explained by the abolition of gaming tax. There has been a 2% decline in spending since then (2005-08). After gambling, the major categories of expenditure are sport clothing and footwear (£165 million) and participation (subscriptions and fees) at £126 million. Together, these two participation-related sectors account for 35% of the market. The spending associated with these two categories declined by 1% since 2005. During the aforementioned period, a 3% decline has also been observed in sports equipment, reaching £44 million in value. According to Family Spending[4], average weekly household expenditure on 'sports and camping equipment' declined from £1.2 to £0.78 in the North East over the period 2003-2008. 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 10% of the market. 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 North East. According to the table, sport-related economic activity increased from £676 million in 2003 to £818 million in 2008. Sport related GVA increased by 21% and 13% over the periods 2003-08 and 2005-08 respectively.

The majority of this economic activity (£445 million, 54%) is generated by the commercial non-sport sector. It increased by 9% during the period 2005-08. The next largest sector is commercial sport (£191 million, 23%); over 70% 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. GVA produced by commercial sport increased by 40% over the period 2005-08. The voluntary and public sectors account for the remainder (£182 million, 22%) of the sport-related economic activity in the region.

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

Table 2.3: Sport-related Value Added in the North East				
	2000 £m	2003 £m	2005 £m	2008 £m
Commercial sport	106	122.9	136.1	190.9
of which:				
Spectator sports	31	32.5	46.6	73.7
Retailing	45	53.5	46.0	60.3
Commercial non-sport	276	401.4	409.4	444.7
Voluntary sector	60	80.1	96.2	91.6
Public sector	47	71.8	84.1	90.6
Total	489.0	676.2	725.9	817.8

2.4 Sport-related employment

Table 2.4 provides estimates for sport-related employment in the North 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 24,000 people in the North East, accounting for 2.1% of total employment in the region in 2008. This represents an increase of 7% since the year 2003. Sports related employment as a percentage of total employment dropped only marginally from 2.2% in 2005, to 2.1% in 2008 following the recession.

The relative share of employment generated within each sector is broadly consistent with their share of value added to the region's economy. As with value added, the largest sector is commercial non-sport, supporting 11,100 jobs or 46% of all sport-related employment in the North East. The commercial sport, public and voluntary sectors support 30%, 14% and 9% of the region's sport-related jobs respectively.

Despite the recession, jobs in the sport retailing increased during the 2005-2008 period by 38%. Similarly, over the aforementioned period, employment linked to spectator sports increased by 37%.

Table 2.4: Sport-related employment in the North East	2000 ('000)	2003 ('000)	2005 ('000)	2008 ('000)
Commercial sport	4.1	4.5	5.7	7.2
of which:				
Spectator sports	1.8	1.4	2.7	3.7
Retailing	1.6	1.6	1.3	1.8
Commercial non-sport	11.0	12.4	11.5	11.1
Voluntary sector	2.1	2.4	3.2	2.2
Public sector	2.4	3.2	3.9	3.4
Total	19.6	22.5	24.3	24.0

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 £584 million. This is followed by the commercial sport sector (£464 million) and the consumer sector (£384 million). Within the commercial sport sector, 52% 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 £828 million of expenditure. This is followed by the commercial non sport (£633 million) and commercial sport (£437 million) sectors. Almost 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	384	828
Commercial sport	464	437
of which:		
Spectator sports	40	107*
Participation sports	28	27*
Retailing	239	214*
Voluntary	159	113
Commercial non-sport	584	633
Central government	372	76
Local government	135	150
Outside the area	233	67

* 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 3.1 it can be seen that the North East has the smallest 'absolute' sport-related consumer spending (£829 million) among the nine English regions. This reflects the size of the North East economy. However, in terms of per capita spending on sport the North East (£322) ranks fifth amongst the English regions. Moreover, the proportion of total consumer expenditure made on sport in the region is the second highest across England at 2.6%. Therefore, despite the small size of the regional economy, sport is a more than average (compared to England) component within it. This is the result of sport driving several regeneration projects in the region.

