

Annex 3 Review of research cost relativities 2009-10: summary

Number of HEIs who participated in the study 46

Key of Acronyms	
I-O	Institution-own funded Research
PGR	Postgraduate Research
RG&C	Externally Funded Research Grants and Contracts
HEIs	Higher Education Institutions

Table 1a. Costs per TRAC (£000s)

Note: RG&C is calculated using the net RG&C costs (i.e. without scholarships etc)

HESA academic cost centre		Subject group for comparative purposes only	I-O costs		PGR costs (including scholarships, stipends, maintenance etc)		RG&C costs		I-O and RG&C costs		Total costs (all research)
			Sector	Sector	Sector	Sector	Sector	Sector			
1	Total clinical medicine	i	Number of HEIs	30	30	30	30	30	30	30	30
			Total costs	168,677	168,725	1,706,716	1,861,618	2,022,585			
			Average	5,623	5,624	56,891	62,054	67,419			
			1st Quartile	1,581	2,148	14,890	19,093	19,493			
			Median Value	4,885	3,872	43,282	47,152	49,744			
			3rd Quartile	7,442	8,872	76,625	82,214	86,181			
2	Total clinical dentistry	i	Number of HEIs	17	16	16	16	17			17
			Total costs	14,591	12,005	36,920	47,521	63,516			
			Average	858	750	2,308	2,970	3,736			
			1st Quartile	328	275	1,152	1,571	2,242			
			Median Value	619	581	2,053	2,569	3,714			
			3rd Quartile	1,313	1,110	2,756	3,764	4,038			
3	Veterinary science	ii	Number of HEIs	8	8	8	8	8			8
			Total costs	15,633	15,040	79,704	95,337	110,377			
			Average	1,954	1,880	9,963	11,917	13,797			
			1st Quartile	873	878	5,363	6,237	7,314			
			Median Value	1,315	1,375	8,372	9,445	11,072			
			3rd Quartile	1,960	2,805	11,763	15,924	18,663			
4	Anatomy and physiology	ii	Number of HEIs	15	13	15	15	15			15
			Total costs	12,060	12,408	91,756	103,816	116,592			
			Average	804	954	6,117	6,921	7,773			
			1st Quartile	288	482	1,667	1,880	2,300			
			Median Value	570	694	2,390	3,080	3,774			
			3rd Quartile	1,127	1,339	12,224	12,660	13,853			
5	Nursing and paramedical studies	iii	Number of HEIs	20	19	19	20	20			20
			Total costs	10,196	8,791	36,567	46,764	55,292			
			Average	510	463	1,925	2,338	2,765			
			1st Quartile	138	134	461	659	683			
			Median Value	448	263	1,281	1,579	2,058			
			3rd Quartile	821	613	2,401	3,258	3,768			
6	Health and community studies	ii	Number of HEIs	21	21	22	22	22			22
			Total costs	8,960	6,209	37,126	46,197	52,626			
			Average	427	296	1,688	2,100	2,392			
			1st Quartile	158	88	389	541	623			
			Median Value	267	219	762	1,173	1,386			
			3rd Quartile	578	360	1,818	2,489	2,784			
7	Psychology and behavioural sciences	iii	Number of HEIs	34	35	34	34	35			35
			Total costs	31,598	31,084	92,177	122,259	161,502			
			Average	929	888	2,711	3,596	4,614			
			1st Quartile	589	380	978	1,726	2,128			
			Median Value	829	602	1,750	2,699	3,590			
			3rd Quartile	1,135	1,179	3,067	4,114	5,534			
8	Pharmacy and pharmacology	ii	Number of HEIs	15	15	15	15	15			15
			Total costs	10,053	15,786	65,948	76,001	91,787			
			Average	670	1,052	4,397	5,067	6,119			
			1st Quartile	241	448	1,553	1,860	2,405			
			Median Value	385	781	3,898	4,285	5,603			
			3rd Quartile	950	1,290	6,033	6,419	7,519			
10	Biosciences	ii	Number of HEIs	38	38	38	38	39			39
			Total costs	83,542	127,052	734,374	760,829	951,106			
			Average	2,198	3,343	19,326	20,022	24,387			
			1st Quartile	910	1,547	5,399	5,349	8,544			
			Median Value	1,709	2,483	13,300	13,840	16,987			
			3rd Quartile	3,199	4,209	24,727	30,043	37,288			
11	Chemistry	ii	Number of HEIs	30	29	30	30	30			30
			Total costs	36,657	77,204	223,982	260,639	337,844			
			Average	1,222	2,662	7,466	8,688	11,261			
			1st Quartile	513	964	2,706	3,533	4,056			
			Median Value	797	2,496	6,913	8,900	10,636			
			3rd Quartile	1,640	4,175	10,716	12,273	15,015			
12	Physics	ii	Number of HEIs	32	32	33	32	32			32
			Total costs	39,013	63,234	312,869	331,970	392,610			
			Average	1,219	1,976	9,481	10,374	12,269			
			1st Quartile	399	781	3,285	3,715	4,426			
			Median Value	731	1,536	5,482	6,537	8,626			
			3rd Quartile	1,770	2,791	10,664	12,006	15,116			
13	Agriculture and forestry	ii	Number of HEIs	3	3	3	3	3			3
			Total costs								
			Average								
			1st Quartile								
			Median Value								
			3rd Quartile								
14	Earth, marine and environmental sciences	ii	Number of HEIs	24	24	24	24	24			24
			Total costs	25,557	35,728	138,945	164,503	200,230			
			Average	1,065	1,489	5,789	6,854	8,343			
			1st Quartile	351	620	1,981	2,520	3,212			
			Median Value	616	1,107	4,606	6,039	6,982			
			3rd Quartile	1,340	2,403	9,684	11,947	14,366			
16	General engineering	ii	Number of HEIs	17	16	16	17	17			17
			Total costs	28,192	42,191	138,391	166,582	208,773			
			Average	1,658	2,637	8,649	9,799	12,281			
			1st Quartile	197	644	2,100	2,745	3,373			
			Median Value	1,055	1,388	3,538	4,031	5,362			
			3rd Quartile	1,822	3,631	13,914	14,686	18,648			

HESA academic cost centre			I-O costs	PGR costs (including scholarships, stipends, maintenance etc)	RG&C costs	I-O and RG&C costs	Total costs (all research)	
Subject group for comparative purposes only			Sector	Sector	Sector	Sector	Sector	
17	Chemical engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	11 6,036 549 238 264 762	12 23,783 1,982 892 1,305 3,276	12 51,595 4,300 1,732 3,973 5,825	12 57,983 4,832 1,910 4,349 6,379	12 81,766 6,814 2,802 5,931 9,656
18	Mineral, metallurgy and materials engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	10 9,015 902 371 644 1,142	11 27,558 2,505 780 1,860 3,672	11 77,219 7,020 3,341 7,739 8,812	11 87,990 7,999 4,411 8,270 10,808	11 115,548 10,504 5,370 11,942 14,932
19	Civil engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	20 11,595 580 233 398 636	19 21,960 1,156 372 831 1,498	19 54,556 2,871 1,307 2,253 4,449	20 66,151 3,308 1,513 2,591 4,951	20 87,943 4,397 2,087 3,824 6,649
20	Electrical, electronic and computer engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	27 25,365 939 303 689 992	25 51,857 2,074 1,047 1,328 2,340	27 141,586 5,244 2,275 3,994 6,895	27 166,951 6,183 3,137 4,683 7,544	27 218,808 8,104 3,843 6,011 10,418
21	Mechanical, aero and production engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	21 22,534 1,073 385 731 1,352	21 41,922 1,996 760 1,291 2,720	20 107,038 5,352 2,183 3,879 6,428	20 127,668 6,383 2,978 5,075 7,280	21 183,731 8,749 3,833 6,636 9,115
23	Architecture, built environment and planning	iii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	20 21,686 1,084 308 704 1,322	20 12,912 646 252 531 916	20 45,387 2,269 691 2,055 3,681	21 67,073 3,194 1,125 2,343 4,519	21 80,092 3,814 1,314 3,253 5,095
24	Mathematics	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	35 60,264 1,722 827 1,210 2,066	35 37,421 1,069 367 884 1,524	37 84,788 2,292 905 1,597 2,421	36 144,380 4,011 1,642 2,766 4,909	36 183,305 5,092 2,479 3,634 6,341
25	Information technology, systems sciences & computer software engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	39 40,563 1,040 437 749 1,237	39 40,838 1,047 326 675 1,264	38 120,935 3,183 1,175 2,187 3,908	39 161,498 4,141 1,618 2,793 4,796	39 202,337 5,188 2,201 3,575 6,150
26	Catering & hospitality management	iii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	2	2	2	2	2
27	Business and management studies	iv	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	37 98,365 2,659 1,171 1,925 3,310	38 41,139 1,083 410 855 1,540	37 87,092 2,354 617 1,345 3,087	38 202,340 5,325 1,785 3,431 6,885	37 243,174 6,572 2,350 4,579 9,197
28	Geography	iii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	27 24,511 908 495 863 1,129	29 18,775 647 381 597 855	29 64,233 2,215 1,068 1,849 2,798	29 89,722 3,094 1,789 2,876 3,902	28 104,385 3,728 2,366 3,143 4,892
29	Social studies	v	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	39 172,039 4,411 2,016 3,003 5,600	39 75,670 1,940 848 1,459 2,422	38 172,341 4,535 1,408 2,560 6,044	39 346,084 8,874 3,626 6,286 10,306	40 437,532 10,938 4,480 7,677 13,857
30	Media studies	v	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	18 8,230 457 174 434 704	17 2,586 152 100 113 180	18 5,117 284 70 185 576	19 13,886 731 331 650 1,073	19 16,540 871 404 772 1,403
31	Humanities	v	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	38 137,135 3,609 1,615 3,133 4,710	37 59,511 1,608 854 1,193 1,878	37 89,828 2,428 817 1,921 2,922	38 232,349 6,114 2,770 4,739 7,797	38 294,686 7,755 3,779 6,253 9,338
33	Design and creative arts	iii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	31 27,459 886 508 658 1,003	32 12,235 382 163 279 443	30 15,407 514 138 364 755	31 43,523 1,404 625 1,069 2,155	32 56,563 1,768 822 1,339 2,490
34	Education	v	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	32 33,797 1,056 410 742 1,174	32 33,106 1,035 382 699 1,009	32 63,528 1,985 429 943 2,220	32 97,202 3,038 1,102 1,964 3,227	32 132,074 4,127 1,584 2,940 3,996

