Economic Value of Sport West Midlands 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.

[1] *Sport Market Forecasts 20097-2013*, Sport Industry Research Centre (SIRC), 2009

Executive Summary

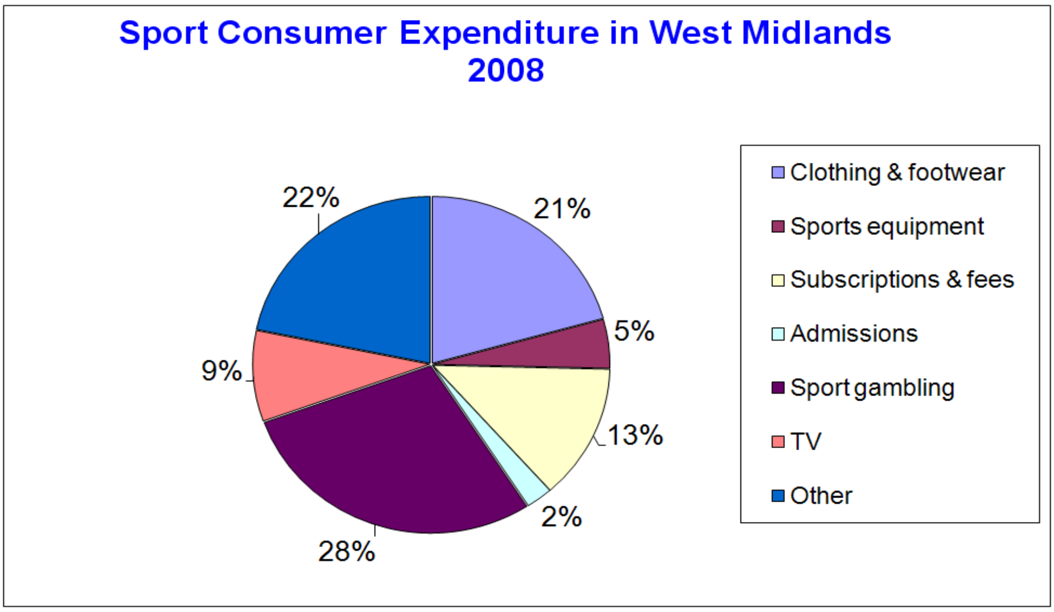
- This report is part of Sport England's ongoing commitment to build the evidence of the economic value of sport. The research has been carried out by The Sport Industry Research Centre (SIRC) as a follow up of the 2005 economic reports.

- 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 West Midlands 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.

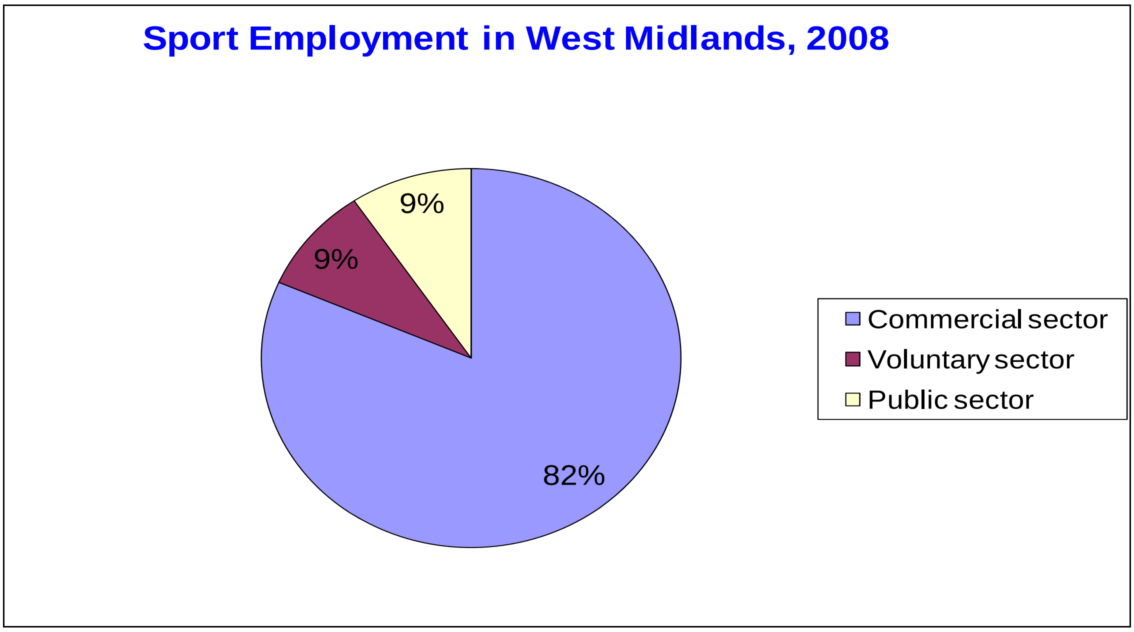
- In 2005 and 2008 consumers spent £1,537m and £2,136m on sport respectively. Consumer expenditure on sport as a percentage of total expenditure (2008):
  West Midlands: 2.9%
  England: 2.3%



