

Economic Value of Sport East Midlands 2003-2008

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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 Forecasts¹. Sport is divided into the following sectors: Sport clothing and footwear, Sport equipment, Health and fitness, other participant sports, Boats, Spectator sports, Sport gambling, Sport TV and video, Sport related publications and sport related travel.

4. Employment

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

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

Executive Summary

- This report is part of Sport England's ongoing commitment to build the evidence of the economic value of sport. The research has been carried out by The Sport Industry Research Centre (SIRC) as a follow up of the 2005 economic reports.
- The economic value of sport has been assessed across England as a whole and separately for each region. The 2008 economic recession has been a factor influencing the size of the sports sector nationally and within each region.
- This report focuses on the economic importance of sport to the East Midlands region in 2008, providing comparisons with estimates from 2005, 2003 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 £1,418m and £1,398m on sport respectively.
 Consumer expenditure on sport as a percentage of total expenditure (2008):
- East Midlands: 2.4%
- England: **2.3%**



- There has been a **34%** increase in consumer spending (current prices) on sport clothing and footwear over the period 2003-2008.
- Sport related activity generated £1,321m and £1,375m in 2005 and 2008 respectively. This is equivalent to 1.7% of total value added in the region (2008).
- **37,900** people are employed in sport related employment corresponding to **1.8%** 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 region features the Silverstone and Donnington Park motor racing circuits, the heart of the motor sport cluster, and a number of sport-related engine builders around Northampton. It is also the home of the powerboat company Fairline and the retailing company Sports Direct. Development of sport in the region has been helped by its proximity to London and to major traffic routes.

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 East Midlands region. It builds on similar research carried out by Cambridge Econometrics in 2000¹ 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 East Midlands 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 nonsport to the commercial sport sector.

¹ 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 results of this study differ from work conducted by York Consulting on the Economic Impact of Sport in the East Midlands, on account of the following:

1. SIRC uses, as a starting point, estimates for sport related consumption, while York Consulting uses sport related employment.

2. The use of moving average estimates for consumption based on Family Spending by SIRC, and the use of multipliers by York Consulting imply a degree of divergence.

3. Different definitions of sport are in use. SIRC have used a much less generous approach towards Motor Sport (for consistency with Cambridge Econometrics). Previous studies had excluded Motor Sport altogether. Several categories are used in the York Consulting report but not by SIRC, such as motoring clubs and associations, dieting and weight control, activity centres for children, trophies and medals, stud farm proprietors etc.

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 East 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 East Midlands economy, as a whole, performs below the average UK level (in terms of GVA per head). It has an unemployment rate (6.1%) slightly above the UK average level (6.0%). This represents a significant increase from the 2005 level (4.3%). Gross Value Added per head in the region is £18,344, which corresponds to 87% of the English level. Average gross weekly earnings are at 91% of the UK level.

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1.4 Sport in the region

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

Table 1.1 East Midlands - regional profile, 2008	
Resident population '000s	
Males	2,181
Females	2,252
All	4,433
Percentage of non-white groups	
Region	8.6%
Gross Value Added per head (£)	10.044
Region	18,344
England	21,183
Gross value Added (£m)	01 000
Freiend	81,320
England	1,089,799
Percentage of working age population	
Region	62.0%
UK	62.1%
I Inemployment % rate (October to December 2008 / Seasonally Adjusted)	
Region	61%
LIK	6.0%
	0.070
Ec. active % rate of working age people (October to December 2008 / Seasonally Adjusted)	
Region	79.8%
England	79.4%
People in employment '000s (May to July 2005 / Seasonally Adjusted)	
Region	2,159
England	23,631
Average weekly paid working hours	
Male Full Time, Pagion	A1 A
Male Full Time, Neglon Male Full Time, LIK	41.4
Female Full Time, Begion	38.0
Female Full Time, Hegion	37.6
All Full Time & Part time. Region	34.4
All Full Time & Part time, LIK	33.9
Average gross weekly earnings	00.0
Male Full Time. Region	578.8
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