A similar trend can be observed in Tables 3.6 and 3.9. The sport-related output in the North East (£818 million) is smaller than any other region, but this output is among the greatest as a proportion of the regional GVA (2.0%) and well above the English average (1.5%). Similarly, although sport-related employment in the region (24,000) is less than half of that supported in the North West and London, its importance to the overall regional employment (2.1%) is much greater than the aforementioned regions..

3.2 Importance of sport in the North East

The sport economy in the North East is boosted by a very enthusiastic consumer sector. More than 2.5% of total consumer expenditure in the region is sport-related, suggesting a genuine strength for sport in the region. This is often expressed in sport related gambling. The North East is among three English regions (together with West Midlands and Yorkshire) having sports gambling as their most important sport consumption category. The latter increased in size significantly following the abolition of gaming tax. This is the case throughout England and the UK. At the same time there is a sense of pride around the local football teams, reinforcing the regional identity and the community spirit in the North East.

It should be noted that the North East economy, on the whole, is underperforming in terms of the UK average. The average earnings for men and women in the North East are 85% and 89% of the national average respectively. This has attracted manufacturing in the region. For example, the production of vintage sport shirts for 'The Old Fashioned Football Company' is carried out near Newcastle. The general positive balance of payments and the significant manufacturing presence and export orientations are important advantages for the region. For example Northumberland is the home of the House of Hardy, a quintessential sport heritage brand producing fishing tackle and exporting 40% of its products

A trend of partnerships between various facilities brings more commercial benefits and at the same time more support for community sport. An example is the acquisition of the Kingston Park Rugby ground by the Northumbria University.

Key sports events such as the Great North Run have played a strategic role in the development of sport in the region. They include the Tyne Tour in Hexham, the East Coast Sailing Week along the Northumbrian coast and the European Dragon boat Championships in Stockton.

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

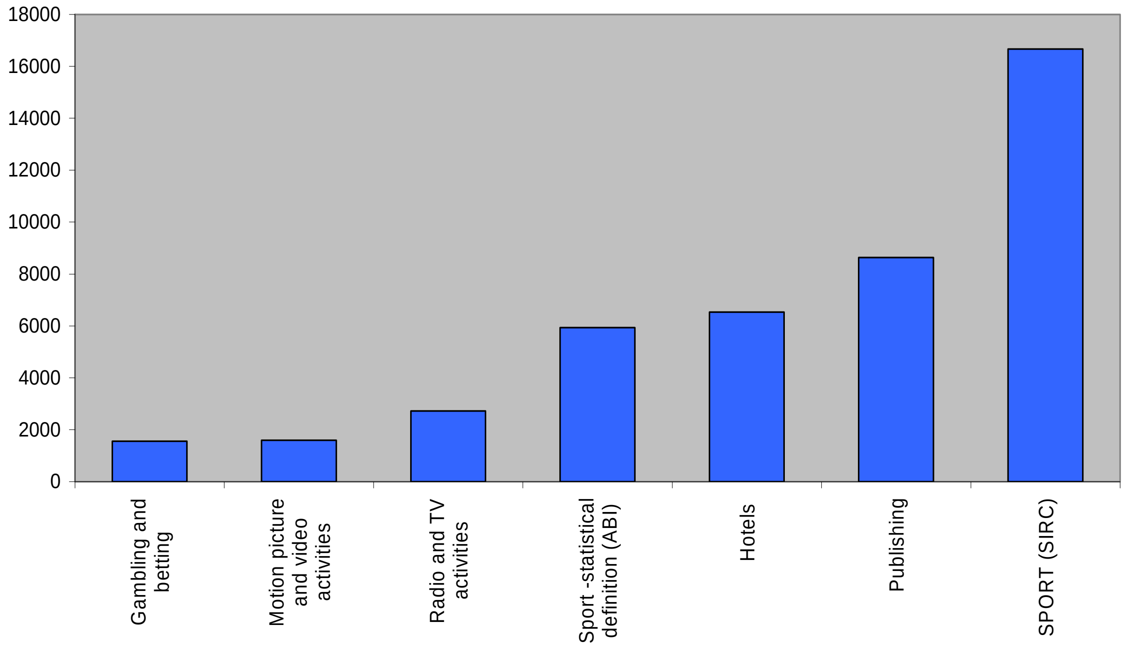
	East ('000)	East Midlands ('000)	London ('000)	North East ('000)	North West ('000)	South East ('000)	South West ('000)	West Midlands ('000)	Yorkshire & Humber ('000)	England ('000)
Commercial sport	25.2	12.5	20.9	7.2	18.8	25.5	12.7	18.1	9.8	150.7
of which:										
Spectator sports	*3.9*	*2.9*	*5.5*	*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.