- There has been a **39%** increase in sport related consumer spending (current prices) in the region over the period 2005-2008. Economic and sports policy circumstances aided the region to buck the declining trend of the 2008 recession.

- Sport related economic activity generated **£1,480m** and **£1,940m** in 2005 and 2008 correspondingly. This is equivalent to **2.0%** of total value added in the region (2008).

- **54,200** people are employed in sport related employment corresponding to **2.2%** 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 West Midlands sports economy benefits from its association with the motor sports cluster and the proximity of the region to London.

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 West Midlands 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 West Midlands 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 prudent to avoid double counting of generated added value. The inclusion of the motor sport cluster makes our results broadly comparable with the reports from Cambridge Econometrics. 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 West Midlands 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 West Midlands region has an unemployment rate higher than the UK economy (6.5%). Gross value added per head in the West Midlands is £17,803, representing 84% of the UK level. Similarly, average gross weekly earnings in the West Midlands approximate 91% of the UK average.

1.4 Sport in the region

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

Table 1.1 West Midlands - regional profile, 2008

Resident population '000s	
Males	2,664
Females	2,747
All	5,411
Percentage of non-white groups	
Region	13.9%
Gross Value Added per head (£)	
Region	17,803
England	21,183
Gross Value Added (£m)	
Region	96,333
England	1,089,799
Percentage of working age population	
Region	60.9%
UK	62.1%
Unemployment % rate on working age population (Jun-Aug 2008 / Seasonally Adj.)	
Region	6.5%
UK	6.0%
Ec. active % rate of working age people (Jun-Aug 2008 / Seasonally Adj.)	
Region	77.1%
England	79.4%
People in employment aged 16 to 59/64 '000s, (Jun-Aug 2008 / Seasonally Adj.)	
Region	2,357
England	23,631
Average weekly paid working hours	
Male Full Time, Region	41.0
Male Full Time, UK	40.7
Female Full Time, Region	37.4
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	577.3
Male Full Time, UK	634.0
Female Full Time, Region	432.1
Female Full Time, UK	484.4
All Full Time & Part time, Region	431.5
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 West Midlands Region (time of writing)

Premiership football:	Aston Villa
	Birmingham City
	Stoke City
	Wolverhampton Wanderers
Championship football:	Coventry
	West Bromwich Albion
League 1 football:	Walsall
League 2 football:	Burton Albion
	Hereford
	Port Vale
	Shrewsbury
Rugby union, Premiership:	Worcester
Cricket:	Warwickshire
	Worcestershire
Basketball:	Worcester Wolves
Speedway:	Birmingham
	Coventry
	Wolverhampton
	Stoke
Greyhound racing:	Hall Green (Birmingham)
	Monmore Green (Wolverhampton)
	Perry Bar (Birmingham)
Horse race tracks:	Hereford
	Ludlow
	Stratford-on-Avon
	Uttoxeter
	Warwick
	Wolverhampton
	Worcester
Other:	National Indoor Arena (Birmingham)
	National Exhibition Centre (Birmingham)
	Alexander stadium
	The Belfry, golf course
	National Sport Centre (Lilleshall)
	Tamworth Snow Dome
	British Open Show Jumping

