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UK Sport Satellite Account, 2011 and 2012

Statistical Release

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The Sport Satellite Accounts for the UK are Official Statistics and have been produced to the standards set out in the Code of Practice for Official Statistics.

Executive summary

GVA

- Gross Value Added (GVA) for the sport sector economy has grown in current prices (not adjusted for inflation) by 10.4 per cent in 2011 and 4.4 per cent in 2012 (7.2 per cent and 2.7 per cent in constant prices, adjusted to 2011 prices).
- The value of the sports economy was £38,891m in 2012 (current prices).
- In 2012, the largest sub-sectors by value (2011 prices) were Sporting activities (£20,230m), Telecommunications (£3,677m), Education (£1,691m) and Advertising, business activities (£1,578m).
- Sport related GVA accounted for 2.6 per cent of UK GVA in 2011 and 2012, compared with 2.4 per cent in 2010.

Employment

- Employment in sport increased by 55 per cent in 2011 and a further 1 per cent in 2012. There was a 66 per cent increase between 2004 and 2012.
- Total sport employment in 2012 was one million, or 3.6 per cent of UK employment (up from 2.2 per cent in 2004).

Consumer spending

- Consumer sport-related spending increased from £26.4bn in 2010 to £29.2bn in 2012: a 10.6 per cent increase in current prices (or 4.5 per cent constant prices).
- The highest spending sub-sectors within sport (current prices) are wearing apparel (£3,398m in 2012) and Telecommunications (£3,402m in 2012).
- Consumer spending on sport was 2.9 per cent of all UK consumer spending in 2012, up from 2.8 per cent in 2010 and 2011.

Value of sport in the UK, 2009 - 2012*

	2008	2009	2010	2011	2012
Sport related GVA, £m	29,335	29,455	33,736	37,252	38,891
as % of total GVA	2.1%	2.2%	2.4%	2.6%	2.6%
Sport related consumer spending £m	26,010	24,845	26,405	27,754	29,207
as % of total spending	2.8%	2.7%	2.8%	2.8%	2.9%
Sport related employment, 000s	629.5	629.1	640.1	991.0	1,000.5
as % of total employment	2.2%	2.3%	2.3%	3.6%	3.6%

*GVA and consumer spending in current prices. Total number of people employed in the UK is taken from the *Labour Force Survey* and is calculated using full time equivalents. The GVA total is taken from the National Accounts and the consumer spending total from *Consumer Trends*.

1. Introduction

This report presents the value of the UK's sport sector for 2011 and 2012, including comparisons with previous years (since 2004). The sports economy is presented in terms of consumer spending, gross value added (GVA) and employment. Data sources and the methodology used are the same as the UK's first Sport Satellite Account report, which included data for 2004 to 2006¹. These are the first results which cover the period of the London 2012 Olympic and Paralympic Games.

Please note that there have been revisions to historic data. These revisions are primarily as a result of changes to National Accounts. There are also some small changes as a result of validations following new survey responses.

This section summarises the methodology and statistical sources used. More detail is provided in the appendix A4.

1.1 Background

The desire for more evidence in relation to sport has been increasing across Europe. The White Paper on Sport² (2007) invited the European Commission to 'support national efforts to develop Sport Satellite Accounts'. In 2011, the Commission published its 'Communication on Sport'³, asking for a strengthening of evidence-based policy-making in the field of sport. The production of national Sport Satellite Accounts (SSAs) was the first of three policy suggestions for establishing evidence-based policy-making.

A satellite account system is specifically aimed at sectors of the economy which are not observable in the traditional system of National Accounts, because they do not correspond to a specific statistically delineated economic activity. The approach is an extension of the system of National Accounts. Industries are classified via the Classification of Economic Activities in the European Community (NACE⁴) while goods and services are defined through the Classification of Products by Activity (CPA) framework. Developing estimates for the sports sector requires separating out sport and non-sport components.

1.2. Sport Definition

¹ DCMS, 2004 Sport Satellite Account for the UK, 2010, http://webarchive.nationalarchives.gov.uk/20121204113822/http://www.culture.gov.uk/images/research/2004_UK_Sport_Satellite_Account_-_final.pdf

²<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1389190214279&uri=CELEX:52007DC0391>

³<http://bookshop.europa.eu/en/communication-on-sport-2011--pbNC3111173/?CatalogCategoryID=CdcKABstHUgAAAEJBJEY4e5L>

⁴ Nomenclature statistique des activités économiques dans la Communauté européenne

A statistical definition of sport is required to identify sport-related activities in NACE. The estimates in this publication are based on the EU agreed definition of the sport economy ('Vilnius Definition') which sets out which categories or sub-categories are fully or partly related to sports and the definition to which they belong. Sport under the Vilnius definition is comprised of three parts:

- Statistical Definition: Comprised of “sporting activities” (the only part of the sport sector having its own NACE category).
- Narrow Definition: All activities which are inputs to sport (i.e. all goods and services which are necessary for doing sport) plus the Statistical Definition.
- Broad Definition: All activities which require sport as an input (i.e. all goods and services which are related to a sport activity but without being necessary for doing sport e.g. insurance or gambling) plus the Narrow Definition.

1.4 Sourcing suitable statistical data

Data availability is the greatest challenge when producing SSAs. Using data directly from the System of National Accounts (SNA) is insufficient because of the broader definition of sport. However, data beyond the SNA is scarce and the degree of availability differs largely from sector to sector.

For this reason, data were obtained from three separate sources:

- Questionnaires to sport companies
- Examination of companies accounts
- Sourcing of national data.

More detail on the data sources and how they are used is contained in appendix A4.

So far, SSAs have been completed by several EU countries including Austria, the UK, the Netherlands, Germany, Cyprus, and Poland⁵. Additionally, Lithuania is at the final stage of completion.