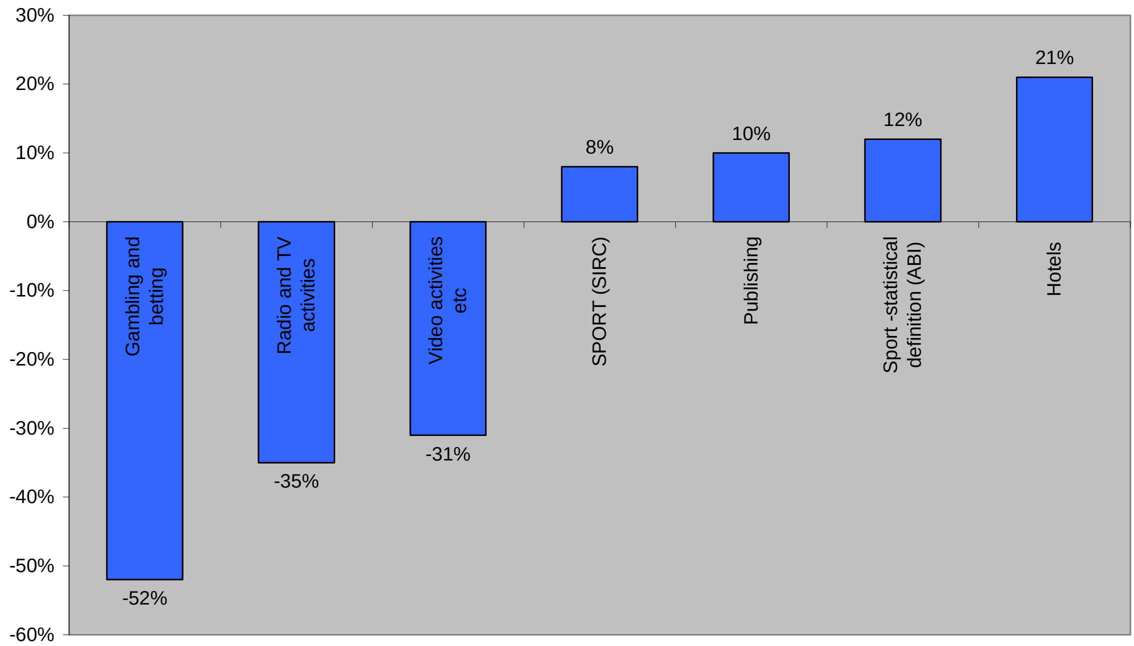
Figure 4.2 illustrates the GVA growth rates of the selected leisure sectors over the period 2005-2008. We consider this short period in order to focus more on the impact of the recession. The sector 'Hotels' has the largest growth over the examined period. This is partly because of the reversal of a 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
- Annual Survey of Hours and Earnings (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	23.4
Sports goods	44.3
Bicycles	2.7
Boats	51.9
Participants sports subscriptions & fees	126.1
Clothing sales	119.7
Footwear sales	45.2
Repairs and laundry	0.5
Travel	34.5
Books and magazines	6.8
Newspapers	14.6
Video: purchase and rental	0.8
BBC licence	15.9
TV and video rental, cable & satellite subscriptions	83.4
Internet subscriptions	0.3
Skiing holidays	39.4
Public schools	4.5
Gambling: Football pools	3.2
Horse Racing	191.3
Raffles and gaming	20.1
Total	828.5

