Creating an active nation through sport

Economic Importance of Sport
North West
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 2009-2013*, Sport Industry Research Centre (SIRC), 2009

Executive Summary

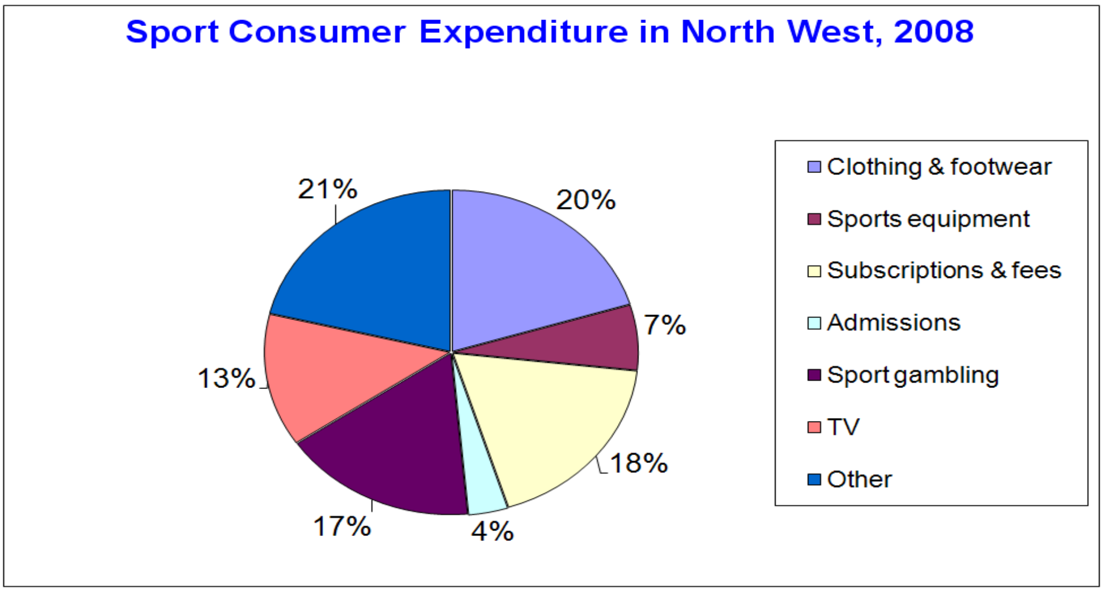
- This report is part of Sport England's ongoing commitment to build the evidence of the economic value of sport. The research has been carried out by The Sport Industry Research Centre (SIRC) as a follow up of the 2005 economic reports.

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

- This report focuses on the economic importance of sport to the North West region in 2008 and in 2005, providing comparisons with estimates from 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.

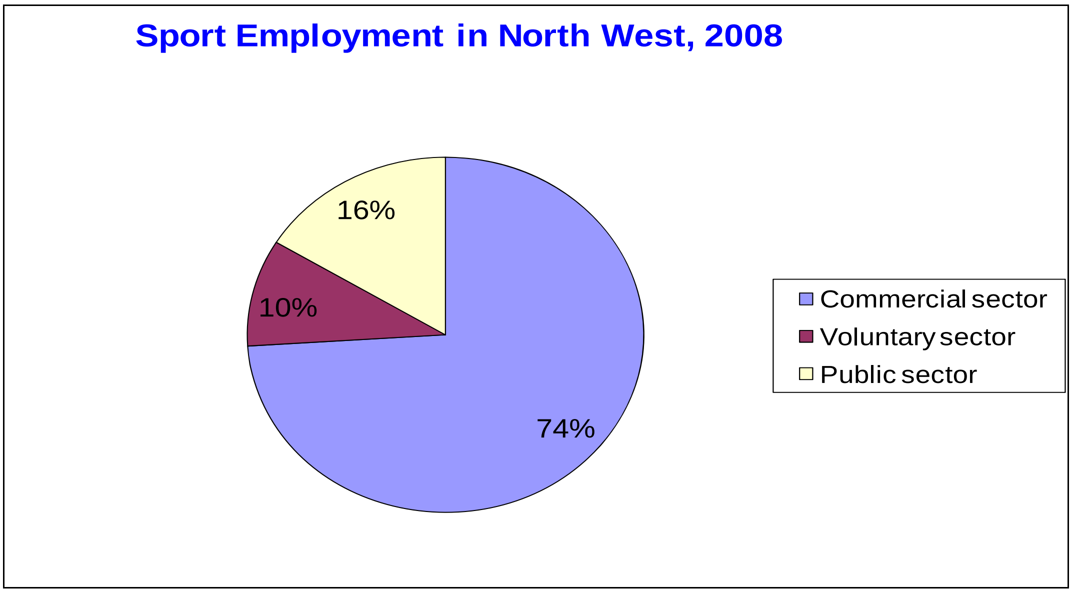
- In 2005 and 2008 consumers spent £2,289m and £2,061m on sport respectively. Consumer expenditure on sport as a percentage of total expenditure (2008):
- North West: 2.2%
- England: 2.3%