⁵ <http://bookshop.europa.eu/en/sport-satellite-accounts-pbNC0213236/>

2. Sport related consumer sending

2.1 Current prices (not adjusted for inflation)

In 2011 and 2012 sport consumption grew by 6.2% and 6.3% respectively, reaching £29.2bn in value in 2012. This has followed a gradual increase in spending each year from £23.4bn in 2004, with the exception of 2009 when there was a decrease of 11.5 per cent, associated with the economic consequences of the recession. According to the National Accounts, in 2009 real GDP declined by 4.3%, representing the largest one-year fall in the last 60 years. In the same year, overall consumer spending, in current prices, declined by 2.0% compared to 2008.

Table 3 illustrates the detailed changes in sport-related consumer spending in the UK (2004-2012), in current prices (not adjusted for inflation). In 2012 the order of the four highest spending categories changed compared to 2011, see Table 1.

Table 1: Highest consumer spending categories 2011 and 2012

2011	2012
Wearing apparel - £3.3bn	Telecommunications - £3.4bn
Telecommunications - £3.2bn	Wearing apparel - £3.4bn
Sport betting - £2.6bn	Sport betting - £2.9bn
Health and fitness - £2.6bn	Hotels & restaurants - £2.6bn

The London Olympic and Paralympic Games appear to have influenced the pattern of consumption, boosting spending on telecommunications, hotel and restaurants and sport participation (seen through an increase in wearing apparel). However changes occurred in most of the categories shown in Table 3.

Revisions have been made to sport betting to reflect the construction of the National Input-Output Tables and subsequent ONS revisions. Sport betting in current prices fluctuates between £2.6bn (2009) and £3.2bn (2005). In reality consumers spend more in remote on-line betting, most of which is treated as imports in the National Accounts and is not included in the consumption figure. Table 2 shows the sport betting pattern with and without the imports element.

Table 2: Sport-related betting spending UK, 2004-2012, current prices

	2004 £m	2005 £m	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m	2011 £m	2012 £m
Consumption	3,162	3,211	2,905	3,147	3,158	2,649	2,591	2,633	2,907
Consumption and remote imports	3,202	3,261	3,198	3,590	3,565	3,264	3,362	3,305	3,556
Imports	40	50	293	443	407	615	771	672	649

Table 3: Sport-related consumer spending UK, 2004 – 2012, current prices

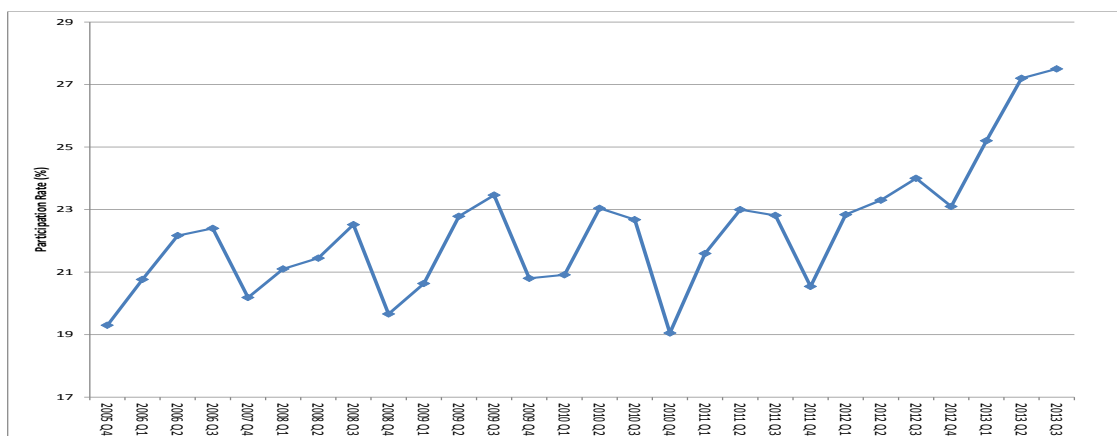
	2004 £m	2005 £m	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m	2011 £m	2012 £m
Food/drinks	239	261	286	344	342	336	364	380	400
Textiles	434	452	538	592	552	549	575	715	718
Wearing apparel	2,763	2,658	2,729	2,962	3,011	2,995	3,104	3,280	3,398
Leather/footwear	1,371	1,372	1,382	1,418	1,464	1,406	1,475	1,601	1,673
Publishing services	876	848	820	862	875	811	808	791	761
Coke, petroleum	246	248	248	299	329	294	339	222	393
Pharmaceuticals	158	164	170	180	192	181	191	204	232
Various metal products	2	1	1	2	2	2	2	2	3
Machinery/weapons	15	15	15	14	13	12	14	16	16
Optical instruments	23	22	24	25	26	24	27	26	25
Motor vehicles	82	84	83	139	159	146	169	133	146
Boats/Aircraft	897	1,042	1,066	1,181	1,202	1,300	1,320	1,330	1,350
Cycles	740	788	774	805	900	974	986	1,042	1,098
Sport goods	1,676	1,736	1,748	1,731	1,720	1,530	1,892	1,864	1,808
Hotels and restaurants	2,067	2,051	2,045	2,291	2,331	2,298	2,335	2,473	2,618
Land transport	89	83	77	84	79	74	76	78	85
Water transport	3	3	3	3	3	3	4	4	4
Air transport	115	108	102	111	108	117	99	110	115
Travel agencies	64	74	57	63	56	58	56	54	57
Telecommunications	2,335	2,354	2,626	2,601	2,723	2,883	2,873	3,155	3,402
Insurance	46	43	106	112	103	100	112	120	137
Renting of Machinery/equipment	102	89	98	102	106	101	110	91	78
Education	173	184	231	246	249	253	246	286	290
Health and vet services	176	216	214	256	229	224	252	247	269
Sporting activities									
<i>Dance schools</i>	133	215	236	240	242	220	378	457	413
<i>Spectator sports</i>	756	720	710	782	742	780	782	997	1,044
<i>Health and fitness</i>	1,980	2,015	2,048	2,130	2,230	1,920	2,538	2,565	2,551
<i>Other participant sports</i>	1,720	1,655	1,702	1,695	1,774	1,532	1,623	1,754	2,031
<i>Sports betting</i>	3,162	3,211	2,905	3,147	3,158	2,649	2,591	2,633	2,907
<i>Boat renting</i>	100	107	114	112	112	120	130	130	132
<i>Massage, fitness</i>	871	913	950	966	975	950	930	990	1,050
Other	3	3	3	3	3	3	4	4	3
TOTAL	23,417	23,735	24,111	25,498	26,010	24,845	26,405	27,754	29,207