Commercial sport income, 2008	
	£ million
Spectator Clubs:	
Admissions	23.2
Sponsorship & advertising	8.3
Corporate entertainment	5.2
Horserace Betting Levy	3.8
Cost of the rights to top league matches	68.0
Participation clubs:	
Subscriptions & fees	28.1
Retailers (net of Vat):	
Equipment	72.3
Clothing and footwear	144.9
Books, newspapers and magazines & videos	22.0
Exports and manufacturers' sales of	
clothing, footwear & equipment	50.1
TV and radio:	
BBC	15.9
Commercial	14.5
Exports	1.2
Internet subscriptions	0.2
Lottery awards	1.7
Lottery partnerships	0.6
Total Income	460.0

Commercial sport expenditure, 2008	
	£ million
Current factor expenditure	
Spectator clubs:	
Wages	71.4
Other inputs	35.1
Participation:	
Wages	14.0
Other inputs	12.6
Retailers:	
Wages	35.2
Other inputs	179.0
Manufactures:	
Wages	10.5
Other inputs	25.5
TV and radio:	
Wages	15.2
Other inputs	8.3
Total Factor Expenditure	
Total wages	146.4
Total other inputs	260.5
Total factor surplus	43.6
Total value added	190.0
Current transfers	
Corporation tax	6.2
Rates	5.7
Capital expenditure	
Investment	18.5
Total Expenditure Leaving Sector	437.3

Voluntary sector income, 2008

	£ million
Factor income (monetary)	
Players' subscriptions and match fees	70.6
Equipment	0.5
Sponsorship and advertising	5.6
Raffles and gaming machines	20.1
Bar receipts	96.8
Subtotal (factor income)	193.7
Other monetary income	
Grants	5.9
Foundation for Sport and Arts	0.8
Employers' subsidies	9.1
Interest	4.1
Lottery awards via Sport England	6.8
Lottery partnerships	6.0
Total Monetary Income (excluding bar receipts)	129.5

Voluntary sector expenditure, 2008	
	£million
Factor expenditure	
Wages	49.1
Ground hire and rents	5.0
Equipment	0.5
Other	33.8
(Bar purchases)	67.8
Subtotal (factor expenditure)	156.2
Rates	5.0
Interest	1.5
Investment	18.1
Total Monetary Expenditure (excluding bar purchases)	113.0

Commercial non-sport income, 2008	
	£million
Receipts net of tax from consumer spending:	
Travel	12.9
Gambling	172.4
Skiing	17.9
Public schools	3.7
TV rental, cable & satellite subscriptions	68.8
Sales of current inputs to:	
Central government	4.3
Local government	20.7
Commercial sport	191.3
Voluntary sector	30.4
Interest from voluntary sector	1.5
Sales of capital inputs to:	
Local government	34.4
Commercial sport	11.4
Voluntary	14.9
Promotion expenditure for sponsorship (intra-sectoral flow)	19.5
Total income	584.5

Commercial non-sport expenditure, 2008	
	£million
Producers of inputs to sport:	
wages	285.4
imports	145.8
(factor surplus)	159.3
(value added)	444.7
Corporation tax	22.8
Rates	13.3
Purchases of inputs from sport:	
Sponsorship and advertising	23.0
ITV and radio advertising	14.5
Corporate entertainment at sports events	5.2
Employees' sports subsidies	4.9
Horserace Betting Levy	3.8
Interest payments to voluntary sector	4.1
Promotion expenditure for sponsorship: (to elsewhere in CNS sector)	19.5
Cost of the rights to top league matches	68.0
Lottery awards via Sport England	19.4
Lottery partnerships	22.9
Total expenditure leaving sector	633.1