- Sport related employment increased in 2008 compared to 2005 despite the 2008 recession. The first effect of the recession was a decrease in the sport industry profit margins.

- Sport related economic activity generated £2,082m and £2,120m in 2008 and 2005 respectively. This is equivalent to 1.7% of total value added in the region (2008).

- 59,500 people are employed in sport related employment corresponding to 1.9% of total employment in the region (2008).



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

- The sport economy in the North West is driven by consumer expenditure, the football industry and sport related manufacturing. The North West is distinguished from other regions by the importance of Premiership football. Eight out of twenty (40%) Premiership clubs come from the region.

1. Introduction

1.1 Terms of reference

This report has been prepared by the Sport Industry Research Centre (SIRC) at Sheffield Hallam University on behalf of Sport England. The purpose of the report is to provide an estimate of the economic importance of sport in the North West region. It builds on similar research carried out by Cambridge Econometrics in 2000[2] and SIRC in 2003 and 2005 that measured the value of the sport economy in the nine English regions. Selected comparisons have been made with the 2003 and 2005 studies to illustrate the change in the importance of sport to the North West economy. This report informs of the direct economic contribution of sport to the regional economy and, in doing so, it enhances the monitoring of progress under the Regional Sports Plan. 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

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

advertising revenue received by the club, represents a flow from the commercial non-sport to the commercial sport sector.

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

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

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

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

Inflation adjustment has not been used for comparisons between the years 2005 and 2008, as the general inflation rate is very low and the intervening period too small to make an impact. The inflation rate also varies between regions and between sport sectors. The sport generated product (GVA) as percentage of the total regional product is usually the most important statistic to consider.

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

1.3 Regional characteristics

Table 1.1 is a snapshot of the economic and social background of the North West 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 expenditure 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 North West has a greater unemployment rate (6.7%) compared to the UK as a whole (6.0%). This is a reversal to the pre-recession condition of 2005.

Gross value added per head in the North West is £18,149 representing 86% of the English average. Similarly, average gross weekly earnings in the North West approximate 92% of the UK average.

1.4 Sport in the Region

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

The Regional Plan for Sport promotes increasing participation, widening access to sport, improving sporting success and enhancing the image of the region.[3] It focuses on the following policy priorities:

[3] The North West Plan for Sport and Physical Activity, 2004-2008

- Raising participation by 1% annually till the year 2020.
- Enhancing the sport facilities in the region to ensure widening access and increasing participation.
- Promote sport within educational and work-related settings to achieve rises in participation and life long learning.
- Create partnership with educational institutions to ensure that the sport education meets the needs of the sport industry.
- Promote volunteering and focus on the training and skills of sport volunteers.
- Work in partnership with schools to promote use of their sports facilities by the local community and develop partnerships between schools and the private sector.
- Create a database for measuring and promoting the value of active sport.
- Increase the number of jobs in the sports sector.
- Use sport to reduce crime and anti-social activity, thus producing a safer and stronger community.