2. The Sport Economy in the West Midlands

2.1 Summary of key indicators

Table 2.1 summarises the most important sport-related indicators for West Midlands, 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 also shows in percentage terms the effect of the 2008 economic recession.

According to Table 2.1, over £2.1 billion was spent on sport-related goods and services in the West Midlands in 2008. In the same year, consumer expenditure on sport accounts for 2.9% of the total expenditure in the region, the highest percentage among the English regions. Compared with 2005, there is a 39% increase in sport-related consumption.

Table 2.1: Main sport-related indicators for the West Midlands

	2000	2003	2005	2008
Consumer expenditure on sport (£million)	1,226.0	1,370.1	1,536.5	2,135.9
percentage of West Midlands total	2.4	2.4	2.4	2.9
national average (England)	2.2	2.5	2.6	2.3
Gross Value Added by sport (£million)	1,032.0	1,303.1	1,480.0	1,939.6
percentage of West Midlands total	1.6	1.7	1.7	2.0
national average (England)	1.5	1.6	1.7	1.5
Sport related employment (thousands)	39.1	43.1	44.2	54.2
percentage of West Midlands total	1.6	1.8	1.8	2.2
national average (England)	1.7	1.7	1.8	1.8

During the period 2003-2008, the proportion of total consumer spending on sport has increased from 2.4% to 2.9%. In 2008, sport-related economic activity added over £1.9 billion to the West Midlands economy, which represents an increase of 31% over the year

2005. The contribution to GVA by sport in the region has also increased from 1.7% to 2.0% during the aforementioned period.

Sport-related employment in the West Midlands grew from 44,200 in the year 2005 to 54,200 in 2008. As a percentage of total employment, it increased from 1.8% to 2.2%. The percentage of employment provided by sport has gone from being marginally below the English average in 2000, to being significantly above the national average in 2008.

It can be seen from the table 2.1 that, over the period 2005-08, the value added by sport to the West Midlands economy grew at a faster rate than sport-related employment in the region. This cannot be justified by inflation alone. Since value added corresponds to the sum of wages and profits it would appear that, as in the case of the South West region, this increase in sport-related economic activity was caused by increasing profit margins in the commercial sector.

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]

The summary table shows that the total value of sport-related consumer spending was £2,136 million in 2008, representing an increase of 39% over the year 2005. The largest single category of consumer spending on sport is sport gambling, accounting for £611 million or 29% of the market. Sport clothing and footwear is the second largest category of consumer spending on sport, accounting for £441 million or 21% of the market in 2008. Other important categories of expenditure include: participation (subscriptions and fees) and sport goods, accounting for £280 million and £101 million respectively. Together, the two participation-related sectors of sport clothing and footwear and subscriptions and fees account for 34% of the market. The spending associated with the two aforesaid participation-related categories increased by 15%, from £654 million in 2005 to £721 million in 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 9% of the market. Other spending categories include publications, sport-related BBC licence fee, and sport travel.