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

Table 1.2 Sport profile of the East Midlands region*

Championship	football:	Derby County				
		Leicester				
		Nottingham Forest				
League 2 foot	ball:	Chesterfield				
		Northampton				
		Notts County				
Rugby Union,	Premiership:	Leicester Tigers				
		Northampton Saints				
Cricket:		Derbyshire				
		Leicestershire				
		Northamptonshire				
		Nottinghamshire				
		National Cricket Academy (Loughborough)				
Basketball:		Leicester Riders				
Greyhound racing:		Nottingham				
Horse race tra	icks:	Leicester				
		Market Rasen				
		Nottingham				
		Southwell				
		Towcester				
Motor rooing		Department Park				
wow racing.						
		Realization Mater Speedway				
		Silverstone				
Other:	National Ice Centre (N	lottingham)				
	National Water Sports	Centre (Nottingham)				
	Inland Sailing Centre (Rutland)				
	Queens Medical Cent	re for sport medicine (University of Nottingham)				
	Sport Science and Ed	lucation centre (University of Loughborough)				
	Long distance walking	g routes - Peak Park and National Forest				

* At the time of writing.

2. The Sport Economy in the East Midlands

2.1 Summary of key indicators

Table 2.1 summarises the most important sport-related indicators for East 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 shows that the effect of the 2008 recession was to take us back to near the 2000 levels of sport economic activity.

According to Table 2.1, £1,398 million was spent on sport-related goods and services in the East Midlands in 2008. Consumer expenditure on sport accounts for 2.4% of their total expenditure in the region; which is slightly higher than the national average for England. During the period 2005-08, there was a decrease of 1.5% in sport-related consumption.

Table 2.1: Main sport-related indicators for the East Midlands										
	2000	2003	2005	2008						
Consumer expenditure on sport (£million)	871.0	1,203.4	1,417.6	1,398.4						
percentage of East Midlands total	2.1	2.5	2.7	2.4						
national average (England)	2.2	2.5	2.6	2.3						
Gross Value Added by sport (£million)	871.0	1,137.2	1,321.1	1,375.3						
percentage of East Midlands total	1.6	1.8	1.9	1.7						
national average (England)	1.5	1.6	1.7	1.5						
Sport related employment (thousands)	33.0	38.0	40.7	37.9						
percentage of East Midlands total	1.8	1.9	1.9	1.8						
national average (England)	1.7	1.7	1.8	1.8						

The proportion of total consumer spending on sport has increased from 2.1% in 2000; to 2.4% in 2008. In 2008, sport-related economic activity added almost £1.4 billion in the East Midlands economy, representing an increase of 4% over the year 2005. The proportional contribution to GVA by sport in the region has increased from 1.6% in 2000 to 1.7% in 2008.

Sport-related employment in the East Midlands declined from 40,700 in 2005 to 37,900 in 2008. This represented a decrease of 7%. During the period 2000-2008, the ratio of the

sport related over the total employment varied between 1.8% and 1.9%. This compares favourably with the situation for England as a whole, where sport-related employment as a proportion of total employment was between 1.7% and 1.8%.

It can be seen from the table 2.1 that, over the period 2005-08, the value added by sport to the East Midlands, in current terms, grew by 4%, while sport-related consumption and employment declined. Since value added corresponds to the sum of wages and profits, it would appear that 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 East Midlands. The estimates are consistent with the total reported in the ONS publication Consumer Trends.¹

The summary table shows that the total value of sport-related consumer spending was £1,398 million in 2008, decreasing by 1.5% over the year 2005. The most significant areas of consumer spending on sport are sport clothing and footwear, participation (subscriptions and fees), sport gambling and other sport-related spending. Together these four broad categories account for £1,068 million, more than three-quarters of the sport-related expenditure in the region in 2008. Of these, the size of the sport participation (subscriptions and fees) sector increased by 11% over the 2003-08 period. The spending associated with sport related gambling in East Midlands increased by 13% since 2003 and the expenditure on sport goods fell from £170 million in 2005 to £118 million in 2008.

¹ Consumer Trends, Quarter 1 2009 (ONS)

Table 2.2: Sport-related consumer spending in the East Midlands										
	2000 £m	2003 £m	2005 £m	2008 £m						
Sport clothing and footwear	181	219	248	293						
Sports goods	55	121	170	118						
Participation subscriptions and fees	180	224	270	248						
Admissions to events	40	48	55	46						
Sport-related gambling	130	211	253	238						
TV/video rental, cable and satellite subscriptions		128	140	167						
Other sport-related spending	285	252	282	289						
Total	871	1,203	1,417	1,398						

The role of sport in creating output and employment in the commercial non-sport sector is further illustrated by the sports-related spending on 'TV and video rental, cable and satellite subscriptions', accounting for 12% 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 to East Midlands' economy. According to the table, sport-related economic activity in the region increased from £1,137 million in 2003 to £1,375 million in 2008. The majority of this economic activity (£706 million, 51%) is generated by the commercial non-sport sector. The next largest sector is commercial sport (£359 million, 26%), with half of the valued added in this sector being attributable to spectator sports and retailing. The latter includes sport-related clothing and footwear, equipment and publications.