Table 1.1 North West - regional profile, 2008

Resident population '000s	
Males	3,377
Females	3,498
All	6,876
Percentage of non-white groups	
Region	7.9%
Gross Value Added per head (£)	
Region	18,149
England	21,183
Gross Value Added (£m)	
Region	124,796
England	1,089,799
Percentage of working age population	
Region	61.6%
UK	62.1%
Unemployment % rate on working age population (Jun-Aug 2008 / Seasonally Adj.)	
Region	6.7%
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	3,025
England	23,631
Average weekly paid working hours	
Male Full Time, Region	40.6
Male Full Time, UK	40.7
Female Full Time, Region	37.5
Female Full Time, UK	37.6
All Full Time & Part time, Region	34.0
All Full Time & Part time, UK	33.9
Average gross weekly earnings (£)	
Male Full Time, Region	576.3
Male Full Time, UK	634.0
Female Full Time, Region	458.3
Female Full Time, UK	484.4
All Full Time & Part time, Region	436.9
All Full Time & Part time, UK	473.2

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

Table 1.2 Sport profile of the North West Region*

Premiership football:	Blackburn
	Bolton
	Burnley
	Everton
	Liverpool
	Manchester City
	Manchester United
	Wigan
Championship football:	Blackpool
	Preston North End
League 1 football:	Carlisle United
	Oldham Athletic
	Tranmere Rovers
	Stockport
League 2 football:	Accrington Stanley
	Bury
	Crewe Alexandra
	Macclesfield
	Morecambe
	Rochdale
Rugby Union, Premiership:	Sale Sharks
Rugby Super League:	Salford City Reds
	St Helens
	Warrington Wolves
	Wigan Warriors
Cricket:	Lancashire

Basketball:	Chester Jets
	Everton Tigers
Speedway:	Belle Vue
	Workington
Greyhound racing:	Belle Vue (Manchester)
Horse racing:	Aintree
	Carlisle
	Cartmel
	Chester
	Haydock Park
Motor racing:	Oulton Park
Open Championship	Royal Birkdale
Golf courses:	Royal Liverpool
	Royal Lytham and St Annes
Major sport firms:	Umbro
	Reebok
	Sprayway
	Ellis Brigham
	JJB Sports
	J-D Sports
Other:	Lake District National Park
	Velodrome, National Cycling Centre (Manchester)
	National Squash Centre (Manchester)
	Olympic size swimming pool (Manchester Aquatics)
	Hockey Centre at Belle Vue, Manchester
	Manchester Evening News Arena
	Sport science facilities at John Moores, Liverpool and Manchester Metropolitan Universities

* At the time of writing.

2. The Sport Economy in the North West

2.1 Summary of key indicators

Table 2.1 summarises the most important sport-related indicators for the North West region, 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 on the regional sports economy, as a percentage of total economic activity.

According to Table 2.1, almost £2.1 billion was spent on sport-related goods and services in the North West in 2008, representing a decrease of 10% compared to 2005. This is a direct consequence of the 2008 recession affecting the sport and leisure sectors more than other sectors of the economy. In the same year, consumer expenditure on sport accounts for 2.2% of total expenditure in the region, just below the national average for England (2.3%). Compared with 2003, there was an increase of 4% in sport-related consumption.

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

	2000	2003	2005	2008
Consumer expenditure on sport (£million)	1,643.0	1,972.9	2,289.3	2,060.9
percentage of North West total	2.4	2.6	2.8	2.2
national average (England)	2.2	2.5	2.6	2.3
Gross Value Added by sport (£million)	1,244.0	1,788.4	2,120.4	2,082.3
percentage of North West total	1.4	1.8	2.0	1.7
national average (England)	1.5	1.6	1.7	1.5
Sport related employment (thousands)	46.3	53.4	59.4	59.5
percentage of North West total	1.6	1.7	1.9	1.9
national average (England)	1.7	1.7	1.8	1.8

Sport-related economic activity adds close to £2.08 billion to the North West economy, representing a decrease of 2% during the period 2005-2008. The contribution to GVA by sport in the region has also declined from 2.0% to 1.7% during the same period. This is still well above the English average (1.5%).

Despite the recession sport-related employment in the North West grew marginally from 59,400 in the year 2005 to 59,500 in 2008. Over the same period, as a percentage of total employment, it remained stable at 1.9%. This is marginally above the national average at 1.8%. The better performance of employment compared to GVA indicators, imply that the first effect of the recession in the region was to reduce the profit margins. This is in direct contrast to what was happening earlier, where the profit margins at times of economic growth were growing much faster than employment.