2.2. Constant prices (2011 prices)

A more meaningful comparison of consumer patterns can be drawn if we adjust for inflation. Table 4 shows the consumer spending information of Table 3 when prices are kept constant at the 2011 level. It is worth noting that after adjusting for inflation, the category 'wearing apparel' becomes the most sizeable category of spending in both 2011 and 2012. Using the Consumer Trends price index (2011=100) the price level in wearing apparel decreased from 135 in 2004 to 97 in 2010. This implied that a given amount of nominal spending would correspond to greater amount of volume. The price index started increasing again in 2011 and 2012 at 100 and 101 respectively. Health and fitness was the fourth most sizeable category examined in 2011, partly boosted by the Olympic Games and partly by the influx of value for money, 24 hour operators throughout the UK. The last row of Table 4 shows the percentage share of sport within total consumer spending. This peaked at 2.9 per cent in 2012, following a decline to 2.7 per cent in the peak of the recession (2009). Overall, as we approached the London Olympic and Paralympic year 2012, a gradual rise in the sport related consumer spending took place which increased the weight of sport within the economy.

Table 5 shows the growth rates per sector for the years 2011 and 2012 and the overall growth during the period 2004 – 2012, in 2011 prices. Growth in sport spending between 2011 and 2012 is driven by participant sports, sports betting, and cycles. This is quite different to the drivers of change in 2011 (spectator sports, footwear and education). Between 2004 and 2012, the greatest growth occurred in the technology related sector 'optical instruments' followed by sport insurance, textiles and dance schools. The greatest overall growth among the larger sectors (over £1bn sectors) was seen in 'wearing apparel', likely to be driven by cheaper prices and increased sports participation. This is illustrated by the trend of intensive participation (three times a week or more) as shown in the following figure derived from Active People Survey data:

Figure 1: Trends in sport participation three times/ week (APS data)



Finally, the over £1bn sector with the greatest decline was sport betting (decrease of 32% between 2004 and 2012).

Table 4: Sport-related consumer spending, UK 2004 – 2012, 2011 prices

	2004 £m	2005 £m	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m	2011 £m	2012 £m
Food/drinks	325	350	374	431	393	373	384	380	388
Textiles	405	440	549	621	591	584	607	715	705
Wearing apparel	2047	2086	2239	2545	2801	2936	3210	3280	3371
Leather/footwear	1107	1162	1220	1271	1361	1339	1429	1601	1676
Publishing and printing	1059	1020	958	992	968	863	833	791	751
Coke, petroleum	414	385	366	429	408	346	380	222	389
Pharmaceuticals	165	172	180	188	199	187	193	204	229
Various metal products	2	1	1	2	2	2	2	2	3
Machinery/weapons	14	15	15	14	13	12	14	16	16
Optical instruments	4	5	7	10	14	16	21	26	35
Motor vehicles	96	97	96	160	179	159	176	133	141
Boats/Aircraft	1052	1207	1234	1356	1354	1413	1372	1330	1307
Cycles	860	940	934	969	1059	1070	1014	1042	1116
Sport goods	1580	1738	1785	1761	1744	1545	1902	1864	1834
Hotels and restaurants	2512	2360	2252	2442	2436	2381	2407	2473	2549
Land transport	114	101	90	94	85	78	79	78	82
Water transport	4	4	4	4	4	3	4	4	4
Air transport	134	124	116	128	118	128	108	110	110
Travel agencies	96	105	76	76	72	68	60	54	54
Telecommunications	2305	2392	2674	2758	2976	3067	2977	3155	3287
Insurance	65	58	135	136	121	111	118	120	136
Renting of Machinery/equipment	130	108	115	114	116	107	114	91	77
Education	295	299	350	328	297	284	259	286	267
Health and vet services	233	278	267	311	264	249	266	247	264
Sporting activities									
<i>Dance schools</i>	227	349	358	320	289	247	397	457	380
<i>Spectator sports</i>	1019	929	872	920	829	848	820	997	1010
<i>Health and fitness</i>	2668	2600	2516	2506	2492	2087	2660	2565	2467
<i>Other participant sports</i>	2318	2135	2091	1994	1982	1665	1701	1754	1964
<i>Sports betting</i>	4161	4070	3526	3668	3576	2848	2719	2633	2823
<i>Boat renting</i>	135	138	140	132	125	130	136	130	128
<i>Massage, fitness</i>	1174	1178	1167	1136	1089	1033	975	990	1015
Other	4	4	4	4	3	3	4	4	3
TOTAL	26,722	26,854	26,711	27,817	27,959	26,185	27,342	27,754	28,582
Sport contribution	2.8%	2.8%	2.7%	2.7%	2.8%	2.7%	2.8%	2.8%	2.9%

Table 5: Sport-related consumer spending, growth rates 2011 prices

Consumer spending	2010-11 %	2011-12 %	2004-12 %
Food/drinks	-1	2	19
Textiles	18	-1	74
Wearing apparel	2	3	65
Leather/footwear	12	5	51
Publishing and printing	-5	-5	-29
Coke, petroleum	-42	75	-6
Pharmaceuticals	6	12	39
Various metal products	0	52	61
Machinery/weapons	14	1	15
Optical instruments	22	35	716
Motor vehicles	-24	6	47
Boats/Aircraft	-3	-2	24
Cycles	3	7	30
Sport goods	-2	-2	16
Hotels and restaurants	3	3	1
Land transport	-1	5	-28
Water transport	-5	-4	-4
Air transport	2	0	-18
Travel agencies	-10	0	-44
Telecommunications	6	4	43
Insurance	2	13	108
Renting of Machinery/equipment	-20	-15	-40
Education	11	-7	-9
Health and vet services	-7	7	13
Sporting activities			
<i>Dance schools</i>	15	-17	68
<i>Spectator sports</i>	22	1	-1
<i>Health and fitness</i>	-4	-4	-8
<i>Other participant sports</i>	3	12	-15
<i>Sports betting</i>	-3	7	-32
<i>Boat renting</i>	-5	-2	-5
<i>Massage, fitness</i>	2	3	-13
Other	-5	-27	-28
TOTAL	2%	3%	7%