HESA academic cost centre		Subject group for comparative purposes only	I-O costs		PGR costs (including scholarships, stipends, maintenance etc)		RG&C costs		I-O and RG&C costs		Total costs (all research)	
			Sector	Sector	Sector	Sector	Sector	Sector				
35	Modern languages	v	Number of HEIs	30	28	28	29	30				
			Total costs	42,073	12,908	18,894	60,173	74,378				
			Average	1,402	461	675	2,075	2,479				
			1st Quartile	518	91	152	562	650				
			Median Value	1,014	386	423	1,543	1,920				
			3rd Quartile	1,853	731	842	2,575	2,980				
37	Archaeology	iii	Number of HEIs	20	19	20	20	20				
			Total costs	12,418	6,777	23,872	36,290	43,870				
			Average	621	357	1,194	1,815	2,193				
			1st Quartile	300	181	384	707	976				
			Median Value	517	267	1,037	1,710	2,030				
			3rd Quartile	879	460	1,797	2,616	3,134				
38	Sports science and leisure studies	iii	Number of HEIs	13	12	13	13	13				
			Total costs	5,724	5,858	11,126	16,850	23,841				
			Average	440	488	856	1,296	1,834				
			1st Quartile	126	94	341	610	735				
			Median Value	219	157	834	961	1,266				
			3rd Quartile	766	743	1,109	1,602	2,581				
41	Continuing education	v	Number of HEIs	9	8	8	10	10				
			Total costs	3,658	841	3,640	7,299	8,128				
			Average	406	105	455	730	813				
			1st Quartile	256	10	112	370	428				
			Median Value	335	46	242	502	502				
			3rd Quartile	474	85	766	674	685				
Total - all cost centres			Number of HEIs	45	45	45	45	45				
			Total costs	1,282,313	1,160,349	5,171,124	6,453,437	7,618,211				
			Average	28,496	25,786	114,914	143,410	169,294				
			1st Quartile	13,282	9,741	36,045	49,326	66,548				
			Median Value	23,561	19,874	79,131	105,318	121,746				
			3rd Quartile	41,969	38,243	148,128	187,110	222,409				

Table 2a. Costs per TRAC (£000s)

Subject group for comparative purposes only		I-O costs		PGR costs (including scholarships, stipends, maintenance etc)		RG&C costs		I-O and RG&C costs		Total costs (all research)	
		Sector	Sector	Sector	Sector	Sector	Sector				
i	Number of observations	47	46	46	46	47					
	Total costs	183,268	180,729	1,743,636	1,909,139	2,086,100					
	Average	3,899	3,929	37,905	41,503	44,385					
	1st Quartile	724	595	2,417	3,148	3,931					
	Median Value	2,173	2,413	12,029	15,590	12,821					
	3rd Quartile	5,790	5,105	58,573	64,605	70,925					
ii	Number of observations	366	361	368	369	371					
	Total costs	436,630	645,670	2,474,571	2,833,847	3,556,213					
	Average	1,193	1,789	6,724	7,680	9,585					
	1st Quartile	359	545	1,559	2,242	2,784					
	Median Value	751	1,157	3,561	4,287	5,603					
	3rd Quartile	1,485	2,480	8,604	9,785	12,668					
iii	Number of observations	167	168	167	170	171					
	Total costs	133,888	96,963	289,398	423,404	526,997					
	Average	802	577	1,733	2,491	3,082					
	1st Quartile	313	190	463	766	1,036					
	Median Value	676	453	1,109	1,986	2,493					
	3rd Quartile	1,043	745	2,235	3,398	4,263					
iv	Number of observations	37	38	37	38	37					
	Total costs	98,365	41,139	87,092	202,340	243,174					
	Average	2,659	1,083	2,354	5,325	6,572					
	1st Quartile	1,171	410	617	1,785	2,350					
	Median Value	1,925	855	1,345	3,431	4,579					
	3rd Quartile	3,310	1,540	3,087	6,885	9,197					
v	Number of observations	166	161	161	167	169					
	Total costs	396,931	184,623	353,348	756,993	963,338					
	Average	2,391	1,147	2,195	4,533	5,700					
	1st Quartile	486	220	335	846	1,175					
	Median Value	1,272	739	980	2,535	3,123					
	3rd Quartile	3,026	1,430	2,314	5,783	7,148					

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Key of Acronyms	
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Table 1b. PGR costs per TRAC (£000s)

HESA academic cost centre	Subject group for comparative purposes only		PGR costs (including scholarships, stipends, maintenance etc)	PGR scholarships, stipends, maintenance etc	PGR scholarships, stipends, maintenance etc as a percentage of total PGR costs
		Sector	Sector	Sector	Sector
1 Total clinical medicine	i	Number of HEIs	30	13	13
		Total costs	168,725	13,277	7.9%
		Average	5,624	1,021	
		1st Quartile	2,148	243	8.5%
		Median Value	3,872	574	10.1%
		3rd Quartile	8,872	1,620	15.8%
2 Total clinical dentistry	i	Number of HEIs	16	5	5
		Total costs	12,005	295	2.5%
		Average	750	59	
		1st Quartile	275	11	3.0%
		Median Value	581	30	5.2%
		3rd Quartile	1,110	122	7.9%
3 Veterinary science	ii	Number of HEIs	8	6	6
		Total costs	15,040	2,694	17.9%
		Average	1,880	449	
		1st Quartile	878	147	17.1%
		Median Value	1,375	235	20.6%
		3rd Quartile	2,805	900	27.9%
4 Anatomy and physiology	ii	Number of HEIs	13	3	3
		Total costs	12,408	552	4.4%
		Average	954	184	
		1st Quartile	482	163	8.0%
		Median Value	694	179	17.5%
		3rd Quartile	1,339	209	23.9%
5 Nursing and paramedical studies	iii	Number of HEIs	19	9	9
		Total costs	8,791	306	3.5%
		Average	463	34	
		1st Quartile	134	2	0.6%
		Median Value	263	14	4.6%
		3rd Quartile	613	71	15.1%
6 Health and community studies	ii	Number of HEIs	21	6	6
		Total costs	6,209	145	2.3%
		Average	296	24	
		1st Quartile	88	1	0.4%
		Median Value	219	4	3.6%
		3rd Quartile	360	68	18.8%
7 Psychology and behavioural sciences	iii	Number of HEIs	35	16	16
		Total costs	31,084	1,422	4.6%
		Average	888	89	
		1st Quartile	380	10	1.2%
		Median Value	602	20	6.2%
		3rd Quartile	1,179	115	13.5%
8 Pharmacy and pharmacology	ii	Number of HEIs	15	5	5
		Total costs	15,786	716	4.5%
		Average	1,052	143	
		1st Quartile	448	43	8.8%
		Median Value	781	70	9.3%
		3rd Quartile	1,290	120	18.4%
10 Biosciences	ii	Number of HEIs	38	16	16
		Total costs	127,052	10,041	7.9%
		Average	3,343	628	
		1st Quartile	1,547	80	3.4%
		Median Value	2,483	175	11.5%
		3rd Quartile	4,209	1,029	27.9%
11 Chemistry	ii	Number of HEIs	29	13	13
		Total costs	77,204	5,089	6.6%
		Average	2,662	391	
		1st Quartile	964	92	11.1%
		Median Value	2,496	191	15.2%
		3rd Quartile	4,175	427	27.7%
12 Physics	ii	Number of HEIs	32	15	15
		Total costs	63,234	4,666	7.4%
		Average	1,976	311	
		1st Quartile	781	62	7.3%
		Median Value	1,536	146	17.0%
		3rd Quartile	2,791	284	25.0%
13 Agriculture and forestry	ii	Number of HEIs	3	2	2
		Total costs			
		Average			
		1st Quartile			
		Median Value			
		3rd Quartile			
14 Earth, marine and environmental sciences	ii	Number of HEIs	24	11	11
		Total costs	35,728	2,528	7.1%
		Average	1,489	230	
		1st Quartile	620	48	3.9%
		Median Value	1,107	84	11.3%
		3rd Quartile	2,403	199	18.2%
16 General engineering	ii	Number of HEIs	16	8	8
		Total costs	42,191	5,118	12.1%
		Average	2,637	640	
		1st Quartile	644	128	16.4%
		Median Value	1,388	225	29.4%
		3rd Quartile	3,631	1,190	35.8%