2.2 Consumer expenditure

Table 2.2 summarises the value of sport-related consumer expenditure in the region. The estimates are consistent with the total spending reported in the ONS publication Consumer Trends[4]

The summary table shows that the total value of sport-related consumer expenditure was £2,061 million in 2008, representing an increase of 4% over the year 2003, and a decline of 10% over the year 2005. Sport clothing and footwear is the single largest category of consumer spending on sport, accounting for £418 million or 20% of the market in 2008. Participation subscriptions and fees is the second largest category, accounting for £379 million or 18% of the market. After participation subscriptions and fees, the major categories of expenditure are 'sport related gambling' (£350 million) and 'TV rental, cable and satellite subscriptions' (£273 million).

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 13% of the market. Other expenditure categories include publications, sport-related BBC licence fee, and sport travel.

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

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

	2000 £m	2003 £m	2005 £m	2008 £m
Sport clothing and footwear	367	434	443	418
Sports goods	103	120	137	134
Participation subscriptions and fees	375	369	461	379
Admissions to events	83	79	93	70
Sport-related gambling	228	384	494	350
TV/video rental, cable and satellite subscriptions		133	233	273
Other sport-related spending	487	454	429	437
Total	1,643	1,973	2,289	2,061

2.3 Sport-related output

Estimates of sport-related output are based on value added by the sport sector. Value added is calculated as the sum of wages and profits generated in the sector. Table 2.3 summarises the value added by sport in North West. According to the table, sport-related economic activity increased from £1,784 million in 2003 to £2,082 million in 2008. The largest part of this economic activity (£1,086 million, 52%) is generated by the commercial non-sport sector. The next largest sector is commercial sport (£496 million, 24%); most of the valued added in this sector is attributable to spectator sports and retailing. The latter includes sport-related clothing and footwear, equipment and publications. Commercial sport increased its output in the examined period despite the 2008 recession. The voluntary and public sectors account for the remainder (£501 million, 24%) of the sport-related economic activity in the region.

Within the commercial sport sector, during the period 2005 to 2008, spectator sports increased its GVA contribution by 20% reaching £187 million in value. However during the same period the contribution of retailing decreased marginally.

Table 2.3: Sport-related Value Added in the North West				
	2000 £m	2003 £m	2005 £m	2008 £m
Commercial sport	339	371	488	496
of which:				
Spectator sports	84	98	156	187
Retailing	129	146	164	150
Commercial non-sport	626	1,018	1,130	1,086
Voluntary sector	161	238	318	248
Public sector	118	162	185	253
Total	1,244	1,784	2,120	2,082

2.4 Sport-related employment

Table 2.4 provides estimates for sport-related employment in the North West, derived from calculations based on wage payments and average salaries per sector. Sport and associated industries are estimated to employ 59,500 people in the North West, accounting for 1.9% of all employment in the region in 2008. This represents a marginal increase since the year 2005. It is important that the region, in terms of sport employment, bucked the trend of economic decline triggered by the 2008 recession.

The relative share of employment generated within each sector is broadly consistent with their share of value added to the region's economy. As with value added, the largest sector is commercial non-sport, supporting 25,300 jobs or 43% of all sport-related employment in the North West. The commercial sport, public and voluntary sectors support 32%, 16% and 10% of the region's sport-related jobs respectively. As in the case of GVA, employment linked to spectator sports increased significantly over the period 2005-2008. The public and commercial sport sectors are the two sectors where sport related employment increased during the aforementioned period. The increase in sport employment and the decline in GVA indicate that the first effect of the 2008 recession in the sport industry of the North West was the reduction of the profit margins, which had increased considerably over the past decade.

Table 2.4: Sport-related employment in the North West	2000 ('000)	2003 ('000)	2005 ('000)	2008 ('000)
Commercial sport	10.5	12.4	15.9	18.8
of which:				
Spectator sports	4.2	3.6	5.9	9.0
Retailing	4.0	4.3	4.6	4.4
Commercial non-sport	25.5	28.8	30.0	25.3
Voluntary sector	5.2	5.7	6.6	5.8
Public sector	5.1	6.5	6.8	9.7
Total	46.3	53.4	59.4	59.5

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. The largest portion of income is generated in the commercial non-sport sector, accounting for £1,427 million. This is followed by the commercial sport sector (£1,199 million) and the consumer sector (£1,053 million). Within the commercial sport sector, more than half of generated income comes from retailing. This consists mainly of sport equipment, clothing and footwear and sales of sport related books, magazines, newspapers and DVDs. On the expenditure side, by far the most important category is the consumer sector accounting for £2,061 million of expenditure. This is followed by the commercial non-sport (£1,524 million) and commercial sport (£1,141 million) sectors. Almost half of the expenditure within the commercial sport sector relates to current factor spending, such as wages, in the retailing sub-sector.