3. Sport related GVA

3.1 Current prices (not adjusted for inflation)

In 2011 and 2012 sport related GVA grew by 10.4 per cent and 4.4 per cent respectively in current prices. The size of GVA increased from £33.7bn in 2010, to £37.3.5bn in 2011, and £38.9bn in 2012. Since 2009 the rates of growth in sport GVA are considerably higher than the growth rate for the economy overall. Table 6 shows the elements of sport GVA from 2004 to 2012. The majority of GVA is generated by the sport activities category. In 2011 and 2012 important contributions were also made by telecommunications, education, advertising and retail. As in consumer spending, it is likely the London 2012 Games influenced much sport related activity, however, it particularly boosted by two elements: construction activity and administration.

GVA associated with administration peaked in 2012, but started being a major economic activity in 2011. Construction had a much longer span, passing the £0.6bn mark in 2008 and peaking at £0.8bn in 2010, two years before the Games. By 2012 it was back down to £0.5bn. This is a direct injection of spending through the sport related economy generating impacts on employment.

The final row of Table 6 shows the share of sport GVA as a proportion of UK total GVA. It is interesting to note that the rise of sport contribution here is much more decisive than in the case of sport consumption, increasing from 2.2% in 2009 to 2.6% of total GVA in both 2011 and 2012.

Table 7 underlines the growth of sport industry since 2009. In the period 2006-2008 sport growth was slower than growth in the economy as a whole. In 2009, when UK GVA reduced by 1.7 per cent, it would have been expected that sport would also have declined, as in a recessionary period necessities become the priority for consumers. Instead, sport related GVA rose slightly by 0.4 per cent. This was followed by growth rates of 14.5 per cent and 10.4 per cent for the years 2010 and 2011 respectively. In 2012 it saw a continued increase of 4.4 per cent, compared to 2.4 per cent for the UK economy as a whole.

Table 6: Sport-related GVA, UK, 2004-2012, current prices

GVA	2004 £m	2005 £m	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m	2011 £m	2012 £m
Agriculture	392	278	287	291	308	290	277	358	399
Food/drinks	94	101	113	115	114	113	163	156	151
Textiles	114	114	123	131	134	132	167	176	174
Wearing apparel	112	104	111	109	96	91	108	137	144
Leather/footwear	9	9	10	10	9	9	11	15	14
Publishing services	369	352	356	353	356	369	400	490	508
Coke, petroleum	39	33	26	24	19	18	17	17	26
Pharmaceuticals	126	131	136	144	154	145	153	185	197
Rubber products	3	3	3	3	3	3	3	5	7
Various metal products	2	1	1	1	1	1	2	2	2
Machinery/weapons	21	24	27	27	29	27	32	36	46
Optical instruments	34	32	35	37	37	34	43	47	48
Motor vehicles	39	40	40	37	28	23	38	38	38
Boats/Aircraft	576	569	734	775	790	805	780	1,268	1,077
Cycles	46	43	50	51	47	38	53	58	42
Sport goods	214	271	237	261	258	234	251	349	334
Construction	153	161	171	338	635	640	882	736	483
Maintenance of motor vehicles	56	62	65	64	56	51	56	87	98
Wholesale	334	372	389	411	392	394	454	427	424
Retail	1,121	1,140	1,191	1,250	1,346	1,250	1,755	1,460	1,519
Hotels and restaurants	489	526	548	572	590	570	582	700	737
Land transport	115	104	96	104	107	104	102	148	153
Water transport	2	2	1	1	2	2	2	4	6
Air transport	55	49	45	47	48	44	61	50	53
Travel agencies	627	694	540	537	481	501	540	660	741
Telecommunications	2,136	2,247	2,473	2,572	2,604	2,506	2,715	3,036	3,207
Financial intermediation	442	502	641	689	895	992	816	1,053	1,089
Insurance	33	31	37	42	30	40	32	67	74
Renting of machinery & equip.	97	100	103	112	106	98	92	164	135
Research and development	27	29	32	30	27	27	36	62	58
Advertising, business activities	907	962	1,089	1,117	1,212	1,085	1,427	1,502	1,595
Administration	30	32	34	35	35	34	39	756	1,472
Education	1,088	1,200	1,493	1,577	1,651	1,600	1,637	1,754	1,694
Health and vet services	58	71	69	78	77	82	83	107	120
Sporting activities	14,845	15,943	16,274	16,555	16,566	17,020	19,830	21,047	21,927
Other	74	83	83	83	92	83	97	94	97
TOTAL	24,879	26,415	27,663	28,583	29,335	29,455	33,736	37,252	38,891
Sport contribution	2.2%	2.2%	2.2%	2.2%	2.1%	2.2%	2.4%	2.6%	2.6%

Table 7: Sport-related GVA, UK 2005-2012, current prices, growth rates

	2005 %	2006 %	2007 %	2008 %	2009 %	2010 %	2011 %	2012 %
Sport GVA growth	6.2	4.7	3.3	2.6	0.4	14.5	10.4	4.4
Total GVA growth	5.9	5.9	5.5	3.1	-1.7	4.1	2.9	2.4

3.2 Constant prices (2011)

Table 8 shows the details of Table 6 adjusted for inflation (using the PPI index) at 2011 price levels. Under constant prices the 2010, 2011 and 2012 growth rates in sport related GVA were 11.7 per cent, 7.2 per cent and 2.7 per cent correspondingly. The size of these growth rates (in constant prices) is indicative of the post-recession recovery and likely to be influenced by the Olympic and Paralympic Games. It can also be concluded that the major influence of such an event starts at least three to four years before the event. The major categories of economic activities (see Table 6) remain unaltered. However, under constant prices, the economic activities can be compared in a more meaningful way. In 2012, the largest sub-sectors by value were Sporting activities (dominated by betting, £20,230m), Telecommunications (primarily broadcasting, internet, and mobile, £3,677m), Education (£1,691m), Advertising, business activities (£1,578m) and administration (£1,456m).