HESA academic cost centre			PGR costs (including scholarships, stipends, maintenance etc)	PGR scholarships, stipends, maintenance etc	PGR scholarships, stipends, maintenance etc as a percentage of total PGR costs	
Subject group for comparative purposes only			Sector	Sector	Sector	
17	Chemical engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	12 23,783 1,982 892 1,305 3,276	4 894 223 129 184 317	3.8% 16.2% 16.3% 19.0%
18	Mineral, metallurgy and materials engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	11 27,558 2,505 780 1,860 3,672	2 543 272 140 272 403	2.0% 16.8% 17.4% 17.9%
19	Civil engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	19 21,960 1,156 372 831 1,498	7 1,013 145 0 63 244	4.6% 0.0% 16.2% 18.9%
20	Electrical, electronic and computer engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	25 51,857 2,074 1,047 1,328 2,340	13 4,517 347 9 164 364	8.7% 10.5% 17.0% 23.2%
21	Mechanical, aero and production engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	21 41,922 1,996 760 1,291 2,720	9 3,005 334 41 188 370	7.2% 13.7% 17.2% 22.1%
23	Architecture, built environment and planning	iii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	20 12,912 646 252 531 916	8 751 94 21 99 149	8 5.8% 5.5% 7.8% 15.9%
24	Mathematics	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	35 37,421 1,069 367 884 1,524	15 2,618 175 36 102 171	15 7.0% 6.0% 14.9% 25.9%
25	Information technology, systems sciences & computer software engineering	ii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	39 40,838 1,047 326 675 1,264	18 4,022 223 27 127 245	18 9.8% 8.2% 17.8% 31.0%
26	Catering & hospitality management	iii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	2		
27	Business and management studies	iv	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	38 41,139 1,083 410 855 1,540	15 1,001 67 5 24 87	15 2.4% 0.9% 3.8% 11.9%
28	Geography	iii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	29 18,775 647 381 597 855	14 931 66 14 37 66	14 5.0% 3.3% 5.5% 10.0%
29	Social studies	v	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	39 75,670 1,940 848 1,459 2,422	18 3,346 186 13 75 219	18 4.4% 1.6% 5.9% 15.8%
30	Media studies	v	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	17 2,586 152 100 113 180	4 58 14 6 15 23	4 2.2% 5.8% 9.4% 15.9%
31	Humanities	v	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	37 59,511 1,608 854 1,193 1,878	15 1,691 113 3 18 123	15 2.8% 0.6% 3.2% 9.6%
33	Design and creative arts	iii	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	32 12,235 382 163 279 443	9 209 23 0 9 21	9 1.7% 0.1% 3.5% 6.4%
34	Education	v	Number of HEIs Total costs Average 1st Quartile Median Value 3rd Quartile	32 33,106 1,035 382 699 1,009	7 202 29 0 22 59	7 0.6% 0.0% 1.7% 10.0%

HESA academic cost centre		Subject group for comparative purposes only	PGR costs (including scholarships, stipends, maintenance etc)			
			Sector	Sector	Sector	
35	Modern languages	v	Number of HEIs	28	9	
			Total costs	12,908	297	2.3%
			Average	461	33	
			1st Quartile	91	0	0.1%
			Median Value	386	3	2.9%
			3rd Quartile	731	29	13.3%
37	Archaeology	iii	Number of HEIs	19	8	
			Total costs	6,777	118	1.7%
			Average	357	15	
			1st Quartile	181	1	0.5%
			Median Value	267	11	3.5%
			3rd Quartile	460	23	9.1%
38	Sports science and leisure studies	iii	Number of HEIs	12	4	
			Total costs	5,858	346	5.9%
			Average	488	86	
			1st Quartile	94	3	1.9%
			Median Value	157	14	12.0%
			3rd Quartile	743	169	21.5%
41	Continuing education	v	Number of HEIs	8	1	
			Total costs	841	0	0.0%
			Average	105	0	
			1st Quartile	10	0	0.0%
			Median Value	46	0	0.0%
			3rd Quartile	85	0	0.0%
Total - all cost centres			Number of HEIs	45	21	
			Total costs	1,160,349	74,462	6.4%
			Average	25,786	3,546	
			1st Quartile	9,741	583	7.2%
			Median Value	19,874	1,559	12.5%
			3rd Quartile	38,243	4,416	19.8%

Table 2b. PGR costs per TRAC (£000s)

Subject group for comparative purposes only		PGR costs (including scholarships, stipends, maintenance etc)		
		Sector	Sector	Sector
i	Number of observations	46	18	18
	Total costs	180,729	13,572	7.5%
	Average	3,929	754	
	1st Quartile	595	30	3.0%
	Median Value	2,413	258	9.0%
	3rd Quartile	5,105	1,565	13.6%
ii	Number of observations	361	153	153
	Total costs	645,670	48,309	7.5%
	Average	1,789	316	
	1st Quartile	545	43	7.6%
	Median Value	1,157	141	16.3%
	3rd Quartile	2,480	361	23.9%
iii	Number of observations	168	68	68
	Total costs	96,963	4,081	4.2%
	Average	577	60	
	1st Quartile	190	7	1.2%
	Median Value	453	18	5.2%
	3rd Quartile	745	80	13.5%
iv	Number of observations	38	15	15
	Total costs	41,139	1,001	2.4%
	Average	1,083	67	
	1st Quartile	410	5	0.9%
	Median Value	855	24	3.8%
	3rd Quartile	1,540	87	11.9%
v	Number of observations	161	54	54
	Total costs	184,623	5,594	3.0%
	Average	1,147	104	
	1st Quartile	220	3	0.6%
	Median Value	739	23	3.8%
	3rd Quartile	1,430	102	11.5%

Review of research cost relativities 2009-10: summary

Number of HEIs who participated in the study 46

Key of Acronyms	
I-O	Institution-own funded Research
PGR	Postgraduate Research
RG&C	Externally Funded Research Grants and Contracts
HEIs	Higher Education Institutions

Table 3. FTEs per TRAC

HESA academic cost centre			I-O academic staff FTEs	PGR student FTEs	RG&C academic staff FTEs	Total academic staff FTEs (I-O and RG&C)	
	Subject group for comparative purposes only		Sector	Sector	Sector	Sector	
1	Total clinical medicine	i	30	30	30	30	
			Total FTEs	465.7	6,484.9	1,648.2	2,098.7
			Average	15.5	216.2	54.9	70.0
			1st Quartile	6.7	93.0	17.8	23.8
			Median Value	11.2	167.3	51.1	64.3
			3rd Quartile	19.1	312.5	73.0	102.5
2	Total clinical dentistry	i	17	16	16	16	
			Total FTEs	61.9	327.5	73.0	131.5
			Average	3.6	20.5	4.6	8.2
			1st Quartile	0.8	11.0	2.7	5.6
			Median Value	2.7	21.4	4.4	6.9
			3rd Quartile	4.8	28.7	5.3	10.6
3	Veterinary science	ii	8	8	8	8	
			Total FTEs	56.6	451.4	108.4	164.9
			Average	7.1	56.4	13.5	20.6
			1st Quartile	2.9	33.8	7.8	10.9
			Median Value	3.9	47.9	11.9	15.5
			3rd Quartile	5.7	78.1	19.0	24.7
4	Anatomy and physiology	ii	15	13	15	15	
			Total FTEs	36.5	510.3	89.7	126.1
			Average	2.4	39.3	6.0	8.4
			1st Quartile	1.3	17.6	2.1	3.4
			Median Value	1.9	35.5	4.7	6.0
			3rd Quartile	3.0	52.8	10.5	14.2
5	Nursing and paramedical studies	iii	20	19	19	20	
			Total FTEs	50.7	405.4	87.6	138.4
			Average	2.5	21.3	4.6	6.9
			1st Quartile	0.9	8.8	1.2	2.3
			Median Value	1.5	17.9	4.0	6.0
			3rd Quartile	3.2	27.9	5.4	10.3
6	Health and community studies	ii	21	21	22	22	
			Total FTEs	44.8	404.9	73.0	118.0
			Average	2.1	19.3	3.3	5.4
			1st Quartile	0.9	7.1	1.1	2.7
			Median Value	1.5	16.5	2.6	4.6
			3rd Quartile	2.7	28.8	5.0	7.8
7	Psychology and behavioural sciences	iii	34	35	34	34	
			Total FTEs	160.5	1,797.2	208.5	363.2
			Average	4.7	51.3	6.1	10.7
			1st Quartile	3.1	23.0	2.9	6.4
			Median Value	4.3	33.5	5.4	10.1
			3rd Quartile	6.1	64.7	8.0	14.2
8	Pharmacy and pharmacology	ii	15	15	15	15	
			Total FTEs	27.9	637.7	82.3	110.2
			Average	1.9	42.5	5.5	7.3
			1st Quartile	0.9	14.9	2.5	3.2
			Median Value	1.3	30.9	5.2	6.6
			3rd Quartile	2.2	73.6	7.5	9.0
10	Biosciences	ii	38	38	38	38	
			Total FTEs	228.0	5,235.4	719.6	922.4
			Average	6.0	137.8	18.9	24.3
			1st Quartile	2.5	73.8	6.3	9.5
			Median Value	4.0	110.5	15.7	21.9
			3rd Quartile	8.6	160.5	27.4	34.2
11	Chemistry	ii	30	29	30	30	
			Total FTEs	82.2	3,201.2	269.0	351.2
			Average	2.7	110.4	9.0	11.7
			1st Quartile	1.7	59.7	4.1	6.6
			Median Value	2.4	102.5	8.4	11.1
			3rd Quartile	3.6	140.3	12.1	15.1
12	Physics	ii	32	32	33	32	
			Total FTEs	127.2	2,700.2	402.1	516.7
			Average	4.0	84.4	12.2	16.1
			1st Quartile	1.1	40.3	5.8	8.5
			Median Value	2.9	59.6	7.7	11.5
			3rd Quartile	5.7	96.9	16.3	19.3
13	Agriculture and forestry	ii	3	3	3	3	
			Total FTEs				
			Average				
			1st Quartile				
			Median Value				
			3rd Quartile				
14	Earth, marine and environmental sciences	ii	24	24	24	24	
			Total FTEs	84.9	1,494.3	216.1	301.1
			Average	3.5	62.3	9.0	12.5
			1st Quartile	1.5	29.2	4.0	5.5
			Median Value	3.0	52.7	6.5	9.8
			3rd Quartile	4.6	85.9	11.4	16.1
16	General engineering	ii	17	16	16	17	
			Total FTEs	75.7	1,865.2	180.3	256.0
			Average	4.5	116.6	11.3	15.1
			1st Quartile	0.7	29.9	3.3	4.8
			Median Value	4.5	69.1	5.4	8.9
			3rd Quartile	5.1	178.8	16.1	16.4