	2000 £m	2003 £m	2005 £m	2008 £m
Commercial sport	282	294	341	359
of which: Spectator sports Retailing	45 72	47 103	50 125	67 113
Commercial non-sport	411	604	677	706
Voluntary sector	109	140	178	161
Public sector	69	99	125	150
Total	871	1,137	1,321	1,375

The voluntary and public sectors account for 12% and 11% of the sport-related economic activity in the region respectively. Within the commercial sport sector, retailing increased from \pounds 103 million in 2003 to \pounds 113 million in 2008. This reflects increasing trends for sports wear to be used as fashion wear.

2.4 Sport-related employment

Table 2.4 provides estimates for sport-related employment in the East 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 37,900 people in the East Midlands, accounting for 1.8% of all employment in the region in 2008. This shows a small decline compared to the pre-recession period, indicating that sport has been more affected compared to the rest of the regional economy.

Jobs in sport were almost the same over the period 2003-08. Table 2.4 indicates that the majority of these jobs are supported by the commercial non-sport and commercial sport sectors, together accounting for almost 29,000 jobs or around 77% of the total sport-related employment in the region. During 2003-08, employment linked to spectator sports increased by 26%.

Table 2.4: Spor	t-related employment in the E	ast Midlands			
		2000	2003	2005	2008
		('000)	('000)	('000)	('000)
Commercial spo	rt	10.5	11.6	12.5	12.5
	of which:				
	Spectator sports	2.9	2.3	2.3	2.9
	Retailing	2.2	3.1	3.6	3.4
Commercial non	-sport	15.4	17.5	18.4	16.5
Voluntary sector		3.8	4.5	4.7	3.4
Public sector		3.3	4.4	5.1	5.4
Total		33.0	38.0	40.7	37.9

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. Of these sectors, the commercial non-sport sector generated the largest income, £928 million. This is followed by the commercial sport sector (£752 million) and consumer sector (£651 million) respectively. Sport retailing accounts for the majority (59%) of the commercial sport sector income, generated through the sale of sport equipment, clothing and footwear, and publications. On the expenditure side, by far the most important category is the consumer sector accounting for spending almost £1.4 billion. The commercial non-sport and commercial sport sectors also incur significant expenditures, £900 million and £707 million respectively. Almost two thirds of the expenditure within the commercial sport sector relates to current factor spending, such as wages, predominantly in the retailing sub-sector.

Table 2.5 Sport-related income and expenditure fl	ows, 2008	
	Income	Expenditure
	£m	£m
Consumer	651	1,398
Commercial sport	752	707
of which:		
Spectator sports	75	97*
Participation sports	57	54*
Retailing	441	400
Voluntary	271	196
Commercial non-sport	928	900
Central government	558	131
Local government	216	262
Outside the area	374	108
* 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, of the nine English regions, the East Midlands has the second lowest 'absolute' level of consumer spending on sport-related goods and services. Further, in terms of per capita spending on sport the East Midlands (£316) ranks sixth amongst the English regions (2005). Nevertheless, the proportion of total consumer expenditure made on sport in the region is above average at 2.4%. The 2008 recession brought an absolute decline in the level of sport related expenditure. Additionally, sport as percentage of total spending fell from 2.7% in 2005 to 2.4% in 2008.

A similar trend can be observed in Tables 3.6 and 3.9. The size of sport-related output in the East Midlands (£1.38 billion) is smaller than all but one English region, but as a proportion of regional GVA (1.7%), this level of output is only behind to the level of North East, West Midlands and East (2%). Similarly, although sport-related employment in the region (37,900) is less than that supported by most regions, its importance to the overall regional employment (1.8%) is equal to the English average (1.8%). The 2008 recession brought a decline in sport related occupations. In percentage terms, sport employment declined from 1.9% in 2005 to 1.8% in 2008.

3.2 Importance of sport in the East Midlands

Overall, the East Midlands economy is underperforming compared with the UK average, in terms of earnings and GVA. The region performs approximately at the 86% and 91% level of the UK GVA per head and gross weekly earnings average respectively. This is reflected in the position that the region occupies in relation to sport-related consumer expenditure. However, in terms of sport-generated GVA and employment the region outperforms its overall economic weight. For example, sport employment as percentage of total employment compares favourably to the English average. The explanation for this most likely lies in sport-linked engineering.