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

Table 2.2: Sport-related consumer spending in the West Midlands

	2000 £m	2003 £m	2005 £m	2008 £m
Sport clothing and footwear	244	334	330	441
Sports goods	149	91	93	101
Participation subscriptions and fees	263	241	324	280
Admissions to events	58	51	65	52
Sport-related gambling	182	263	306	611
TV/video rental, cable and satellite subscriptions		142	153	187
Other sport-related spending	330	248	266	465
Total	1,226	1,370	1,537	2,136

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: Sport-related value added in the West Midlands

	2000 £m	2003 £m	2005 £m	2008 £m
Commercial sport	282	318	386	470
of which:				
Spectator sports	53	62	91	90
Retailing	73	103	107	181
Commercial non-sport	518	723	765	1,115
Voluntary sector	139	145	209	214
Public sector	93	118	120	140
Total	1,032	1,303	1,480	1,940

Table 2.3 summarises the value added by sport in the West Midlands. According to the table, sport-related economic activity increased from £1,480 million in 2005 to £1,940 million in 2008. This represents an increase of 31%. The single largest portion of this economic activity (£1,115 million, 57%) is generated by the commercial non-sport sector. This is followed by commercial sport (£470 million, 24%). Most of the valued added generated in commercial sport is attributable to spectator sports and retailing. The latter increased by 69% during the period 2005-2008. It includes sport-related clothing and footwear, equipment and publications. The voluntary and public sectors account for the remainder (£354 million, 18%) of the sport-related economic activity in the region.

2.4 Sport-related employment

Table 2.4 provides estimates for sport-related employment in the West Midlands. The employment estimates for 2008 are derived from calculations based on wage payments and average salaries per sector.

Sport and associated industries are estimated to employ 54,200 people in the West Midlands. This represents an increase of 23% over the period 2005-2008. During the aforementioned period, the percentage of sport related employment in the region has increased from 1.8% to 2.2%.

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 26,100 jobs or 48% of all sport-related employment in the West Midlands. The commercial sport, voluntary and public sectors support 33%, 9% and 9% of the region's sport-related jobs respectively.

Employment linked to the sport retailing sector stayed increased very strongly during the 2005-2008 period, reaching 5,400 people employed. The region bucked the recession trend in all sport related indicators. The increases in retailing and sport gambling were particularly sharp, driving the market. Overall, the increase in sport related output had a positive effect on both profit margins and employment.

Table 2.4: Sport-related employment in the West Midlands	2000 ('000)	2003 ('000)	2005 ('000)	2008 ('000)
Commercial sport	11.3	12.4	14.1	18.1
of which:				
Spectator sports	3.3	2.8	3.7	4.2
Retailing	2.5	3.0	3.0	5.4
Commercial non-sport	19.0	20.7	20.5	26.1
Voluntary sector	4.5	4.7	5.0	4.9
Public sector	4.3	5.2	4.6	5.1
Total	39.1	43.1	44.2	54.2

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 £1,466 million. This is followed by the commercial sport sector (£1,120 million) and the consumer sector (£917 million). Within the commercial sport sector, 62% of generated income comes from retailing. This consists mainly of sport equipment, clothing and sales of sport related publications and DVDs. On the expenditure side, the most important category is the consumer sector accounting for £2,136 million of expenditure. This is followed by the commercial non sport (£1,369 million) and commercial sport (£1,065 million) sectors.

Table 2.5 Sport-related income and expenditure flows, 2008	Income £m	Expenditure £m
Consumer	917	2,136
Commercial sport	1,120	1,065
of which:		
Spectator sports	87	131
Participation sports	79	75
Retailing	689	619
Voluntary	349	252
Commercial non-sport	1,466	1,369
Central government	796	135
Local government	209	251
Outside the area	576	162

* 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 West Midlands has the fourth largest 'absolute' sport-related consumer spending among the nine English regions (£2,136 million). Per capita spending on sport in the West Midlands (£395) is the second largest among the English regions. This is a very significant improvement on the 2005 position. Consequently, the proportion of total consumer expenditure on sport in the region is the best in England, at 2.9%.