HESA academic cost centre		Subject group for comparative purposes only	I-O academic staff FTEs	PGR student FTEs	RG&C academic staff FTEs	Total academic staff FTEs (I-O and RG&C)
			Sector	Sector	Sector	Sector
17	Chemical engineering	ii	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	11 12 907.9 75.7 36.3 72.8 110.0	12 63.5 5.3 3.0 4.4 7.1	12 79.4 6.6 4.2 5.8 8.2
18	Mineral, metallurgy and materials engineering	ii	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	10 11 967.7 88.0 54.2 99.8 105.0	11 81.2 7.4 3.6 7.3 9.4	11 103.8 9.4 5.0 8.4 11.1
19	Civil engineering	ii	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	20 19 977.3 51.4 18.5 43.4 62.0	19 84.9 4.5 2.3 3.7 6.8	20 122.7 6.1 3.6 5.0 8.7
20	Electrical, electronic and computer engineering	ii	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	27 25 2,119.0 84.8 50.0 68.1 102.3	27 27 226.2 8.4 3.6 6.8 11.6	27 310.4 11.5 6.8 10.2 14.8
21	Mechanical, aero and production engineering	ii	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	21 21 1,704.9 81.2 46.7 60.9 95.5	20 167.3 8.4 4.3 6.3 9.2	20 231.4 11.6 6.0 8.4 12.5
23	Architecture, built environment and planning	iii	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	20 20 960.2 48.0 17.5 29.0 53.4	20 127.2 6.4 3.0 6.7 8.8	21 239.3 11.4 5.5 10.4 15.1
24	Mathematics	ii	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	35 35 1,850.8 52.9 26.5 39.7 66.6	37 253.1 6.8 3.2 5.8 7.9	36 632.3 17.6 8.8 14.2 22.0
25	Information technology, systems sciences & computer software engineering	ii	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	39 39 1,998.3 51.2 25.9 38.1 63.4	38 232.8 6.1 3.3 4.5 7.9	39 405.8 10.4 5.9 8.9 12.9
26	Catering & hospitality management	iii	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	2 2 2 2 2 2	2 2 2 2 2 2	2 2 2 2 2 2
27	Business and management studies	iv	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	37 38 2,367.9 62.3 31.5 54.0 90.4	37 295.9 8.0 3.1 5.8 9.8	38 850.5 22.4 10.1 18.2 27.3
28	Geography	iii	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	27 29 1,039.7 35.9 21.5 29.5 47.8	29 155.9 5.4 3.7 5.2 6.4	29 278.1 9.6 7.8 8.9 13.6
29	Social studies	v	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	39 39 5,842.3 149.8 56.0 118.2 190.7	38 556.7 14.7 5.5 10.9 17.3	39 1,597.0 40.9 18.0 30.0 50.9
30	Media studies	v	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	18 17 269.3 15.8 7.9 16.8 24.1	18 30.5 1.7 0.8 0.9 1.8	19 86.3 4.5 2.1 3.2 7.0
31	Humanities	v	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	38 37 6,011.6 162.5 59.5 122.6 173.9	37 335.2 9.1 2.8 9.4 13.7	38 1,326.4 34.9 17.9 31.4 47.0
33	Design and creative arts	iii	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	31 32 1,019.9 31.9 15.7 25.3 41.9	30 63.1 2.1 0.6 1.3 3.2	31 228.3 7.4 3.9 5.8 8.4
34	Education	v	Number of HEIs Total FTEs Average 1st Quartile Median Value 3rd Quartile	32 32 2,821.7 88.2 34.4 70.4 96.1	32 168.5 5.3 1.8 4.3 7.0	32 349.8 10.9 5.3 7.3 12.1

HESA academic cost centre	Subject group for comparative purposes only		I-O academic staff FTEs	PGR student FTEs	RG&C academic staff FTEs	Total academic staff FTEs (I-O and RG&C)
			Sector	Sector	Sector	Sector
35	Modern languages	v	30	28	28	29
		Number of HEIs				
		Total FTEs	313.0	999.7	84.3	393.4
		Average	10.4	35.7	3.0	13.6
		1st Quartile	3.9	6.8	0.9	4.6
		Median Value	8.8	21.9	1.7	11.2
		3rd Quartile	11.8	40.8	4.4	15.9
37	Archaeology	iii	20	19	20	20
		Number of HEIs				
		Total FTEs	69.0	575.2	45.4	114.4
		Average	3.5	30.3	2.3	5.7
		1st Quartile	1.5	16.6	1.3	3.2
		Median Value	3.6	23.9	1.8	5.5
		3rd Quartile	5.3	39.0	3.2	7.7
38	Sports science and leisure studies	iii	13	12	13	13
		Number of HEIs				
		Total FTEs	27.5	261.6	36.1	63.6
		Average	2.1	21.8	2.8	4.9
		1st Quartile	0.5	5.3	0.7	1.6
		Median Value	0.9	10.1	2.2	3.9
		3rd Quartile	3.4	39.7	4.5	5.7
41	Continuing education	v	9	8	8	10
		Number of HEIs				
		Total FTEs	19.1	91.0	13.1	32.2
		Average	2.1	11.4	1.6	3.2
		1st Quartile	1.0	1.3	0.4	0.6
		Median Value	1.7	7.0	0.6	2.1
		3rd Quartile	3.4	12.2	3.3	5.9
Total - all cost centres			45	45	45	45
		Number of HEIs				
		Total FTEs	5,979.5	58,751.0	7,258.3	13,237.9
		Average	132.9	1,305.6	161.3	294.2
		1st Quartile	63.6	591.1	71.2	135.5
		Median Value	129.1	1,052.4	123.8	269.8
		3rd Quartile	175.9	1,592.0	243.0	407.0

Table 4. FTEs per TRAC

Subject group for comparative purposes only		I-O academic staff FTEs	PGR student FTEs	RG&C academic staff FTEs	Total academic staff FTEs (I-O and RG&C)
		Sector	Sector	Sector	Sector
i	Number of observations	47	46	46	46
	Total FTEs	527.5	6,812.4	1,721.2	2,230.2
	Average	11.2	148.1	37.4	48.5
	1st Quartile	2.6	24.0	4.4	6.9
	Median Value	7.4	91.2	16.7	23.4
	3rd Quartile	13.2	243.4	57.9	75.3
ii	Number of observations	366	361	368	369
	Total FTEs	1,546.2	27,183.7	3,285.7	4,791.7
	Average	4.2	75.3	8.9	13.0
	1st Quartile	1.3	28.1	3.3	5.3
	Median Value	2.8	53.3	6.2	9.5
	3rd Quartile	5.1	99.8	11.1	16.0
iii	Number of observations	167	168	167	170
	Total FTEs	707.5	6,077.1	728.3	1,431.6
	Average	4.2	36.2	4.4	8.4
	1st Quartile	1.8	16.3	1.5	4.2
	Median Value	3.7	26.7	3.4	7.2
	3rd Quartile	5.7	45.8	6.0	11.7
iv	Number of observations	37	38	37	38
	Total FTEs	528.1	2,367.9	295.9	850.5
	Average	14.3	62.3	8.0	22.4
	1st Quartile	8.2	31.5	3.1	10.1
	Median Value	10.7	54.0	5.8	18.2
	3rd Quartile	17.8	90.4	9.8	27.3
v	Number of observations	166	161	161	167
	Total FTEs	2,615.4	16,035.7	1,188.3	3,785.2
	Average	15.8	99.6	7.4	22.7
	1st Quartile	3.2	19.8	1.5	5.5
	Median Value	8.8	58.0	4.3	12.6
	3rd Quartile	22.0	132.9	10.0	31.3

Review of research cost relativities 2009-10: summary

Number of HEIs who participated in the study 48

Key of Acronyms	
I-O	Institution-own funded Research
PGR	Postgraduate Research
RG&C	Externally Funded Research Grants and Contracts
HEIs	Higher Education Institutions

Table 5. Research cost per FTE (£s)

Note: RG&C is calculated using the net RG&C costs (i.e. without scholarships etc)