The growth comparison is presented in Table 9. The driving sectors in 2011 are: administration, boats/aircrafts and financial intermediation. The latter includes activities such as legal services, market research, and accounting services. The growth of both administration and financial intermediation are closely linked to the London Olympic and Paralympic Games. The influence of the Games became stronger in 2012 with leading growth sectors including: administration (dominated by the Olympic Games, according to the Olympic Games Accounts), telecommunications (the coverage of the Games increased substantially the sport share in terms of TV coverage) and travel agents (increasing profits and employment related to the Games). Finally, sectors such as wearing apparel, despite representing a very strong market in terms of consumer spending, do not have an equivalent GVA presence as most consumption is covered by imports.

Table 8: Sport-related GVA, UK, 2004-2012, 2011 prices

GVA	2004 £m	2005 £m	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m	2011 £m	2012 £m
Agriculture	479	338	344	333	318	292	277	333	360
Food/drinks	115	123	135	132	118	114	163	145	137
Textiles	127	125	133	140	140	134	167	165	158
Wearing apparel	115	107	113	110	96	91	108	133	136
Leather/footwear	10	9	10	10	9	10	11	13	12
Publishing services	461	424	417	403	379	375	400	472	467
Coke, petroleum	59	45	33	30	19	21	17	15	22
Pharmaceuticals	130	142	146	151	157	149	153	183	193
Rubber products	4	3	3	3	3	3	3	4	7
Various metal products	3	1	1	1	1	1	2	2	2
Machinery/weapons	25	28	30	29	30	27	32	35	44
Optical instruments	32	32	35	38	38	35	43	47	50
Motor vehicles	43	43	43	40	29	23	38	38	38
Boats/Aircraft	647	622	792	814	814	812	780	1,252	1,046
Cycles	52	47	54	54	48	38	53	57	41
Sport goods	241	301	256	279	265	237	251	343	321
Construction	183	180	181	340	615	765	882	726	462
Maintenance of motor vehicles	64	69	71	69	59	52	56	84	93
Wholesale	450	476	469	473	436	413	454	408	397
Retail	1,511	1,458	1,436	1,440	1,497	1,309	1,755	1,392	1,421
Hotels and restaurants	485	509	511	519	542	546	582	694	720
Land transport	149	128	108	113	110	105	102	146	148
Water transport	2	2	1	1	2	2	2	3	6
Air transport	69	60	53	53	52	45	61	48	48
Travel agencies	869	911	670	600	578	582	540	613	651
Telecommunications	1,572	1,746	1,977	2,117	2,214	2,297	2,715	3,247	3,677
Financial intermediation	526	576	701	742	923	998	816	1,041	1,086
Insurance	44	40	45	48	33	42	32	64	70
Renting of Machinery & equip.	97	99	97	105	99	97	92	158	131
Research and development	29	31	33	30	27	27	36	61	58
Advertising, business activities	971	1,018	1,113	1,127	1,219	1,086	1,427	1,489	1,578
Administration	32	34	35	35	35	34	39	753	1,456
Education	1,397	1,531	1,810	1,832	1,713	1,613	1,637	1,736	1,691
Health and vet services	73	87	82	90	84	86	83	101	111
Sporting activities	19,086	19,625	19,073	18,581	17,658	17,649	19,830	20,079	20,230
Other	85	92	90	87	93	86	97	93	94
TOTAL	30,238	31,061	31,102	30,971	30,455	30,197	33,736	36,173	37,162

Table 9: Sport-related GVA Growth rates, 2011 prices

GVA	2010-11 %	2011-12 %	2004-12 %
Agriculture	20	8	-25
Food/drinks	-11	-6	19
Textiles	-2	-4	24
Wearing apparel	22	2	18
Leather/footwear	17	-8	22
Publishing services	18	-1	1
Coke, petroleum	-11	51	-62
Pharmaceuticals	20	5	48
Rubber products	63	58	96
Various metal products	4	4	-34
Machinery/weapons	10	25	73
Optical instruments	9	6	54
Motor vehicles	1	-1	-12
Boats/Aircraft	60	-16	62
Cycles	8	-29	-21
Sport goods	37	-6	33
Construction	-18	-36	152
Maintenance of motor vehicles	50	10	45
Wholesale	-10	-3	-12
Retail	-21	2	-6
Hotels and restaurants	19	4	48
Land transport	43	1	0
Water transport	92	65	174
Air transport	-22	0	-31
Travel agencies			
Telecommunications	20	13	134
Financial intermediation	28	4	106
Insurance	103	9	57
Renting of machinery and equip.	72	-17	36
Research and development	70	-5	100
Advertising, business activities	4	6	62
Administration	1813	93	4433
Education	6	-3	21
Health and vet services	21	10	53
Sporting activities	1	1	6
Other	-5	1	11
TOTAL	7	3	23

4. Sport related employment

These are the first estimates of employment covering a major investment in sport such as the London 2012 Olympic and Paralympic Games. As we approach the year of the Games we observe a considerable effect on consumption, a greater effect on GVA and the greatest effect on employment. This means that the generated GVA weighted more heavily towards wages and employment than profits.

Table 10 shows the pattern of employment generated by sport during the years 2004 to 2012. Employment increased considerably during the years 2011 and 2012 as a result of projects and organisation of the Olympic and Paralympic Games. The greatest employment effect was in 2011 when sport related employment increased by over 50 per cent. During 2012 this was consolidated by a small rise of 1 per cent. Total full time equivalent sport employment reached 0.99 million and 1 million during the years 2011 and 2012 respectively.