The most distinguishing characteristic of sport for the region is its links with the motorsport industry, including the Silverstone motor racing circuit. The latter is the heart of the motor sport cluster. This has attracted major engine builders to the region. The East Midlands is also the home of other motor racing venues including Donnington Park, Mallory Park and Rockingham Motor Speedway. Consequently, moving the Formula 1 race from Silverstone to Donnington Park, will not affect the region. The sport-engineering hub around Northampton also features Fairline, the boat building company. The region has been helped by its proximity to London and to major traffic routes such as M1, M40, and A14. Another company that notably boosts the sport profile of the region is Sports Direct, based in Shirebrook.

From the consumer expenditure point of view, it is important to highlight the growth in sport clothing and footwear. The latter has increased by 18% in the 2005-08 period. This is possibly connected to policies for increasing sports participation during these years. Another area of sport-related spending that has seen increase despite the recession is sport related television rental and subscriptions. This is consistent with evidence from the Expenditure and Food Survey¹. The latter suggests two areas where on average East Midlands spends more than England: TV subscriptions and spectator sports. Sport gambling forms a very important component of the sport budget following the abolition of gaming tax. This is the case throughout England and the UK. However, its relative importance to the industry has declined as a result of the 2008 recession.

¹ Family Spending, a report on the Expenditure and Food Survey (ONS)

Table 3.1: Summary of sport-	related co	onsumer spe	ending in the	e English F	Regions in 2	2003				
		East		North	North	South	South	West	Yorkshire	
	East	Midlands	London	East	West	East	West	Midlands	& Humber	England
	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£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		North	North	South	South	West	Yorkshire		
	East	Midlands	London	East	West	East	West	Midlands	& Humber	England	
	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	
Sport clothing and footwear (\pounds 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		North	North	South	South	West	Yorkshire	
	East	Midlands	London	East	West	East	West	Midlands	& Humber	England
	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£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%

able 3.4: Summary of sport-related output in the English Regions in 2003										
		East			North	South	South	West	Yorkshire	
	East	Midlands	London	North East	West	East	West	Midlands	& Humber	England
	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£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
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-relation	ited output	in the Engli	sh Regions	s in 2005						
		East			North	South	South	West	Yorkshire	
	East	Midlands	London	North East	West	East	West	Midlands	& Humber	England
	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£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
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-relation	ated output	in the Engli	sh Regions	s in 2008						_
		East			North	South	South	West	Yorkshire	
	East	Midlands	London	North East	West	East	West	Midlands	& Humber	England
	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£m)	(£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
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 sp	ort-relate	d employme	ent in the E	English Regio	ns in 2003					
-		East			North	South	South	West	Yorkshire	
	East	Midlands	London	North East	West	East	West	Midlands	& Humber	England
	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('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 sp	ort-relate	ed employme	ent in the E	English Regio	ns in 2005					
-		East			North	South	South	West	Yorkshire	
	East	Midlands	London	North East	West	East	West	Midlands	& Humber	England
	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('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	90.0
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 sp	ort-relate	ed employme	ent in the E	English Regio	ns in 2008					
		East			North	South	South	West	Yorkshire	
	East	Midlands	London	North East	West	East	West	Midlands	& Humber	England
	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('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



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Consumer expenditure on sport related goods and services, 2008 Commercial sport income, 2008 Commercial sport expenditure, 2008 Voluntary sector income, 2008 Voluntary sector expenditure 2008 Commercial non sport income 2008 Commercial non sport expenditure 2005 Central Government income, 2008 Central Government expenditure, 2008 Local Government income, 2008 Local Government expenditure, 2008 Outside the area income, 2008 Outside the area expenditure, 2008 Value added by sport related economic activity, 2008 Employment, 2008 Expenditure flows matrix, 2008

A3 Sources and Methods

A1: Statistical Sources

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

Consumer Trends	Housing and Construction Statistics
Travel Trends	LIK National Accounts
Family Spending	 BBC Annual Report and Accounts
Regional Trends	 PRODCOM Annual Industry Reports
 'Focus on' reports 	HM Customs and Excise Report
Annual Business Inquiry	 Monthly Digest of Statistics
Appual Survey of Hours and	Einancial Statement and Budget Report
Annual Survey of hours and	
Earnings (ASHE)	
	 Horserace and Betting Levy Board Report
Sport England Annual Report	
	Government's Expenditure Plans
Regional Accounts	
	Deloitte: Annual Review of Football Finance
- Leigurg and Degraption	
Statistics	 BSkyB Annual Report
General Household Survey	 Labour Tranda
National Travel Survey	