Table 2.5 Sport-related income and expenditure flows, 2008	Income £m	Expenditure £m
Consumer	1,053	2,061
Commercial sport	1,199	1,141
of which:		
Spectator sports	116	271*
Participation sports	102	97*
Retailing	601	540*
Voluntary	414	298
Commercial non-sport	1,427	1,524
Central government	896	214
Local government	330	432

Outside the area	585	167

* Current factor expenditure (wages, other inputs)

3. The Sport Economy in Context

3.1 Expenditure, 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 North West has the fifth largest 'absolute' sport-related consumer spending among the nine English regions. The proportion of total consumer expenditure on sport in the region is just below the national average at 2.2%. Consumer spending in the North West reduced significantly following the 2008 recession.

The North West performed better in terms of output and employment as shown in tables 3.6 and 3.9 for 2008. The sport-related output in the North West (£2,082 million) is the fourth largest of the nine regions. The level of sport related output as a percentage of total regional value added is above the national average at 1.7%. Further, the number of sport-related jobs supported in the North West (59,500) is third among the English regions, following the South East and the East of England. The importance of sport to the overall regional employment in the North West (1.9%) is also high in comparison with the English average.

3.2 Importance of sport in the North West

The sport economy in the North West is boosted by a relatively strong consumer sector, football industry, and sport manufacturing. Of the total consumer expenditure in the region, 2.2% is sport-related. Spectator sports often drive the industry in terms of GVA and sport related employment. The Manchester Evening News Arena is the largest multipurpose indoor sports and entertainment arena in Europe.

It should be noted that the North West economy, on the whole, is performing slightly below the UK average. The average earnings for men and women in the North West are 91% and 95% of the national average respectively.

The North West is distinguished from other English regions by the importance of Premiership football and also through its hub of commercial sport industries.

Eight of the twenty premiership football teams are based in the North West, the highest number of any of the nine regions. Of these, Liverpool and Manchester United have strong international followings. Although the region represents about 13% of both the English population and economy, it provides 40% of Premiership football. This implies an increasing importance of sport-related TV and admission fees for the region. There is great potential for Premiership football in Asian markets. Similarly, rugby league is predominantly north-west based.

The North West, following its textile traditions, is the base of a commercial sport hub consisting of firms such as Umbro (the supplier of football kit to the England team), Reebok, Sprayway, Ellis Bingham, JJB Sports, Sportech PLC (the owner of football pools) and J-D Sports. Adidas has its regional headquarters in Bolton, near Manchester and, after the acquisition of Reebok, has invested considerably in the region. The presence of these and other commercial sport firms in the region is consequently reflected in the high number and proportion of sport-related jobs in the North West region. Its sport economy in terms of employment is among the largest in England outperforming its weight of sport spending and value added.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