The share of sport employment (out of total UK employment) rose from 2.3 per cent in 2010 to 3.6 per cent in 2011 and 2012. This is much greater than the share for GVA (2.6 per cent in 2011 and 2012), implying that the sports economy is a labour intensive growth industry. Hence, when investing in sport, employment increases at a greater rate than average, making the sport economy an effective way for generating jobs.

Table 10 shows that just over 56 per cent of employment is generated directly by 'sporting activities'. From the remaining categories, corresponding to sport related activities in the wider economy, the greatest employment effects in 2012 were in education, retail, telecommunications and administration.

Table 11 shows the growth rates in employment for the years 2011 and 2012 and overall for the period 2004 to 2012. In 2011 employment was driven by administration, retail, financial intermediation and sporting activities, whilst in 2012 the market was driven by administration, telecommunication, advertising and retail.

Table 10: Sport-related employment, UK, 2004-2012

Employment	2004 000s	2005 000s	2006 000s	2007 000s	2008 000s	2009 000s	2010 000s	2011 000s	2012 000s
Agriculture	7.9	8.1	8.3	8.0	8.8	8.6	8.3	11.5	11.1
Food/drinks	1.6	1.7	1.7	2.5	2.3	2.3	4.1	5.1	5.1
Textiles	4.4	4.1	3.9	4.2	4.1	3.6	4.5	5.6	6.1
Wearing apparel	4.1	3.4	3.1	2.7	2.5	2.1	3.3	4.6	4.9
Leather/footwear	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.3	0.3
Publishing and printing	8.0	7.5	7.1	8.3	7.6	7.6	6.5	9.2	9.2
Coke, petroleum	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.4	0.8
Pharmaceuticals	0.6	0.6	0.7	1.1	1.2	1.4	1.4	1.8	2.0
Rubber products	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Various metal products	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Machinery/weapons	0.5	0.5	0.6	0.6	0.6	0.6	1.0	0.7	0.8
Optical instruments	0.7	0.7	0.7	0.8	0.8	0.7	0.9	1.0	1.0
Motor vehicles	1.0	1.0	0.9	1.0	0.9	0.7	0.7	1.1	1.2
Boats/Aircraft	16.0	17.8	18.8	21.8	21.2	20.6	20.7	26.2	27.1
Cycles	1.0	0.9	0.8	1.6	1.6	1.4	1.4	1.4	1.4
Sport goods	6.1	6.0	6.8	6.7	6.8	5.9	6.3	7.6	7.5
Construction	3.1	3.2	3.2	5.8	10.5	10.9	16.4	12.9	9.2
Maintenance of motor vehicles	1.5	1.6	1.5	2.0	2.0	1.8	1.8	2.7	2.9
Wholesale	7.6	7.8	7.7	8.2	6.5	6.4	6.7	10.1	10.3
Retail	25.7	24.0	23.5	31.3	27.8	27.7	28.1	60.7	64.5
Hotels and restaurants	29.5	30.6	30.9	31.7	31.2	30.6	34.0	34.0	34.3
Land transport	3.2	2.8	2.4	3.0	2.9	2.9	2.7	3.9	3.7
Water transport	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Air transport	0.8	0.7	0.7	0.8	0.8	0.7	0.7	0.8	0.8
Travel agencies	14.7	15.7	11.3	14.9	14.0	13.6	12.0	18.8	19.2
Telecommunications	33.4	34.8	36.2	37.8	33.2	31.1	30.3	35.7	43.3
Financial intermediation	6.2	6.5	7.3	7.6	6.9	7.5	5.0	10.5	10.9
Insurance	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.6
Renting of machinery & equip.	2.6	2.5	2.6	2.2	2.0	1.9	1.5	4.2	2.9
Research and development	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.9
Advertising, business activities	25.7	26.4	26.6	26.6	25.6	24.3	28.3	27.0	29.8
Administration	0.6	0.7	0.7	1.0	1.0	1.0	1.1	20.4	38.6
Education	56.1	60.6	72.7	74.0	74.5	75.9	75.3	79.3	76.2
Health and vet services	1.7	2.1	2.0	2.7	2.5	2.6	2.9	3.7	4.1
Sporting activities	334.2	350.7	354.1	357.7	325.7	331.0	329.2	583.2	564.5
Other	2.3	2.3	2.1	2.4	2.4	2.2	2.6	4.7	4.9
TOTAL	602.9	627.1	640.5	670.8	629.5	629.1	640.1	991.0	1,000.5
Sport share (%)	2.2%	2.3%	2.3%	2.4%	2.2%	2.3%	2.3%	3.6%	3.6%

Table 11: Sport-related employment, growth rates, per cent

Employment	2010-11 %	2011-12 %	2004-12 %
Agriculture	38.6	-3.6	41.1
Food/drinks	24.8	0.0	225.8
Textiles	23.5	8.4	38.2
Wearing apparel	38.3	5.9	19.6
Leather/footwear	-53.7	-8.8	-1.0
Publishing and printing	40.8	0.2	15.1
Coke, petroleum	85.1	75.7	90.3
Pharmaceuticals	32.4	7.3	216.4
Rubber products	47.3	43.2	111.0
Various metal products	44.6	-5.3	9.5
Machinery/weapons	-24.5	9.1	56.7
Optical instruments	5.6	-2.7	34.2
Motor vehicles	64.8	7.6	21.1
Boats/Aircraft	26.5	3.4	69.1
Cycles	1.9	-6.4	35.4
Sport goods	20.0	-1.0	22.7
Construction	-21.1	-28.9	196.0
Maintenance of motor vehicles	46.1	8.3	89.2
Wholesale	50.5	1.7	34.8
Retail	116.5	6.2	151.3
Hotels and restaurants	-0.1	1.0	16.4
Land transport	46.0	-3.4	18.3
Water transport	115.9	32.2	613.6
Air transport	6.4	4.1	-1.6
Travel agencies	55.9	2.5	30.6
Telecommunications	18.0	21.3	29.8
Financial intermediation	108.7	3.4	75.4
Insurance	35.5	6.9	44.9
Renting of machinery and equip.	185.2	-29.9	13.6
Research and development	28.7	7.0	54.0
Advertising, business activities	-4.6	10.2	15.7
Administration	1802.4	89.4	5924.1
Education	5.3	-3.9	35.8
Health and vet services	29.5	11.0	140.7
Sporting activities	77.2	-3.2	68.9
Other	81.7	4.7	116.2
TOTAL	54.8	1.0	66.0