A2: Model Output

Consumer expenditure on sport related	goods & services, 2008
	£million
Admissions	45.9
Sports goods	118.2
Bicycles	1.2
Boats	73.1
Participants sports subscriptions & fees	248.1
Clothing sales	184.4
Footwear sales	108.6
Repairs and laundry	1.9
Travel	66.1
Books and magazines	14.5
Newspapers	26.0
Video: purchase and rental	1.4
BBC licence	26.8
TV and video rental, cable & satellite subscriptions	166.9
Internet subscriptions	0.6
Skiing holidays	70.5
Public schools	6.7
Gambling: football pools	3.6
Horse racing	211.7
Raffles and gaming	22.2
Total	1,398.4

Commercial sport income, 2008	
	£ million
Spectator Clubs:	
Admissions	44.6
Sponsorship & advertising	14.0
Corporate entertainment	10.2
Horserace Betting Levy	6.6
Cost of the rights to top league matches	22.7
Participation clubs:	
Subscriptions & fees	57.2
Retailers (net of Vat):	
Fauinment	141.3
Clething and facturer	050.0
	200.0
Books, newspapers and magazines & videos	41.7
Exports and manufacturers' sales of clothing, footwear & equipment	92.2
	02.2
TV and radio:	
BBC	26.8
Commercial	24.5
Exports	2.0
Internet subscriptions	0.5
Lottery awards	1.7
Lottery partnerships	0.6
Total Income	744.9

Commercial sport expenditure, 2008	
	£ million
Current factor expenditure Spectator clubs:	
Wages Other inputs	64.7 32.4
Participation:	
Wages Other inputs	28.6 25.7
Retailers:	
Wages Other inputs	71.7 328.7
Manufactures:	
Wages Other inputs	21.6 46.1
TV and radio:	
Wages Other inputs	25.7 14.1
Total Factor Expenditure	
Total wages Total other inputs	212.4 447.0
Total factor surplus	71.6
Total value added	283.9
Current transfers	
Corporation tax	10.2
Rates	8.5
Capital expenditure	
Investment	28.9
Total Expenditure Leaving Sector	707.0

Voluntary sector income, 2008	
Factor income (monetary)	£ million
Players' subscriptions and match fees	138.9
Equipment	1.0
Sponsorship and advertising	9.5
Raffles and gaming machines	22.2
Bar receipts	171.7
Subtotal (factor income)	343.3
Other monetary income	
Grants	13.7
Foundation for Sport and Arts	1.3
Employers' subsidies	13.9
Interest	5.6
Lottery awards via Sport England	6.9
Lottery partnerships	6.1
Total Monetary Income (excluding bar receipts)	219.3

Voluntary sector expenditure, 2008	
Factor expenditure	£million
Wages	86.9
Ground hire and rents	9.2
Equipment	1.0
Other	57.8
(Bar purchases)	120.2
Subtotal (factor expenditure)	275.2
Rates	7.4
Interest	2.6
Investment	31.1
Total Monetary Expenditure	196.1
(excluding bar purchases)	

Commercial non-sport income, 2008	
	£million
Receipts net of tax from consumer spending:	
Travel	25.9
Gambling	190.8
Skiing	32.0
Public schools	5.6
TV rental, cable & satellite subscriptions	137.7
Sales of current inputs to:	
Central government	7.3
Local government	35.6
Commercial sport	335.1
Voluntary sector	52.3
Interest from voluntary sector	2.6
Sales of capital inputs to:	
Local government	59.2
Commercial sport	17.9
Voluntary	25.6
Promotion expenditure for sponsorship (intra-sectoral flow)	32.9
Total income	927.6

Commercial non-sport expenditure, 2008			
	£million		
Producers of inputs to sport:			
wages	452.9		
imports	231.3		
(factor surplus)	252.8		
(value added)	705.8		
Corporation tax	36.1		
Rates	21.2		
Purchases of inputs from sport:			
Sponsorship and advertising	39.4		
ITV and radio advertising	24.5		
Corporate entertainment at sports events	10.2		
Employees' sports subsidies	6.6		
Horserace Betting Levy	6.6		
Interest payments to voluntary sector	5.6		
(to elsewhere in CNS sector)	32.9		
Cost of the rights to top league matches	22.7		
Lottery awards via Sport England	19.8		
Lottery partnerships	23.4		
Total expenditure leaving sector	900.4		