A similar trend can be observed in Tables 3.6 and 3.9. The sport-related output in the West Midlands (£1,940 million) is the fifth largest of the nine regions, but this output, as a proportion of the regional GVA (2.0%), is well above the average for England. Further, this roughly reflects the size of the regional economy (sixth) in terms of value added produced. Sport-related employment in the region (54,200) is the fourth largest of the nine regions and its importance to the overall regional employment (2.2%) is at the best in England.

3.2 Importance of sport in the West Midlands

The economy in the West Midlands is performing below the average level for England as a whole. The GVA per capita, at £17,803, is one of the lowest among the regions, corresponding to 84% of the UK level. Similarly, the average earnings for men and women in the West Midlands are 91% and 89% respectively of the national averages.

The improved sport related performance amid a recession, cannot be explained away by the general regional economy. Birmingham plays an important role within the region. It has become a hub of international sport events. It was the host city of the 2003 World Indoor Athletics and the 2007 European Athletics Indoor Championship. Sport gambling forms a very important component of the sport budget following the abolition of gaming tax.

According to Family Spending (2008), spending on sport related gambling was extremely high in West Midlands compared to the rest of the regions (£611 million). It was a driving force for the improved sports economy.

The improvement in sport related economy has partially to do with the low denominator in many indicators of the regional economy. According to 'Regeneris for NHS 2006', 16% of the productivity gap in the region was due to poor health. According to the Active People Survey (2006), the West Midlands is the least active of all English regions. Consequently, sport and cultural policy had a lot of impact in the regional economy. This result is in line with the regional expectation (SASSOT[4]) of 27% growth in culture and sport during the period 2004-2014.[5]

The West Midlands is part of the motor sport industry cluster. It is the base for five major component manufacturers. This is a constant source for sport-related value added and employment relatively insulated from the state of the domestic consumer sector.

[4] Sport Across Staffordshire and Stoke-on-Trent.

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

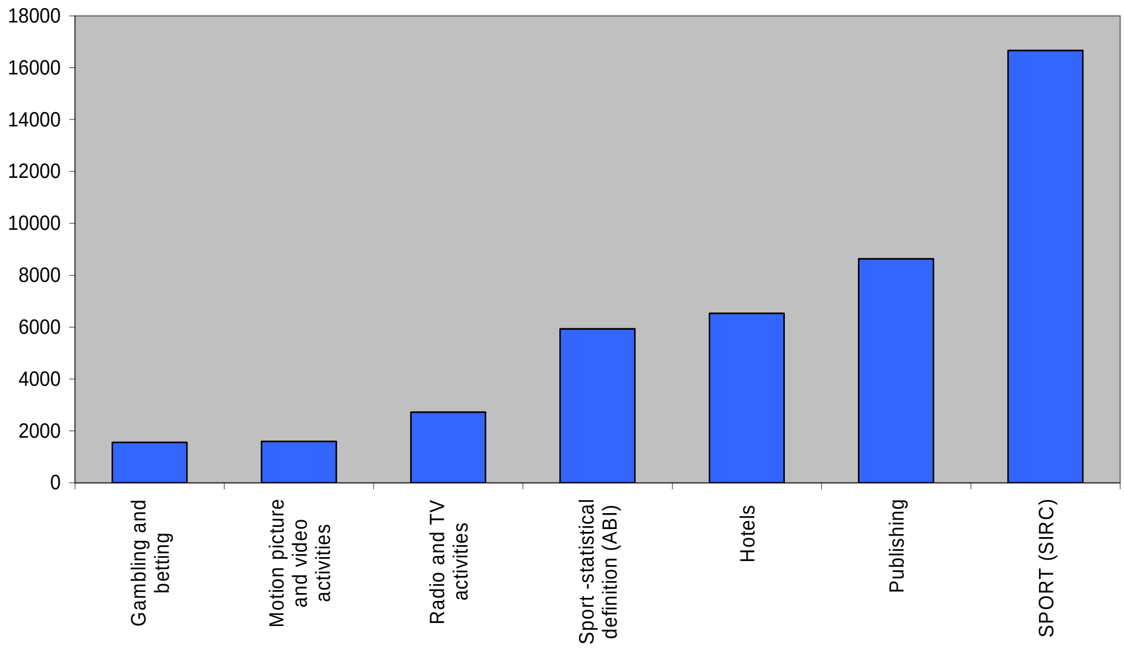
	East ('000)	East Midlands ('000)	London ('000)	North East ('000)	North West ('000)	South East ('000)	South West ('000)	West Midlands ('000)	Yorkshire & Humber ('000)	England ('000)
Commercial sport	25.2	12.5	20.9	7.2	18.8	25.5	12.7	18.1	9.8	150.7
of which:										
Spectator sports	*3.9*	*2.9*	*5.5*	*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 3.1 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.