HESA academic cost centre			I-O cost per academic staff FTE	PGR cost per student FTE	RG&C cost per academic staff FTE	I-O and RG&C cost per academic staff FTE	Total research costs per academic staff FTE
Subject group for comparative purposes only			Sector	Sector	Sector	Sector	Sector
1	Total clinical medicine	i	30	30	30	30	30
	Average		362,236	26,018	1,035,525	887,026	963,724
	1st Quartile		265,314	16,008	631,569	590,636	673,731
	Median Value		360,636	25,347	882,118	773,015	833,741
	3rd Quartile		535,455	35,919	1,329,872	1,141,142	1,216,621
2	Total clinical dentistry	i	17	16	16	16	17
	Average		235,830	36,650	505,456	361,319	470,788
	1st Quartile		224,564	20,063	392,683	291,321	411,597
	Median Value		271,033	24,077	508,368	375,371	493,174
	3rd Quartile		301,761	47,325	616,537	461,755	605,495
3	Veterinary science	ii	8	8	8	8	8
	Average		276,238	33,322	735,577	577,980	669,160
	1st Quartile		229,745	23,272	476,091	371,567	458,114
	Median Value		328,526	29,444	558,219	511,223	582,488
	3rd Quartile		393,383	42,007	1,048,169	812,035	914,474
4	Anatomy and physiology	ii	15	13	15	15	15
	Average		330,587	24,314	1,023,447	823,060	924,348
	1st Quartile		215,099	16,526	408,779	422,295	531,013
	Median Value		298,643	19,644	809,841	712,154	826,562
	3rd Quartile		470,731	32,694	1,307,558	1,009,231	1,104,375
5	Nursing and paramedical studies	iii	20	19	19	20	20
	Average		200,970	21,686	417,293	337,973	399,612
	1st Quartile		139,342	9,114	316,980	211,276	242,893
	Median Value		214,286	20,657	373,033	324,757	398,465
	3rd Quartile		287,040	31,745	538,457	427,699	540,972
6	Health and community studies	ii	21	21	22	22	22
	Average		199,822	15,334	508,716	391,665	446,168
	1st Quartile		129,992	10,915	245,668	195,827	231,062
	Median Value		172,619	15,436	393,857	346,831	402,163
	3rd Quartile		270,020	21,848	629,055	526,576	538,961
7	Psychology and behavioural sciences	iii	34	35	34	34	35
	Average		196,880	17,296	442,108	336,639	432,629
	1st Quartile		134,286	13,491	260,737	196,092	259,382
	Median Value		197,613	18,725	344,302	289,634	368,433
	3rd Quartile		250,000	23,907	491,677	366,968	482,940
8	Pharmacy and pharmacology	ii	15	15	15	15	15
	Average		360,763	24,755	801,329	689,891	833,184
	1st Quartile		151,000	20,752	653,447	576,217	727,374
	Median Value		411,557	27,099	814,286	713,966	808,286
	3rd Quartile		451,173	36,414	1,059,239	821,037	967,679
10	Biosciences	ii	38	38	38	38	39
	Average		366,485	24,268	1,020,535	824,881	1,000,059
	1st Quartile		233,074	17,037	577,760	498,835	606,707
	Median Value		363,135	22,995	920,806	687,290	807,051
	3rd Quartile		525,511	32,606	1,341,295	972,868	1,195,525
11	Chemistry	ii	30	29	30	30	30
	Average		445,708	24,117	832,728	742,100	961,918
	1st Quartile		229,252	16,235	561,587	528,772	652,623
	Median Value		388,974	22,072	733,635	634,912	923,179
	3rd Quartile		651,579	31,842	1,013,029	859,870	1,085,716
12	Physics	ii	32	32	33	32	32
	Average		306,646	23,418	778,171	642,482	759,842
	1st Quartile		187,100	17,648	517,144	408,906	536,814
	Median Value		270,818	23,815	608,719	577,050	661,581
	3rd Quartile		450,996	31,604	819,265	659,592	834,484
13	Agriculture and forestry	ii	3	3	3	3	3
	Average						
	1st Quartile						
	Median Value						
	3rd Quartile						
14	Earth, marine and environmental sciences	ii	24	24	24	24	24
	Average		300,859	23,910	642,903	546,394	665,063
	1st Quartile		200,851	14,140	426,087	370,704	452,619
	Median Value		271,305	22,630	604,470	510,753	641,546
	3rd Quartile		366,262	30,055	905,530	733,243	917,547
16	General engineering	ii	17	16	16	17	17
	Average		372,271	22,620	767,595	650,661	815,456
	1st Quartile		226,389	18,054	582,222	372,345	489,159
	Median Value		295,246	19,823	671,529	520,503	662,135
	3rd Quartile		396,425	24,054	1,033,104	756,108	858,592

HESA academic cost centre			I-O cost per academic staff FTE	PGR cost per student FTE	RG&C cost per academic staff FTE	I-O and RG&C cost per academic staff FTE	Total research costs per academic staff FTE	
Subject group for comparative purposes only			Sector	Sector	Sector	Sector	Sector	
17	Chemical engineering	ii	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	11 383,161 194,971 396,425 466,720	12 26,195 19,898 24,420 30,590	12 812,634 537,274 712,354 1,080,966	12 729,945 521,565 652,577 900,294	12 1,029,345 768,480 981,704 1,240,624
18	Mineral, metallurgy and materials engineering	ii	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	10 413,604 342,670 467,843 578,915	11 28,478 15,827 22,892 35,828	11 950,579 697,001 1,053,034 1,170,028	11 847,685 696,250 914,343 976,185	11 1,113,180 887,118 1,069,721 1,444,527
19	Civil engineering	ii	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	20 307,000 168,155 273,425 388,318	19 22,470 14,279 20,819 26,930	19 642,271 407,414 590,026 848,674	20 539,077 378,982 484,139 618,381	20 716,665 501,212 663,417 803,339
20	Electrical, electronic and computer engineering	ii	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	27 301,473 174,873 269,854 398,717	25 24,472 16,844 20,952 28,573	27 625,831 382,988 607,895 763,396	27 537,903 351,180 497,638 619,319	27 704,983 501,297 614,038 804,634
21	Mechanical, aero and production engineering	ii	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	21 339,289 238,938 337,795 514,851	21 24,588 16,409 21,298 27,762	20 639,892 505,566 671,694 811,925	20 551,791 430,364 535,173 693,959	21 764,950 581,605 708,557 873,809
23	Architecture, built environment and planning	iii	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	20 193,437 148,818 180,531 221,209	20 13,446 11,118 13,989 18,425	20 356,860 217,178 282,114 401,656	21 280,298 190,220 233,524 307,064	21 334,705 239,384 317,299 367,986
24	Mathematics	ii	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	35 158,465 118,171 155,019 224,286	35 20,218 13,849 19,034 24,791	37 334,951 216,870 293,448 429,586	36 228,352 160,428 203,088 286,799	36 289,917 215,588 287,410 361,960
25	Information technology, systems sciences & computer software engineering	ii	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	39 234,465 140,056 211,791 303,735	39 20,437 13,156 17,846 22,145	38 519,560 322,302 438,676 627,523	39 398,007 268,059 346,194 445,490	39 498,652 307,793 414,289 523,513
26	Catering & hospitality management	iii	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	2	2	2	2	2
27	Business and management studies	iv	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	37 186,267 137,713 173,882 222,308	38 17,374 11,932 16,802 23,866	37 294,310 186,217 241,039 333,613	38 237,915 159,211 218,836 252,628	37 287,458 215,143 254,949 305,196
28	Geography	iii	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	27 203,336 169,712 200,000 257,734	29 18,058 14,108 18,245 22,726	29 411,953 261,289 362,551 513,161	29 322,654 227,451 287,437 381,163	28 381,653 290,400 371,516 455,901
29	Social studies	v	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	39 162,450 125,694 159,221 191,311	39 12,952 8,699 14,300 17,626	38 309,559 197,498 254,242 416,088	39 216,713 160,827 194,747 267,035	40 268,182 192,570 248,412 322,917
30	Media studies	v	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	18 150,785 128,718 143,510 160,731	17 9,604 6,667 9,298 13,713	18 167,779 143,999 202,327 306,306	19 160,831 128,718 164,090 234,388	19 191,568 167,901 193,351 266,850
31	Humanities	v	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	38 139,214 121,018 136,226 173,161	37 9,899 7,945 10,467 13,394	37 268,012 181,218 220,717 345,469	38 175,169 139,544 166,227 188,562	38 222,164 175,374 212,635 247,335
33	Design and creative arts	iii	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	31 166,273 124,178 174,423 205,243	32 11,997 8,487 10,785 15,672	30 244,017 162,500 260,092 388,223	31 190,646 145,284 181,558 227,783	32 245,829 187,212 246,129 304,450
34	Education	v	Number of HEIs Average 1st Quartile Median Value 3rd Quartile	32 183,084 137,131 195,522 247,707	32 11,732 7,622 10,320 15,317	32 377,095 191,411 317,015 346,156	32 277,883 174,494 222,540 345,844	32 377,574 245,533 329,474 489,798

HESA academic cost centre		Subject group for comparative purposes only	I-O cost per academic staff FTE	PGR cost per student FTE	RG&C cost per academic staff FTE	I-O and RG&C cost per academic staff FTE	Total research costs per academic staff FTE
			Sector	Sector	Sector	Sector	Sector
35	Modern languages	v	30	28	28	29	30
		Number of HEIs					
		Average	134,424	12,912	224,153	152,945	186,937
		1st Quartile	111,775	9,163	144,647	134,907	157,062
		Median Value	134,914	15,770	189,038	149,721	179,029
		3rd Quartile	155,503	19,818	232,203	161,460	211,782
37	Archaeology	iii	20	19	20	20	20
		Number of HEIs					
		Average	179,884	11,781	526,257	317,237	383,496
		1st Quartile	135,227	9,451	252,798	170,244	232,769
		Median Value	177,665	10,649	380,331	256,489	331,989
		3rd Quartile	238,408	12,901	786,966	383,215	469,424
38	Sports science and leisure studies	iii	13	12	13	13	13
		Number of HEIs					
		Average	208,333	22,394	308,127	265,008	374,956
		1st Quartile	127,826	9,739	188,784	188,612	275,643
		Median Value	204,211	16,939	296,476	279,582	410,926
		3rd Quartile	227,857	23,693	376,938	383,648	472,585
41	Continuing education	v	9	8	8	10	10
		Number of HEIs					
		Average	191,604	9,243	276,918	226,417	252,161
		1st Quartile	113,284	4,973	98,058	113,284	164,157
		Median Value	197,059	9,330	259,677	251,309	293,369
		3rd Quartile	387,452	17,846	781,225	1,072,248	1,072,248
Total - all cost centres			45	45	45	45	45
		Number of HEIs					
		Average	214,450	19,750	712,439	487,498	575,486
		1st Quartile	161,344	15,542	442,054	314,731	410,359
		Median Value	212,906	17,678	570,100	402,623	476,084
		3rd Quartile	262,866	24,085	942,855	463,072	581,907

Table 6. Research cost per FTE (£s)