Central Government income, 2008				
		£ million		
Taxes :		_		
on expenditure		245.4		
on incomes generated in:				
commercial sport		71.2		
voluntary sector		25.5		
commercial non-sport		176.5		
local government		39.3		
Total income		558.2		
Lottery awards		3.0		
Lottery partnerships		1.8		

Central Government expenditure, 2008			
Transfer Payments	£ million		
Grants via Sport England Grant support for local government expenditure on:	10.5		
sport (net spending)	47.9		
education	50.2		
Foundation for Sport and Arts	1.7		
Factor Expenditure			
Sport England: wages and other inputs	9.6		
Prison service, MOD, royal parks: wages and other inputs	3.5		
Total	130.8		

Local Government income, 2008			
	£ million		
Local authority sports facilities:			
fees and charges	32.8		
sales of equipment	17.5		
ground hire	4.6		
Grants from central government:			
to fund net expenditure on sport	47.9		
sport education	50.2		
via Sport England	1.6		
via FSA	0.4		
Rates:			
voluntary sector	7.4		
commercial sport	8.5		
commercial non-sport	21.2		
Payments for policing	1.1		
Lottery awards	8.2		
Lottery partnerships	14.8		
Total income	216.2		

Local Government expenditure, 2008			
	£ million		
Current expenditure			
Direct gross expenditure:			
Wages	59.8		
Other current expenditure	51.0		
Education:			
Wages	62.2		
Research	0.5		
Local transport and policing:			
Wages and other inputs	12.0		
Grants to voluntary clubs	4.8		
Capital expenditure			
Investment	71.8		
Total expenditure	262.0		

Outside the area income, 2008				
	£ million			
Sports, clothing, footwear and equipment	82.0			
Import content of skiing	26.2			
TV imports	3.5			
Prize income	13.8			
Import content of UK production of:				
Sport related goods and services	17.5			
Commercial non-sport sector output	231.3			
Total income	374.2			

Outside the area expenditure, 2008			
	£ million		
Sports, clothing, footwear and equipment	83.9		
Admissions to sports events	8.1		
TV exports	2.0		
Prize income	13.8		
Total expenditure	107.8		

Value Added by sport related economic activity, 2008				
	£million	Index		
Commercial sport:				
Wages Surplus	286.2 71.6			
Lottery projects	1.0			
Total	358.8	26.1		
Voluntary sector:				
Wages Surplus	86.9 68.2			
Lottery projects	5.6			
Total	160.7	11.7		
Commercial non-sport:				
Wages Surplus	452.9 252.8			
Total	705.8	51.3		
Central Government:				
Wages	4.2			
Lottery projects	2.0			
Total	6.2	0.5		
Local Government:				
Wages (education) Wages (sports facilities)	62.2 59.8			
vvages (transport and policing)	12.0			
Lottery projects	9.8			
Total	143.8	10.5		
Total Value Added	1,375.3	100.0		

Employment, 2008			
	Employment ('000s)		
Sector			
Commercial Sport			
Spectator clubs	2.9		
Participation clubs	1.3		
Retailers	3.4		
Manufacturing	4.2		
TV and Radio	0.8		
Subtotal	12.5		
Voluntary sport	3.4		
Commercial non-sport	16.5		
Central Government			
Administration	0.1		
Local Government			
Sports facilities	2.7		
Education	2.2		
Transport/police	0.4		
Subtotal	5.2		
lotal	37.9		

The expenditure flows matrix, 2008 (£m)							
Flows from:	Flows to: CON	CS	VOL	CNS	CG	LG	OV
Consumer sector	0.0	562.8	162.1	391.9	200.5	50.3	26.2
Commercial sport	150.1	0.0	0.0	353.0	77.6	9.6	116.7
Voluntary sector	61.4	0.8	0.0	80.5	41.2	12.0	0.0
Commercial non-sport	326.7	86.9	34.8	0.0	176.5	44.2	231.3
Central government	4.2	1.8	17.5	7.3	0.0	100.0	0.0
Local government	95.0	6.5	4.8	94.8	60.9	0.0	0.0
Overseas	13.8	92.6	0.0	0.0	1.4	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).