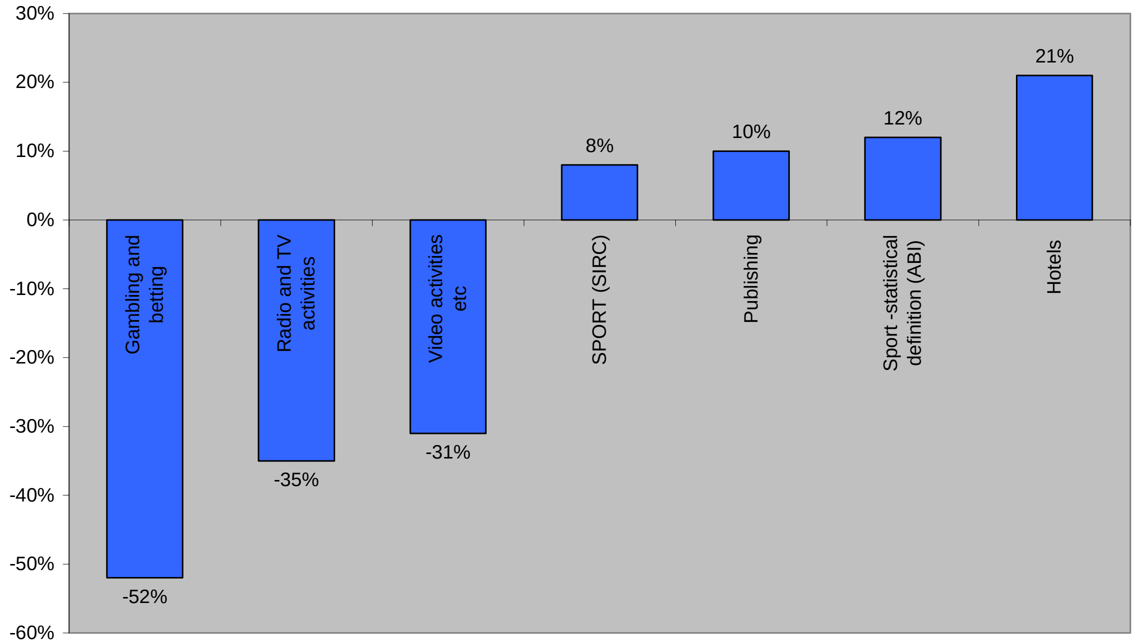
Figure 3.2 illustrates the GVA growth rates of the selected leisure sectors over the period 2005-2008. We consider this short period in order to focus more on the impact of the recession. The sector 'Hotels' has the largest growth over the examined period. This is partly because of the reversal of a 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	51.8
Sports goods	100.6
Bicycles	7.1
Boats	210.9
Participants sports subscriptions & fees	279.6
Clothing sales	315.0
Footwear sales	126.4
Repairs and laundry	2.0
Travel	72.0
Books and magazines	14.8
Newspapers	31.4
Video: purchase and rental	2.3
BBC licence	32.2
TV and video rental, cable & satellite subscriptions	187.3
Internet subscriptions	0.6
Skiing holidays	81.9
Public schools	9.4
Gambling: Football pools	9.2
Horse Racing	544.4
Raffles and gaming	57.2
Total	2,135.9