Subject group for comparative purposes only		I-O cost per academic staff FTE	PGR cost per student FTE	RG&C cost per academic staff FTE	I-O and RG&C cost per academic staff FTE	Total research costs per academic staff FTE
		Sector	Sector	Sector	Sector	Sector
i	Number of HEIs	30	30	30	30	30
	Average	347,411	26,529	1,013,030	856,024	933,950
	1st Quartile	266,157	16,008	621,275	590,636	659,279
	Median Value	350,923	26,340	862,131	725,248	791,776
	3rd Quartile	479,535	34,763	1,283,040	1,078,540	1,150,061
ii	Number of HEIs	42	43	43	42	43
	Average	282,390	23,752	753,137	591,407	736,396
	1st Quartile	201,904	15,868	497,290	413,807	516,894
	Median Value	255,230	21,223	611,885	513,486	668,756
	3rd Quartile	359,292	28,825	975,328	672,517	854,291
iii	Number of HEIs	39	39	39	39	39
	Average	189,250	15,955	397,346	295,757	366,237
	1st Quartile	147,843	12,624	236,690	226,146	274,450
	Median Value	194,112	17,017	360,114	286,181	357,014
	3rd Quartile	230,575	21,462	471,027	329,879	405,296
iv	Number of HEIs	37	38	37	38	37
	Average	186,267	17,374	294,310	237,915	287,458
	1st Quartile	137,713	11,932	186,217	159,211	215,143
	Median Value	173,882	16,802	241,039	218,836	254,949
	3rd Quartile	222,308	23,866	333,613	252,628	305,196
v	Number of HEIs	42	42	42	42	42
	Average	151,770	11,513	297,357	199,988	251,909
	1st Quartile	122,974	9,247	216,583	165,106	209,798
	Median Value	147,976	12,461	266,731	184,007	236,032
	3rd Quartile	184,829	15,250	372,736	217,347	276,471

Review of research cost relativities 2009-10: summary

Number of HEIs who participated in the study 46

Key of Acronyms	
I-O	Institution-own funded Research
PGR	Postgraduate Research
RG&C	Externally Funded Research Grants and Contracts
HEIs	Higher Education Institutions

Table 7. Cost relativities

Note: RG&C is calculated using the net RG&C costs (i.e. without scholarships etc)

HESA academic cost centre			I-O cost relativity	PGR cost relativity	RG&C cost relativity	I-O and RG&C cost relativity	Total research cost relativity
Subject group for comparative purposes only			Sector	Sector	Sector	Sector	Sector
1	Total clinical medicine	i	29	28	28	28	28
		Number of HEIs					
		Average	2.39	2.26	3.48	4.44	3.83
		1st Quartile	1.97	1.58	2.28	3.18	2.78
		Median Value	2.45	2.12	3.28	3.96	3.36
		3rd Quartile	3.08	2.79	4.26	5.01	4.30
2	Total clinical dentistry	i	17	16	16	16	17
		Number of HEIs					
		Average	1.55	3.18	1.70	1.81	1.87
		1st Quartile	1.26	1.49	1.47	1.50	1.62
		Median Value	1.52	1.98	1.79	1.93	1.99
		3rd Quartile	2.20	3.01	1.95	2.21	2.37
3	Veterinary science	ii	7	7	7	7	7
		Number of HEIs					
		Average	1.82	2.89	2.47	2.89	2.66
		1st Quartile	1.59	1.80	1.34	2.45	2.54
		Median Value	2.25	2.38	2.38	2.94	3.04
		3rd Quartile	2.67	2.59	3.06	4.18	3.85
4	Anatomy and physiology	ii	15	13	15	15	15
		Number of HEIs					
		Average	2.18	2.11	3.44	4.12	3.67
		1st Quartile	1.45	1.58	1.30	3.03	2.63
		Median Value	2.25	1.82	2.18	3.40	3.35
		3rd Quartile	3.71	2.35	3.70	4.70	4.37
5	Nursing and paramedical studies	iii	20	19	19	20	20
		Number of HEIs					
		Average	1.32	1.88	1.40	1.69	1.59
		1st Quartile	0.90	1.20	0.90	1.29	1.21
		Median Value	1.35	1.51	1.53	1.47	1.56
		3rd Quartile	1.95	2.24	2.10	2.30	2.19
6	Health and community studies	ii	21	21	22	22	22
		Number of HEIs					
		Average	1.32	1.33	1.71	1.96	1.77
		1st Quartile	0.89	0.92	0.80	1.07	1.09
		Median Value	1.30	1.25	1.17	1.62	1.41
		3rd Quartile	1.84	1.64	2.34	2.38	2.20
7	Psychology and behavioural sciences	iii	34	35	34	34	35
		Number of HEIs					
		Average	1.30	1.50	1.49	1.68	1.72
		1st Quartile	1.07	1.14	1.00	1.24	1.19
		Median Value	1.24	1.44	1.37	1.51	1.51
		3rd Quartile	1.75	1.84	1.66	1.87	2.02
8	Pharmacy and pharmacology	ii	15	15	15	15	15
		Number of HEIs					
		Average	2.38	2.15	2.69	3.45	3.31
		1st Quartile	1.23	2.01	1.96	3.36	3.15
		Median Value	2.48	2.39	2.73	3.47	3.34
		3rd Quartile	3.07	2.70	3.38	3.93	3.88
10	Biosciences	ii	38	37	37	38	38
		Number of HEIs					
		Average	2.41	2.11	3.43	4.12	3.97
		1st Quartile	1.66	1.45	2.21	2.73	2.52
		Median Value	2.26	2.11	2.87	3.45	3.51
		3rd Quartile	3.52	2.70	3.84	5.25	4.79
11	Chemistry	ii	30	29	30	30	30
		Number of HEIs					
		Average	2.94	2.09	2.80	3.71	3.82
		1st Quartile	1.50	1.52	2.02	2.74	2.85
		Median Value	2.45	1.85	2.55	3.57	3.67
		3rd Quartile	3.71	2.24	3.07	4.24	4.46
12	Physics	ii	32	32	33	32	32
		Number of HEIs					
		Average	2.02	2.03	2.62	3.21	3.02
		1st Quartile	1.38	1.54	1.53	2.30	2.28
		Median Value	1.99	1.95	2.31	2.77	2.60
		3rd Quartile	2.54	2.40	2.74	3.62	3.52
13	Agriculture and forestry	ii	3	3	3	3	3
		Number of HEIs					
		Average					
		1st Quartile					
		Median Value					
		3rd Quartile					
14	Earth, marine and environmental sciences	ii	24	24	24	24	24
		Number of HEIs					
		Average	1.98	2.08	2.16	2.73	2.64
		1st Quartile	1.28	1.39	1.54	1.93	1.99
		Median Value	1.88	1.77	1.93	2.52	2.55
		3rd Quartile	2.41	2.31	2.94	3.60	3.47
16	General engineering	ii	17	16	16	17	17
		Number of HEIs					
		Average	2.45	1.96	2.58	3.25	3.24
		1st Quartile	1.52	1.33	2.00	2.47	2.54
		Median Value	1.86	2.02	2.72	3.01	2.89
		3rd Quartile	2.70	2.87	3.01	3.74	3.63

HESA academic cost centre			I-O cost relativity	PGR cost relativity	RG&C cost relativity	I-O and RG&C cost relativity	Total research cost relativity	
Subject group for comparative purposes only			Sector	Sector	Sector	Sector	Sector	
17	Chemical engineering	ii	Number of HEIs	11	12	12	12	12
			Average	2.52	2.28	2.73	3.65	4.09
			1st Quartile	1.40	1.60	1.81	2.66	3.07
			Median Value	1.98	1.93	2.66	3.16	3.68
			3rd Quartile	2.62	2.27	3.38	4.21	4.53
18	Mineral, metallurgy and materials engineering	ii	Number of HEIs	10	11	11	11	11
			Average	2.73	2.47	3.20	4.24	4.42
			1st Quartile	1.58	1.36	2.33	3.41	3.50
			Median Value	2.84	2.18	2.97	4.49	4.60
			3rd Quartile	3.64	3.71	4.06	5.05	5.27
19	Civil engineering	ii	Number of HEIs	20	19	19	20	20
			Average	2.02	1.95	2.16	2.70	2.84
			1st Quartile	1.00	1.34	1.48	1.71	1.74
			Median Value	1.79	1.60	1.98	2.34	2.52
			3rd Quartile	2.51	1.88	2.44	3.11	3.39
20	Electrical, electronic and computer engineering	ii	Number of HEIs	27	25	27	27	27
			Average	1.99	2.13	2.10	2.69	2.80
			1st Quartile	1.14	1.39	1.35	1.72	1.96
			Median Value	1.83	1.62	1.94	2.49	2.60
			3rd Quartile	2.37	2.15	2.56	2.95	3.28
21	Mechanical, aero and production engineering	ii	Number of HEIs	21	21	20	20	21
			Average	2.24	2.14	2.15	2.76	3.04
			1st Quartile	1.49	1.36	1.52	2.07	2.37
			Median Value	1.92	1.76	1.88	2.55	2.90
			3rd Quartile	2.75	2.06	2.54	3.22	3.52
23	Architecture, built environment and planning	iii	Number of HEIs	20	20	20	21	21
			Average	1.27	1.17	1.20	1.40	1.33
			1st Quartile	0.91	1.02	0.86	0.99	0.99
			Median Value	1.19	1.35	1.03	1.20	1.26
			3rd Quartile	1.35	1.55	1.38	1.71	1.61
24	Mathematics	ii	Number of HEIs	35	35	37	36	36
			Average	1.04	1.76	1.13	1.14	1.15
			1st Quartile	0.85	1.17	0.84	0.92	0.94
			Median Value	0.97	1.60	1.10	1.12	1.17
			3rd Quartile	1.24	2.07	1.34	1.39	1.45
25	Information technology, systems sciences & computer software engineering	ii	Number of HEIs	39	39	38	39	39
			Average	1.54	1.78	1.75	1.99	1.98
			1st Quartile	1.11	1.18	1.18	1.42	1.39
			Median Value	1.37	1.45	1.65	1.86	1.85
			3rd Quartile	1.78	1.79	2.00	2.25	2.35
26	Catering & hospitality management	iii	Number of HEIs	2	2	2	2	2
			Average					
			1st Quartile					
			Median Value					
			3rd Quartile					
27	Business and management studies	iv	Number of HEIs	36	38	36	37	36
			Average	1.23	1.51	0.99	1.19	1.14
			1st Quartile	0.98	1.07	0.72	0.95	0.93
			Median Value	1.14	1.31	1.07	1.10	1.10
			3rd Quartile	1.31	1.81	1.24	1.27	1.28
28	Geography	iii	Number of HEIs	27	29	29	29	28
			Average	1.34	1.57	1.39	1.61	1.52
			1st Quartile	1.03	1.26	0.92	1.16	1.20
			Median Value	1.38	1.38	1.21	1.58	1.44
			3rd Quartile	1.69	1.87	1.62	2.07	1.88
29	Social studies	v	Number of HEIs	39	39	38	39	40
			Average	1.07	1.12	1.04	1.08	1.06
			1st Quartile	0.97	0.99	0.88	0.98	0.96
			Median Value	1.06	1.08	1.08	1.07	1.04
			3rd Quartile	1.12	1.29	1.20	1.17	1.17
30	Media studies	v	Number of HEIs	18	17	18	19	19
			Average	0.99	0.83	0.56	0.80	0.76
			1st Quartile	0.83	0.67	0.45	0.63	0.65
			Median Value	0.97	0.80	0.68	0.97	0.88
			3rd Quartile	1.09	1.02	0.83	1.07	1.14
31	Humanities	v	Number of HEIs	38	37	37	38	38
			Average	0.92	0.86	0.90	0.88	0.88
			1st Quartile	0.87	0.80	0.77	0.77	0.75
			Median Value	0.93	0.90	0.91	0.86	0.88
			3rd Quartile	1.00	0.99	1.12	0.99	1.03
33	Design and creative arts	iii	Number of HEIs	31	32	30	31	32
			Average	1.10	1.04	0.82	0.95	0.98
			1st Quartile	0.95	0.73	0.62	0.78	0.81
			Median Value	1.08	0.98	0.85	0.97	1.01
			3rd Quartile	1.28	1.17	1.16	1.13	1.24
34	Education	v	Number of HEIs	32	32	32	32	32
			Average	1.21	1.02	1.27	1.39	1.50
			1st Quartile	1.05	0.74	0.73	1.02	1.09
			Median Value	1.27	0.93	1.00	1.24	1.37
			3rd Quartile	1.64	1.15	1.41	1.62	1.74