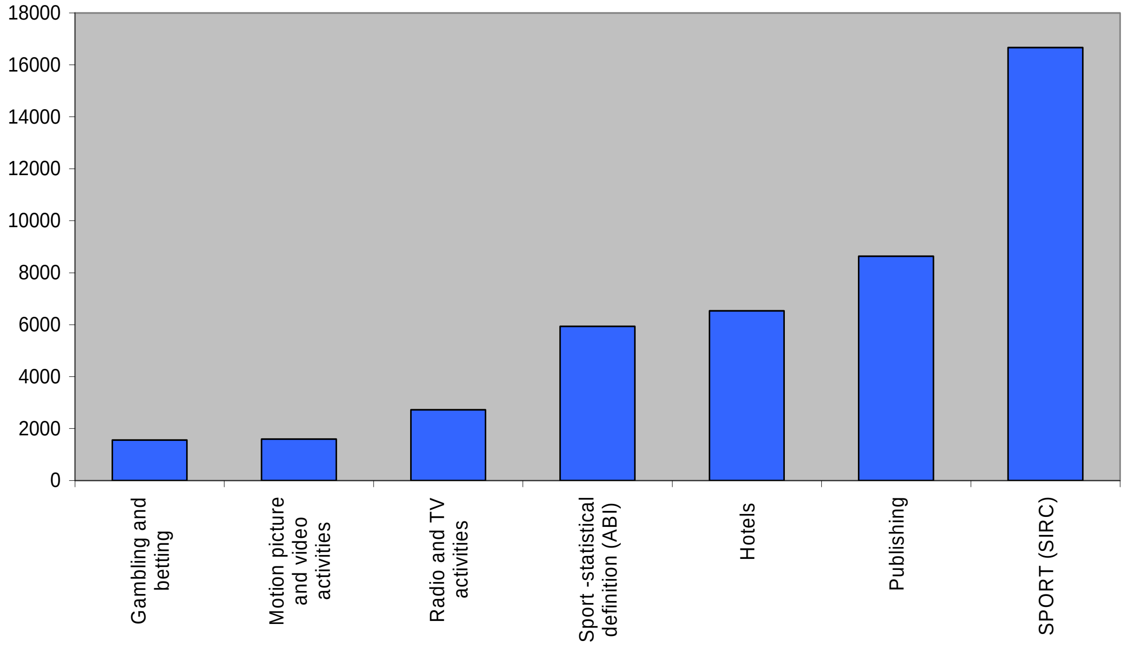
	East ('000)	East Midlands ('000)	London ('000)	North East ('000)	North West ('000)	South East ('000)	South West ('000)	West Midlands ('000)	Yorkshire & Humber ('000)	England ('000)
Commercial sport	25.2	12.5	20.9	7.2	18.8	25.5	12.7	18.1	9.8	150.7
of which:										
Spectator sports	*3.9*	*2.9*	*5.5*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

3.3 Sport and the leisure industries

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

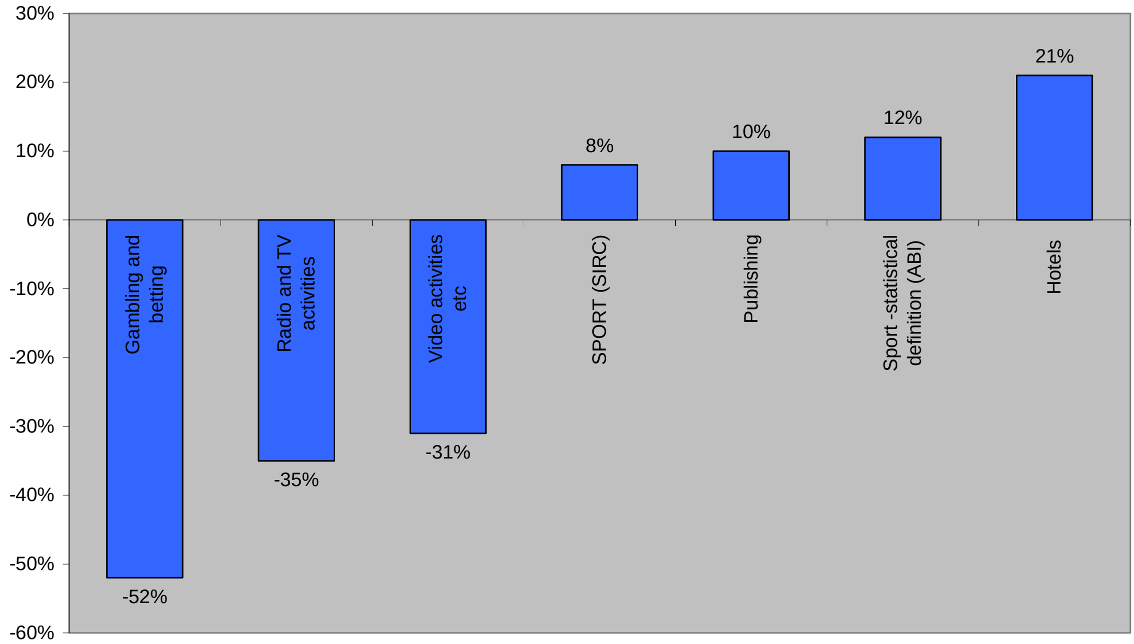
Figure 4.2 illustrates the GVA growth rates of the selected leisure sectors over the period 2005-2008. We consider this short period in order to focus more on the impact of the recession. The sector 'Hotels' has the largest growth over the examined period. This is partly because of the reversal of a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