Commercial sport income, 2008	
	£ million
Spectator Clubs:	
Admissions	50.9
Sponsorship & advertising	16.8
Corporate entertainment	11.5
Horserace Betting Levy	8.1
Cost of the rights to top league matches	45.4
Participation clubs:	
Subscriptions & fees	79.4
Retailers (net of Vat):	
Equipment	252.8
Clothing and footwear	388.3
Books, newspapers and magazines & videos	48.1
Exports and manufacturers' sales of	
clothing, footwear & equipment	144.4
TV and radio:	
BBC	32.2
Commercial	29.4
Exports	2.4
Internet subscriptions	0.5
Lottery awards	1.5
Lottery partnerships	0.5
Total Income	1,112.2

Commercial sport expenditure, 2008	
	£ million
Current factor expenditure	
Spectator clubs:	
Wages	87.3
Other inputs	43.5
Participation:	
Wages	39.7
Other inputs	35.7
Retailers:	
Wages	110.5
Other inputs	508.6
Manufactures:	
Wages	35.7
Other inputs	89.5
TV and radio:	
Wages	30.9
Other inputs	16.9
Total Factor Expenditure	
Total wages	304.0
Total other inputs	694.3
Total factor surplus	97.5
Total value added	401.5
Current transfers	
Corporation tax	13.9
Rates	12.1
Capital expenditure	
Investment	40.4
Total Expenditure Leaving Sector	1,064.7

Voluntary sector income, 2008	
	£ million
Factor income (monetary)	
Players' subscriptions and match fees	156.6
Equipment	1.6
Sponsorship and advertising	11.5
Raffles and gaming machines	57.2
Bar receipts	226.8
Subtotal (factor income)	453.5
Other monetary income	
Grants	13.3
Foundation for Sport and Arts	1.6
Employers' subsidies	19.3
Interest	8.9
Lottery awards via Sport England	5.9
Lottery partnerships	5.2
Total Monetary Income (excluding bar receipts)	281.1

Voluntary sector expenditure, 2008	
	£million
Factor expenditure	
Wages	114.2
Ground hire and rents	6.2
Equipment	1.8
Other	76.7
(Bar purchases)	158.7
Subtotal (factor expenditure)	357.7
Rates	10.5
Interest	3.3
Investment	39.4
Total Monetary Expenditure (excluding bar purchases)	252.1

Commercial non-sport income, 2008	
	£million
Receipts net of tax from consumer spending:	
Travel	27.8
Gambling	490.6
Skiing	37.2
Public schools	7.7
TV rental, cable & satellite subscriptions	154.6
Sales of current inputs to:	
Central government	9.0
Local government	18.6
Commercial sport	520.9
Voluntary sector	66.3
Interest from voluntary sector	3.3
Sales of capital inputs to:	
Local government	72.3
Commercial sport	25.0
Voluntary	32.5
Promotion expenditure for sponsorship (intra-sectoral flow)	39.5
Total income	1,465.7

Commercial non-sport expenditure, 2008	
	£million
Producers of inputs to sport:	
wages	715.7
imports	365.5
(factor surplus)	399.5
(value added)	1,115.2
Corporation tax	57.1
Rates	33.5
Purchases of inputs from sport:	
Sponsorship and advertising	47.1
ITV and radio advertising	29.4
Corporate entertainment at sports events	11.5
Employees' sports subsidies	10.4
Horserace Betting Levy	8.1
Interest payments to voluntary sector	8.9
Promotion expenditure for sponsorship: (to elsewhere in CNS sector)	39.5
Cost of the rights to top league matches	45.4
Lottery awards via Sport England	16.9
Lottery partnerships	20.0
Total expenditure leaving sector	1,369.4