5. Value of sport in the UK

Table 12 below compares the position of the UK's sports market during the years 2009 to 2012. It presents a period that started with an economic recession and finished with the London 2012 Olympic and Paralympic Games. The recession between 2008 and 2009 negatively influenced the share of sport in the overall indicators. However, in 2010, sport related GVA increased from 2.2 per cent to 2.4 per cent of the UK economy. This increased further to 2.6 per cent in 2011 and 2012. The greatest change was observed in the employment indicators with sports share of total employment increasing from 2.3 per cent in 2009 to 3.6 per cent in 2012. In the case of consumption the sport share increased at a smaller rate: from 2.7 per cent in 2009 to 2.9 per cent in 2012.

The current analysis established that following an investment in the sport industry, the rise in employment in percentage terms is greater than the corresponding change of GVA. This means that in the sport industry overall the profit margins are kept at a lower level than average enabling the creation of a greater number of jobs. This makes sport an effective way of creating employment and counteracting recession within the economy.

Table 12: Value of sport in the UK, 2009 - 2012*

	2008	2009	2010	2011	2012
Sport related GVA, £m	29,335	29,455	33,736	37,252	38,891
as % of total GVA	2.1%	2.2%	2.4%	2.6%	2.6%
Sport related consumer spending £m	26,010	24,845	26,405	27,754	29,207
as % of total spending	2.8%	2.7%	2.8%	2.8%	2.9%
Sport related employment, 000s	629.5	629.1	640.1	991.0	1,000.5
as % of total employment	2.2%	2.3%	2.3%	3.6%	3.6%

*GVA and consumer spending in current prices. Total number of people employed in the UK is taken from the Labour Force Survey and is calculated using full time equivalents. The GVA total is taken from the National Accounts and the consumer spending total from Consumer Trends.

It should be noted that many legacy outcomes associated with the London 2012 Olympic and Paralympic Games are not covered by this report, including economic benefits which are not part of the sports economy. A broader assessment of the impact of the Games was been published by DCMS in July 2013⁶.

⁶ <https://www.gov.uk/government/collections/london-2012-meta-evaluation>

Appendices

A1. Bibliography

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A2. International trade data example

International trade data have been used for both tourism and consumption estimation purposes. For example, consumption of sport footwear has been estimated using the following codes (Table A1) from Customs and Excise: by calculating the total footwear imports, sport trade is expressed as a percentage of total trade. This percentage in its turn is applied on the Footwear consumption in the National Accounts.

Table A1:

Product codes associated Sport footwear
640212
640219
640220
640230
640312
630319
640320
640330
640340
64039116
64039118
64039191
64039193
640411

A3. Questionnaire

Research on the economic impact of sport (Sport Satellite Account), UK, 2011-12

The Department of Culture Media and Sport (DCMS) has commissioned the XXXXX to construct the Sport Satellite Account of the UK for the years 2011 and 2012. We would be grateful if you could assist in providing the information requested below on your organisation. The information you provide will be treated as **Strictly Confidential**, and will be aggregated anonymously along with the responses received from other organisations, to be used only for the purposes of this research study for DCMS.

Each category has a total and a sport related element aiming to calculate a **sport percentage**. If the monetary values are classified please provide, if possible, directly the sport share. Please answer only the parts that are relevant to your business.

Please e-mail your response to XXXX, or alternatively please either fax your response XXXXX for the attention of XXXX or post to XXXX.

We would welcome your contribution to this study, which is important in raising awareness of the economic importance of Sport in the UK and for Government decision-making on the funding of the sport sector.

Information for 2011 or 2012

1. Total turnover: £_____
 - Sport related turnover: £_____
 - Percentage of sport turnover 2011: _____%
 - Percentage of sport turnover 2012: _____%

2. Total employment full time: _____
 - Sport related employment (f-t): _____
 - Percentage of sport employment (f-t) 2011: _____%
 - Percentage of sport employment (f-t) 2012: _____%

3. Total employment part time: _____
 - Sport related employment (p-t): _____
 - Percentage of sport employment (p-t), 2011: _____%
 - Percentage of sport employment (p-t), 2012: _____%

4. Total wages and salaries: £_____
 - Sport related wages and salaries: £_____
 - Percentage of sport wages and salaries, 2011: _____%
 - Percentage of sport wages and salaries, 2012: _____%

5. Total profit: £_____
 - Sport related profit: £_____
 - Percentage of sport profit, 2011: _____%
 - Percentage of sport profit, 2012: _____%

6. Total imports of commodities: £_____
 - Sport related imports of commodities: £_____
 - Percentage of sport imports of commodities, 2011: _____%
 - Percentage of sport imports of commodities, 2012: _____%

7. Total imports of services: £_____
 - Sport related imports of services: £_____
 - Percentage of sport imports of services, 2011: _____%
 - Percentage of sport imports of services, 2012: _____%

8. Total exports of commodities: £_____
 - Sport related exports of commodities: £_____
 - Percentage of sport exports of commodities, 2011: _____%
 - Percentage of sport exports of commodities, 2012: _____%

9. Total exports of services: £_____
 - Sport related exports of services: £_____
 - Percentage of sport exports of services, 2011: _____%
 - Percentage of sport exports of services, 2012: _____%

10. Total investment (including construction): £_____
 - Sport related investment: £_____
 - Percentage of sport investment, 2011: _____%
 - Percentage of sport investment, 2012: _____%

11. Total construction: £_____
 - Sport related construction: £_____
 - Percentage of sport construction, 2011: _____%
 - Percentage of sport construction, 2012: _____%

12. Total subsidies received from government: £_____
 - Sport related subsidies: £_____
 - Percentage of sport subsidies, 2011: _____%
 - Percentage of sport subsidies, 2012: _____%

13. Total domestic tourism income: £_____
 - Sport related domestic tourism income: £_____
 - Percentage of sport domestic tourism income, 2011: _____%
 - Percentage of sport domestic tourism income, 2012: _____%

14. Total foreign tourism income: £_____
 - Sport related foreign tourism income: £_____
 - Percentage of sport foreign tourism income, 2011: _____%
 - Percentage of sport foreign tourism income, 2012: _____%

A4. Definition of Sport and Methodology

This Appendix summarises the methodology used and sets out more detail about the statistical sources.