HESA academic cost centre			Subject group for comparative purposes only	I-O cost	PGR cost	RG&C cost	I-O and	Total
				relativity	relativity	relativity	RG&C cost	research cost
				Sector	Sector	Sector	Sector	Sector
35	Modern languages	v	Number of HEIs	30	28	28	29	30
			Average	0.89	1.12	0.75	0.76	0.74
			1st Quartile	0.80	1.01	0.58	0.71	0.68
			Median Value	0.91	1.18	0.75	0.84	0.76
			3rd Quartile	1.06	1.67	0.85	0.89	0.91
37	Archaeology	iii	Number of HEIs	20	19	20	20	20
			Average	1.19	1.02	1.77	1.59	1.52
			1st Quartile	1.00	0.72	0.98	1.07	1.04
			Median Value	1.14	1.06	1.26	1.26	1.18
			3rd Quartile	1.57	1.27	1.60	1.81	1.72
38	Sports science and leisure studies	iii	Number of HEIs	13	12	13	13	13
			Average	1.37	1.95	1.04	1.33	1.49
			1st Quartile	1.03	0.84	0.70	1.35	1.15
			Median Value	1.28	1.44	1.14	1.41	1.46
			3rd Quartile	1.92	2.15	1.35	1.63	1.89
41	Continuing education	v	Number of HEIs	9	8	8	10	10
			Average	1.26	0.80	0.93	1.13	1.00
			1st Quartile	0.97	0.48	0.36	0.65	0.59
			Median Value	1.08	1.03	1.30	1.37	1.31
			3rd Quartile	3.28	1.48	2.26	3.18	2.84
Total - all cost centres			Number of HEIs	42	42	42	42	42
			Average	1.41	1.72	2.40	2.44	2.28
			1st Quartile	1.13	1.32	1.49	1.62	1.52
			Median Value	1.36	1.47	1.99	2.18	2.07
			3rd Quartile	1.55	1.74	2.62	2.62	2.45

Table 8. Cost relativities

Subject group for comparative purposes only		I-O cost	PGR cost	RG&C cost	I-O and	Total
		relativity	relativity	relativity	RG&C cost	research cost
			Sector	Sector	Sector	Sector
i	Number of HEIs	29	28	28	28	28
	Average	2.29	2.30	3.41	4.28	3.71
	1st Quartile	1.97	1.61	2.28	3.12	2.76
	Median Value	2.28	2.12	3.19	3.83	3.34
	3rd Quartile	2.58	2.70	4.05	4.75	4.21
ii	Number of HEIs	41	41	41	41	41
	Average	1.86	2.06	2.53	2.96	2.92
	1st Quartile	1.18	1.41	1.81	2.33	2.35
	Median Value	1.79	1.76	2.33	2.75	2.86
	3rd Quartile	2.36	2.26	2.68	3.41	3.31
iii	Number of HEIs	39	39	39	39	39
	Average	1.25	1.39	1.34	1.48	1.45
	1st Quartile	1.04	1.06	1.05	1.19	1.17
	Median Value	1.30	1.37	1.47	1.54	1.54
	3rd Quartile	1.49	1.73	1.60	1.84	1.78
iv	Number of HEIs	36	38	36	37	36
	Average	1.23	1.51	0.99	1.19	1.14
	1st Quartile	0.98	1.07	0.72	0.95	0.93
	Median Value	1.14	1.31	1.07	1.10	1.10
	3rd Quartile	1.31	1.81	1.24	1.27	1.28
v	Number of HEIs	42	42	42	42	42
	Average	1.00	1.00	1.00	1.00	1.00
	1st Quartile	1.00	1.00	1.00	1.00	1.00
	Median Value	1.00	1.00	1.00	1.00	1.00
	3rd Quartile	1.00	1.00	1.00	1.00	1.00

Review of research cost relativities 2009-10: summary

Number of HEIs who participated in the study

Key of Acronyms	
I-O	Institution-own funded Research
PGR	Postgraduate Research
RG&C	Externally Funded Research Grants and Contracts
HEIs	Higher Education Institutions

Table 9. Research assistants per TRAC (FTEs)

HESA academic cost centre		Subject group for comparative purposes only	Sector	I-O	RG&C	Total	
				research assistants per TRAC	research assistants per TRAC	research assistants per TRAC	
1	Total clinical medicine	i		17	31	31	
				Total research assistants	459.9	9,838.3	10,298.1
				Average	27.1	317.4	332.2
				1st Quartile	6.6	69.5	90.6
				Median Value	13.8	191.2	200.6
				3rd Quartile	37.9	369.0	372.7
2	Total clinical dentistry	i		9	16	16	
				Total research assistants	17.8	157.3	175.1
				Average	2.0	9.8	10.9
				1st Quartile	0.4	6.4	7.4
				Median Value	0.5	8.5	8.7
				3rd Quartile	1.0	12.4	12.4
3	Veterinary science	ii		5	8	8	
				Total research assistants	21.7	383.7	405.4
				Average	4.3	48.0	50.7
				1st Quartile	2.0	22.3	24.5
				Median Value	2.4	39.0	45.4
				3rd Quartile	4.4	58.2	59.4
4	Anatomy and physiology	ii		5	13	13	
				Total research assistants	32.4	524.6	557.0
				Average	6.5	40.4	42.8
				1st Quartile	3.3	12.3	12.5
				Median Value	5.9	14.7	18.9
				3rd Quartile	6.5	74.7	74.7
5	Nursing and paramedical studies	iii		11	18	18	
				Total research assistants	32.2	147.0	179.1
				Average	2.9	8.2	10.0
				1st Quartile	0.3	1.3	2.4
				Median Value	2.2	3.4	4.5
				3rd Quartile	3.4	11.4	15.5
6	Health and community studies	ii		10	20	20	
				Total research assistants	23.6	150.6	174.2
				Average	2.4	7.5	8.7
				1st Quartile	0.9	1.7	1.9
				Median Value	1.2	3.0	3.8
				3rd Quartile	3.6	6.0	9.8
7	Psychology and behavioural sciences	iii		17	33	33	
				Total research assistants	54.0	554.3	608.3
				Average	3.2	16.8	18.4
				1st Quartile	1.3	3.8	6.7
				Median Value	2.6	8.8	9.8
				3rd Quartile	4.2	22.0	24.4
8	Pharmacy and pharmacology	ii		6	14	14	
				Total research assistants	26.0	334.4	360.4
				Average	4.3	23.9	25.7
				1st Quartile	1.8	6.7	8.4
				Median Value	3.8	18.5	19.9
				3rd Quartile	5.0	33.0	42.3
10	Biosciences	ii		22	37	37	
				Total research assistants	224.2	4,343.0	4,567.2
				Average	10.2	117.4	123.4
				1st Quartile	3.6	29.0	29.0
				Median Value	7.6	77.5	87.4
				3rd Quartile	17.2	141.4	160.1
11	Chemistry	ii		15	29	29	
				Total research assistants	73.9	1,240.5	1,314.4
				Average	4.9	42.8	45.3
				1st Quartile	2.3	12.1	14.6
				Median Value	3.2	34.5	36.8
				3rd Quartile	5.1	60.8	63.4
12	Physics	ii		15	32	32	
				Total research assistants	59.9	1,767.4	1,827.3
				Average	4.0	55.2	57.1
				1st Quartile	1.1	14.9	18.3
				Median Value	2.0	39.8	42.9
				3rd Quartile	7.2	68.2	68.8
13	Agriculture and forestry	ii		3	3	3	
				Total research assistants			
				Average			
				1st Quartile			
				Median Value			
				3rd Quartile			
14	Earth, marine and environmental sciences	ii		11	24	24	
				Total research assistants	50.4	691.7	742.1
				Average	4.6	28.8	30.9
				1st Quartile	2.0	7.0	8.0
				Median Value	2.5	21.9	25.1
				3rd Quartile	6.5	51.3	52.4
16	General engineering	ii		11	17	17	
				Total research assistants	68.9	849.6	918.5
				Average	6.3	50.0	54.0
				1st Quartile	1.0	11.9	14.8
				Median Value	3.5	21.9	24.1
				3rd Quartile	5.1	63.8	66.6