Central Government income, 2008	
	£ million
Taxes:	
on expenditure	346.0
on incomes generated in:	
commercial sport	100.9
voluntary sector	34.0
commercial non-sport	277.7
local government	37.3
Total income	796.3
Lottery awards	2.5
Lottery partnerships	1.6

Central Government expenditure, 2008	
	£ million
Transfer Payments	
Grants via Sport England	12.8
Grant support for local government expenditure on:	
sport (net spending)	32.7
education	61.2
Foundation for Sport and Arts	2.1
Factor Expenditure	
Sport England: wages and other inputs	11.7
Prison service, MOD, royal parks:	
wages and other inputs	5.4
Total	135.3

Local Government income, 2008	
	£ million
Local authority sports facilities:	
fees and charges	22.1
sales of equipment	10.2
ground hire	3.1
Grants from central government:	
to fund net expenditure on sport	32.7
sport education	61.2
via Sport England	1.9
via FSA	0.5
Rates:	
voluntary sector	10.5
commercial sport	12.1
commercial non-sport	33.5
Payments for policing	1.3
Lottery awards	7.0
Lottery partnerships	12.7
Total income	208.8

Local Government expenditure, 2008	
	£ million
Current expenditure	
Direct gross expenditure:	
Wages	40.9
Other current expenditure	34.8
Education:	
Wages	76.0
Research	0.6
Local transport and policing:	
Wages and other inputs	8.2
Grants to voluntary clubs	2.5
Capital expenditure	
Investment	87.6
Total expenditure	250.6

Outside the area income, 2008	
	£ million
Sports, clothing, footwear and equipment	126.8
Import content of skiing	30.4
TV imports	4.2
Prize income	18.7
Import content of UK production of:	
Sport related goods and services	30.7
Commercial non-sport sector output	365.5
Total income	576.3

Outside the area expenditure, 2008	
	£ million
Sports, clothing, footwear and equipment	131.4
Admissions to sports events	9.9
TV exports	2.4
Prize income	18.7
Total expenditure	162.4

Value added by sport related economic activity, 2008	£million	Index
Commercial sport:		
Wages	371.8	
Surplus	97.5	
Lottery projects	0.8	
Total	470.1	24.2
Voluntary sector:		
Wages	114.2	
Surplus	95.9	
Lottery projects	4.3	
Total	214.4	11.1
Commercial non-sport:		
Wages	715.7	
Surplus	399.5	
Total	1,115.2	57.5
Central Government:		
Wages	5.7	
Lottery projects	1.6	
Total	7.3	0.4
Local Government		
Wages (education)	76.0	
Wages (sports facilities)	40.9	
Wages (transport and policing)	8.2	
Lottery projects	7.6	
Total	132.6	6.8
Total Value Added	1,939.6	100.0

Employment, 2008

Sector	Employment ('000s)
Commercial Sport:	
Spectator clubs	4.2
Participation clubs	1.9
Retailers	5.4
Manufacturing	5.3
TV and Radio	0.9
Subtotal	17.9
Voluntary sport:	4.9
Commercial non-sport	26.1
Central Government:	
Administration	0.2
Subtotal	0.2
Local Government:	
Sports facilities	2.0
Education	2.7
Transport/police	0.3
Subtotal	4.9
Total	54.0

The expenditure flows matrix, 2008 (£m)

Flows from:	Flows to: CON	CS	VOL	CNS	CG	LG	OV
Consumer sector	0.0	842.5	215.3	717.8	291.8	32.3	30.4
Commercial sport	213.4	0.0	0.0	545.9	111.5	13.4	180.4
Voluntary sector	80.2	1.5	0.0	102.1	54.7	13.6	0.0
Commercial non-sport	510.4	120.8	41.9	0.0	277.7	53.1	365.5
Central government	5.7	2.9	21.4	9.0	0.0	96.4	0.0
Local government	88.2	10.1	2.5	90.9	58.8	0.0	0.0
Overseas	18.7	142.0	0.0	0.0	1.7	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).