A4.1 Overview of SSA

The Satellite Account approach is an extension of the System of National Accounts. In order to prepare the latter, the Office for National Statistics (ONS) constructs the Supply and Use Tables (SUTS), which provide detailed information on the supply and use of goods and services within the economy, linking industries, products and sectors. Industries are classified via the NACE⁷ classification while goods and services are defined through the Classification of Products by Activity (CPA) framework. Developing satellite accounts for the sports sector requires that the flows matrices are partitioned into sport and non-sport components. This is a detailed task which requires significant secondary source review in order to define a coherent definition of the sector.

The Vilnius definition is the basis of the Pan-European approach of the SSAs. What is called the statistical definition of sport is directly linked to the SUTS via the NACE category 'sporting activities'. A further, 'broad' definition of sport is taken as the statistical definition plus (i) a range of additional activities required for producing sport output and (ii) activities representing products/services that are related to sport but are not necessary for doing sport (such as insurance or gambling). The latter broad definition is associated with the history of economic impact reports generated in UK since the 1980s.

The basic objective of the research is to estimate the impact of sport in the economy in the years 2011 and 2012 in terms of:

- Consumer spending at current and constant prices
- Gross Value Added (GVA) and employment
- Associated percentage changes since 2010
- Associated shares of sport within the national economy

A4.2 Sourcing suitable statistical data

Data availability has been one of the most problematic obstacles for SSAs. As can be seen from the differences between the statistical definition and the broader definition of sport (Vilnius), using data directly from the System of National Accounts (SNA) is

⁷ Nomenclature statistique des activités économiques dans la Communauté européenne

insufficient. However, data beyond the SNA is scarce and the degree of availability differs largely from sector to sector.

For this reason, following the recent developments of methodology at EU and UK level, data were sourced in three separate directions:

- Questionnaires to sport companies
- Examination of companies accounts
- Sourcing of national data.

The importance of following this approach is that a single statistic can be derived in a variety of ways and hence increase the robustness of the approach. For example, instead of quoting market surveys, in the case of sportswear, a sport share in the market can be established by examining the codes of imports, which correspond to the majority of final demand. Another example is sport betting. This is usually estimated by using the Gambling Commission Statistics which may not be consistent with the National Accounts. To ensure compatibility, under the suggested methodology, the whole of the Gambling sector is estimated (including lottery, casinos etc) and the total is then compared with the Consumer Trends headline figure. A final example is the Construction industry's estimation in the SIRC's research note of the 2010 SSA.

Primary research is particular useful for establishing a share of sport in some industries, when such information is not available within national data or company accounts. This is particular relevant in the case of services where the international trade data are very limited.

Companies' accounts are available through the Companies House. A selected use of the most important operators highlights trends (rather than absolute numbers) in the Sport Industry, which methodologically can be easily reproduced. An example of using companies' accounts at a large scale (through the *Fame* dataset) is provided by the SIRC's note on Construction in the 2010 SSA.

The **national data** required are usually based on ONS. The most important dataset is the **Input-Output Tables**, both in the form of Supply and Use Tables (SUTS) and Industry by Industry Matrix. The latest set of UK SUTS was published in 2014 and is consistent with the 2012 National Accounts.

Consumer Spending by COICOP heading is provided in the publication **Consumer Trends**, which is consistent with the household final demand element of the National Accounts. The second most important source of consumer spending data is the **Living Cost and Food Survey** which provides more detailed information related to sport and leading to the Family Spending publication.

Important surveys that use the SIC classification (rather than COICOP) include the **Annual Survey of Hours and Earnings (ASHE)** and the **Annual Business Survey**. The former provides estimates of average earnings per industry, while the latter includes estimates of GVA and profitability. The **UK Manufacturers' Sales by Product (PRODCOM)** is a very analytical data set published directly by EUROSTAT. It is consistent with both SIC and NACE classifications. An alternative source of business data is the **Business Register Employment Survey (BRES)** providing classifications of employment according to SIC-2007. HM Revenue & Customs provide a detailed source for **imports and exports data** at www.uktradeinfo.com. It makes use of the SITC (Standard International Trade Classification) and it is a very valuable source in many sports markets where the final demand is directed mainly towards imports. This is typical in the case of sportswear: in this case SITC can distinguish between sport and non sport consumption of clothing and footwear. Construction for the Olympic Games can be identified through the **Olympic Delivery Authority Annual Report and Accounts**.

Further publications include **Annual Reports** by media companies such as BBC and BSkyB, and the **Gambling Commission Industry Statistics**. The latter is the only information source available to help us identify sports-associated betting within the gambling industry. However, it should only be used in conjunction with the general official statistic in Consumer Trends and the Input-Output Tables (showing imports) to **avoid considerable overestimation** of sport gambling compared to the National Accounts.

Finally sports tourism can be identified using the publications/surveys **UK Tourist Statistics, GB Tourism Survey, GB Day Visits Survey** and **Visitor Attraction Trends**.

A4.3 Developments

The current methodology can be further improved by an analysis of the International Trade in sport goods and services. The existing dataset is sufficient for analysing trade in sport goods through the HM Revenue & Customs dataset. However the analysis of trade in sport services cannot be easily identified. In the UK the ONS dataset 'International Trade in Services' is based on a sample of just over 15,000 businesses linked to SIC codes. Although the released Reference Tables are too general to provide identification of the Sport Industry, it is possible to approach the task by assuming that the trade structure in each SIC code is the same as the associated sport category within it, an assumption also employed in the DCMS Creative Industries analysis.