Figure 4.1: GVA England , 2008, £m



Sources: Annual Business Inquiry, SIRC

Figure 4.2: GVA England % change 2005-08



Sources: Annual Business Inquiry, SIRC

Appendices

LIST OF TABLES

A1: Statistical Sources

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

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

A2: Model Output

Consumer expenditure on sport related goods & services, 2008	
	£million
Admissions	70.2
Sports goods	133.9
Bicycles	2.2
Boats	92.4
Participants sports subscriptions & fees	379.0
Clothing sales	243.9
Footwear sales	173.6
Repairs and laundry	4.4
Travel	99.6
Books and magazines	21.0
Newspapers	37.6
Video: purchase and rental	3.0
BBC licence	42.4
TV and video rental, cable & satellite subscriptions	273.2
Internet subscriptions	0.9
Skiing holidays	123.0
Public schools	10.4
Gambling: Football pools	5.3
Horse racing	312.2
Raffles and gaming	32.8
Total	2,060.9

Commercial sport income, 2008	
	£ million
Spectator Clubs:	
Admissions	68.3
Sponsorship & advertising	22.1
Corporate entertainment	15.6
Horserace Betting Levy	10.3
Cost of the rights to top league matches	158.7
Participation clubs:	
Subscriptions & fees	101.6
Retailers (net of Vat):	
Equipment	170.0
Clothing and footwear	369.6
Books, newspapers and magazines & videos	61.1
Exports and manufacturers' sales of	
clothing, footwear & equipment	122.8
TV and radio:	
BBC	42.4
Commercial	38.7
Exports	3.1
Internet subscriptions	0.8
Lottery awards	3.1
Lottery partnerships	1.1
Total Income	1,189.3

Commercial sport expenditure, 2008	
	£ million
Current factor expenditure	
Spectator clubs:	
Wages	181.5
Other inputs	89.4
Participation:	
Wages	50.8
Other inputs	45.7
Retailers:	
Wages	89.3
Other inputs	451.1
Manufactures:	
Wages	29.3
Other inputs	63.8
TV and radio:	
Wages	40.6
Other inputs	22.3
Total Factor Expenditure	
Total wages	391.5
Total other inputs	672.3
Total factor surplus	102.7
Total value added	494.2
Current transfers	
Corporation tax	14.7
Rates	14.9
Capital expenditure	
Investment	47.4
Total Expenditure Leaving Sector	1,140.7

Voluntary sector income, 2008	
	£ million
Factor income (monetary)	
Players' subscriptions and match fees	212.3
Equipment	1.1
Sponsorship and advertising	15.1
Raffles and gaming machines	32.8
Bar receipts	261.2
Subtotal (factor income)	522.5
Other monetary income	
Grants	17.9
Foundation for Sport and Arts	2.0
Employers' subsidies	22.0
Interest	9.1
Lottery awards via Sport England	12.6
Lottery partnerships	11.1
Total Monetary Income (excluding bar receipts)	336.1

Voluntary sector expenditure, 2008	
	£million
Factor expenditure	
Wages	131.9
Ground hire and rents	10.1
Equipment	1.2
Other	90.9
(Bar purchases)	182.9
Subtotal (factor expenditure)	417.0
Rates	12.9
Interest	3.9
Investment	47.5
Total Monetary Expenditure (excluding bar purchases)	298.5

Commercial non-sport income, 2008

	£million
Receipts net of tax from consumer spending:	
Travel	36.1
Gambling	281.3
Skiing	55.8
Public schools	8.5
TV rental, cable & satellite subscriptions	225.4
Sales of current inputs to:	
Central government	11.5
Local government	66.6
Commercial sport	497.2
Voluntary sector	80.0
Interest from voluntary sector	3.9
Sales of capital inputs to:	
Local government	91.9
Commercial sport	29.3
Voluntary	39.2
Promotion expenditure for sponsorship (intra-sectoral flow)	52.0
Total income	1,426.7

Commercial non-sport expenditure, 2008

	£million
Producers of inputs to sport:	
wages	696.6
imports	355.8
(factor surplus)	388.9
(value added)	1,085.5
Corporation tax	55.5
Rates	32.6
Purchases of inputs from sport:	
Sponsorship and advertising	62.1
ITV and radio advertising	38.7
Corporate entertainment at sports events	15.6
Employees' sports subsidies	10.7
Horserace Betting Levy	10.3
Interest payments to voluntary sector	9.1
Promotion expenditure for sponsorship: (to elsewhere in CNS sector)	52.0
Cost of the rights to top league matches	158.7
Lottery awards via Sport England	36.0
Lottery partnerships	42.5
	1,524.2