Central Government income, 2008	
	£ million
Taxes :	
on expenditure	140.2
on incomes generated in:	
commercial sport	57.2
voluntary sector	17.3
commercial non-sport	129.6
local government	27.2
Total income	371.6
Lottery awards	2.9
Lottery partnerships	1.8

Central Government expenditure, 2008	
	£ million
Transfer Payments	
Grants via Sport England	6.1
Grant support for local government expenditure on:	
sport (net spending)	27.5
education	29.1
Foundation for Sport and Arts	1.0
Factor Expenditure	
Sport England: wages and other inputs	5.6
Prison service, MOD, royal parks:	
wages and other inputs	1.9
Total	75.6

Local Government income, 2008	
	£ million
Local authority sports facilities:	
fees and charges	17.7
sales of equipment	9.3
ground hire	2.5
Grants from central government:	
to fund net expenditure on sport	27.5
sport education	29.1
via Sport England	0.9
via FSA	0.3
Rates:	
voluntary sector	5.0
commercial sport	5.7
commercial non-sport	13.3
Payments for policing	0.6
Lottery awards	8.0
Lottery partnerships	14.5
Total income	134.6

Local Government expenditure, 2008	
	£ million
Current expenditure	
Direct gross expenditure:	
Wages	34.4
Other current expenditure	29.3
Education:	
Wages	36.2
Research	0.3
Local transport and policing:	
Wages and other inputs	6.9
Grants to voluntary clubs	0.7
Capital expenditure	
Investment	41.7
Total expenditure	149.5

Outside the area income, 2008	
	£ million
Sports, clothing, footwear and equipment	44.6
Import content of skiing	14.6
TV imports	2.1
Prize income	15.5
Import content of UK production of:	
Sport related goods and services	10.2
Commercial non-sport sector output	145.8
Total income	232.8

Outside the area expenditure, 2008	
	£ million
Sports, clothing, footwear and equipment	45.6
Admissions to sports events	4.7
TV exports	1.2
Prize income	15.5
Total expenditure	67.1

Value Added by sport related economic activity, 2008

	£million	Index
Commercial sport:		
Wages	146.4	
Surplus	43.6	
Lottery projects	0.9	
Total	190.9	23.3
Voluntary sector:		
Wages	49.1	
Surplus	37.5	
Lottery projects	5.0	
Total	91.6	11.2
Commercial non-sport:		
Wages	285.4	
Surplus	159.3	
Total	444.7	54.4
Central Government:		
Wages	2.4	
Lottery projects	1.9	
Total	4.2	0.5
Local Government:		
Wages (education)	36.2	
Wages (sports facilities)	34.4	
Wages (transport and policing)	6.9	
Lottery projects	8.9	
Total	86.4	10.6
Total Value Added	817.8	100.0

Employment, 2008	
	Employment ('000s)
Sector:	
Commercial Sport	
Spectator clubs	3.7
Participation clubs	0.7
Retailers	1.8
Manufacturing (exports)	0.6
TV and Radio	0.5
Subtotal	7.2
Voluntary sport	2.2
Commercial non-sport	11.1
Central Government	
Administration	0.1
Subtotal	0.1
Local Government	
Sports facilities	1.8
Education	1.3
Transport/police	0.3
Subtotal	3.3
Total	24.0

The expenditure flows matrix, 2008 (£m)

Flows from:	Flows to: CON	CS	VOL	CNS	CG	LG	OV
Consumer sector	0.0	302.2	91.2	275.6	114.2	27.0	14.6
Commercial sport	95.0	0.0	0.0	202.7	60.9	6.4	72.4
Voluntary sector	31.9	0.4	0.0	46.8	26.4	7.5	0.0
Commercial non-sport	188.7	105.6	27.4	0.0	129.6	35.9	145.8
Central government	2.4	1.0	10.2	4.3	0.0	57.8	0.0
Local government	50.4	3.5	0.7	55.1	39.7	0.0	0.0
Overseas	15.5	50.7	0.0	0.0	0.8	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).