Total expenditure leaving sector

Central Government income, 2008

	£ million
Taxes :	
on expenditure	363.6
on incomes generated in:	
commercial sport	135.4
voluntary sector	41.0
commercial non-sport	285.2
local government	69.9
Total income	895.7
Lottery awards	5.4
Lottery partnerships	3.3

Central Government expenditure, 2008

	£ million
Transfer Payments	
Grants via Sport England	16.2
Grant support for local government expenditure on:	
sport (net spending)	85.7
education	77.8
Foundation for Sport and Arts	2.7
Factor Expenditure	
Sport England: wages and other inputs	14.9

Prison service, MOD, royal parks:	
wages and other inputs	4.6
Total	213.8

Local Government income, 2008	
	£ million
Local authority sports facilities:	
fees and charges	36.0
sales of equipment	18.5
ground hire	5.0
Grants from central government:	
to fund net expenditure on sport	85.7
sport education	77.8
via Sport England	2.4
via FSA	0.7
Rates:	
voluntary sector	12.9
commercial sport	14.9
commercial non-sport	32.6
Payments for policing	1.7
Lottery awards	14.9
Lottery partnerships	26.9
Total income	330.0

Local Government expenditure, 2008	
	£ million
Current expenditure	
Direct gross expenditure:	
Wages	107.1
Other current expenditure	91.2
Education:	
Wages	96.5
Research	0.7
Local transport and policing:	
Wages and other inputs	21.4
Grants to voluntary clubs	4.2
Capital expenditure	
Investment	111.4
Total expenditure	432.5

Outside the area income, 2008	
	£ million
Sports, clothing, footwear and equipment	112.5
Import content of skiing	45.7
TV imports	5.6
Prize income	39.4
Import content of UK production of:	
Sport related goods and services	25.7
Commercial non-sport sector output	355.8
Total income	584.6

Outside the area expenditure, 2008	
	£ million
Sports, clothing, footwear and equipment	111.7
Admissions to sports events	12.6
TV exports	3.1
Prize income	39.4
Total expenditure	166.9

Value Added by sport related economic activity, 2008		
	£million	Index
Commercial sport:		
Wages	391.5	
Surplus	102.7	
Lottery projects	1.8	
Total	496.0	23.8
Voluntary sector:		
Wages	131.9	
Surplus	105.5	
Lottery projects	10.2	
Total	247.7	11.9
Commercial non-sport:		
Wages	696.6	
Surplus	388.9	
Total	1,085.5	52.1
Central Government:		
Wages	6.2	
Lottery projects	3.8	
Total	10.0	0.5

Local Government:		
Wages (education)	96.5	
Wages (sports facilities)	107.1	
Wages (transport and policing)	21.4	
Lottery projects	18.0	
Total	243.1	11.7
Total Value Added	2,082.3	100.0

Employment, 2008

Sector	Employment ('000s)
Commercial Sport:	
Spectator clubs	9.0
Participation clubs	2.5
Retailers	4.5
Manufacturing	1.6
TV and Radio	1.2
Subtotal	18.8
Voluntary sport	5.8
Commercial non-sport	25.3
Central Government:	
Administration	0.2
Subtotal	0.2
Local Government:	
Sports facilities	5.3
Education	3.5

Transport/police	0.7
Subtotal	9.5
Total	59.6

The expenditure flows matrix, 2008 (£m)

Flows from:	Flows to: CON	CS	VOL	CNS	CG	LG	OV
Consumer sector	0.0	802.4	246.2	607.1	292.8	54.5	45.7
Commercial sport	269.9	0.0	0.0	526.5	144.5	16.6	183.2
Voluntary sector	91.0	1.0	0.0	123.1	65.4	18.0	0.0
Commercial non-sport	490.5	259.8	58.6	0.0	285.2	74.4	355.8
Central government	6.2	2.4	27.1	11.5	0.0	166.6	0.0
Local government	155.6	8.6	4.2	158.5	105.6	0.0	0.0
Overseas	39.4	125.2	0.0	0.0	2.2	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).