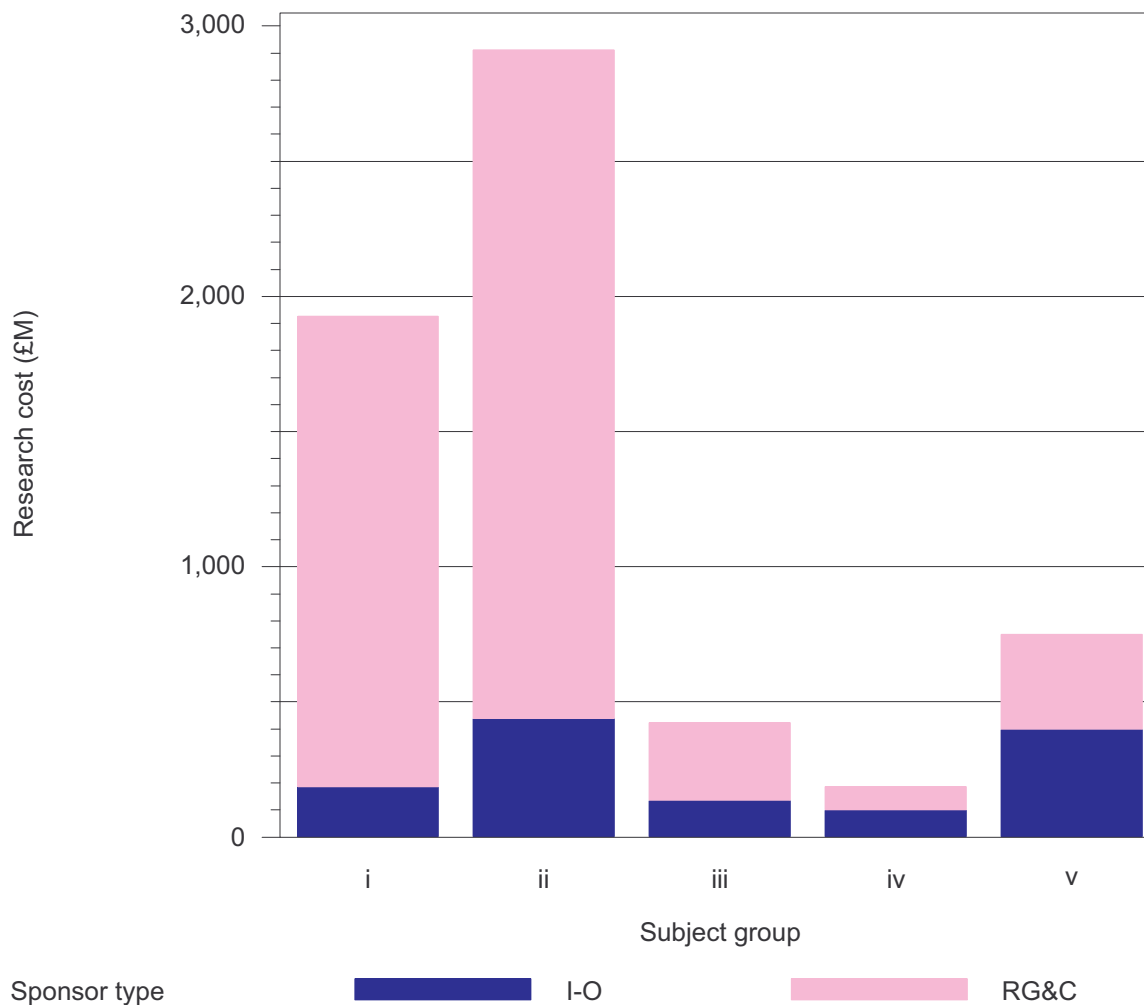
HESA academic cost centre		Subject group for comparative purposes only	I-O research assistants per TRAC	RG&C research assistants per TRAC	Total research assistants per TRAC	
			Sector	Sector	Sector	
17	Chemical engineering	ii	5	12	12	
			Total research assistants	10.2	276.6	286.8
			Average	2.0	23.1	23.9
			1st Quartile	0.4	7.3	7.4
			Median Value	0.6	19.0	21.1
			3rd Quartile	3.9	28.9	28.9
18	Mineral, metallurgy and materials engineering	ii	5	11	11	
			Total research assistants	26.7	422.2	448.9
			Average	5.3	38.4	40.8
			1st Quartile	2.9	15.3	17.8
			Median Value	4.0	39.0	39.0
			3rd Quartile	5.9	58.4	60.2
19	Civil engineering	ii	8	17	17	
			Total research assistants	16.5	271.2	287.7
			Average	2.1	16.0	16.9
			1st Quartile	0.6	6.6	7.1
			Median Value	1.2	11.9	12.3
			3rd Quartile	2.3	20.9	20.9
20	Electrical, electronic and computer engineering	ii	12	25	25	
			Total research assistants	30.4	850.3	880.8
			Average	2.5	34.0	35.2
			1st Quartile	0.4	14.5	14.5
			Median Value	1.8	20.9	22.2
			3rd Quartile	3.5	44.1	44.1
21	Mechanical, aero and production engineering	ii	10	20	20	
			Total research assistants	58.0	581.3	639.3
			Average	5.8	29.1	32.0
			1st Quartile	0.9	8.7	8.9
			Median Value	2.7	19.1	22.4
			3rd Quartile	8.2	39.5	47.4
23	Architecture, built environment and planning	iii	10	18	18	
			Total research assistants	54.8	222.9	277.7
			Average	5.5	12.4	15.4
			1st Quartile	1.0	1.6	2.2
			Median Value	1.9	7.6	8.7
			3rd Quartile	3.3	19.1	26.8
24	Mathematics	ii	16	35	35	
			Total research assistants	44.4	545.0	589.3
			Average	2.8	15.6	16.8
			1st Quartile	0.7	5.6	6.2
			Median Value	1.3	8.4	8.9
			3rd Quartile	3.3	15.6	15.6
25	Information technology, systems sciences & computer software engineering	ii	23	36	36	
			Total research assistants	86.0	836.5	922.5
			Average	3.7	23.2	25.6
			1st Quartile	1.0	5.7	7.8
			Median Value	2.6	15.2	18.3
			3rd Quartile	6.5	27.6	33.8
26	Catering & hospitality management	iii	1	1	1	
			Total research assistants			
			Average			
			1st Quartile			
			Median Value			
			3rd Quartile			
27	Business and management studies	iv	21	38	38	
			Total research assistants	53.3	374.6	427.8
			Average	2.5	9.9	11.3
			1st Quartile	1.2	1.8	2.2
			Median Value	1.6	4.2	5.0
			3rd Quartile	2.6	12.5	15.7
28	Geography	iii	18	28	28	
			Total research assistants	42.1	276.7	318.8
			Average	2.3	9.9	11.4
			1st Quartile	0.7	4.0	4.8
			Median Value	1.2	7.4	8.6
			3rd Quartile	3.0	12.3	15.0
29	Social studies	v	22	38	38	
			Total research assistants	125.0	981.4	1,106.3
			Average	5.7	25.8	29.1
			1st Quartile	2.3	5.8	10.7
			Median Value	4.4	13.1	15.3
			3rd Quartile	7.3	33.2	34.7
30	Media studies	v	5	11	11	
			Total research assistants	3.2	16.9	20.1
			Average	0.6	1.5	1.8
			1st Quartile	0.1	0.1	0.2
			Median Value	0.5	1.0	1.0
			3rd Quartile	1.3	3.4	3.4
31	Humanities	v	18	35	35	
			Total research assistants	51.9	461.7	513.6
			Average	2.9	13.2	14.7
			1st Quartile	1.2	2.8	6.0
			Median Value	2.1	9.0	9.9
			3rd Quartile	3.3	14.0	15.0
33	Design and creative arts	iii	16	29	29	
			Total research assistants	24.5	72.0	96.5
			Average	1.5	2.5	3.3
			1st Quartile	0.2	0.6	1.0
			Median Value	1.0	1.3	2.3
			3rd Quartile	2.2	2.8	4.2
34	Education	v	15	30	30	
			Total research assistants	36.2	312.5	348.6
			Average	2.4	10.4	11.6
			1st Quartile	1.0	0.9	1.4
			Median Value	2.2	3.2	4.2
			3rd Quartile	3.6	9.5	10.4

Subject group for comparative purposes only		I-O research assistants per TRAC	RG&C research assistants per TRAC	Total research assistants per TRAC	
		Sector	Sector	Sector	
HESA academic cost centre					
35 Modern languages	v	8	22	22	
		Total research assistants	24.4	102.2	126.4
		Average	3.0	4.6	5.7
		1st Quartile	0.3	1.0	1.0
		Median Value	2.0	2.4	3.4
		3rd Quartile	5.4	4.6	8.3
37 Archaeology	iii	9	19	19	
		Total research assistants	16.4	151.0	167.4
		Average	1.8	7.9	8.8
		1st Quartile	0.7	1.5	2.5
		Median Value	0.8	5.1	5.1
		3rd Quartile	1.2	12.8	13.6
38 Sports science and leisure studies	iii	7	12	12	
		Total research assistants	11.2	44.5	55.7
		Average	1.6	3.7	4.6
		1st Quartile	0.5	0.7	1.3
		Median Value	0.7	2.9	3.2
		3rd Quartile	3.7	6.2	7.4
41 Continuing education	v	3	5	5	
		Total research assistants	10.6	4.1	14.7
		Average	3.5	0.8	2.9
		1st Quartile	0.2	0.6	0.8
		Median Value	1.4	0.6	1.9
		3rd Quartile	9.0	1.0	2.0
Total - all cost centres		27	46	46	
		Total research assistants	1,899.2	27,843.6	29,742.8
		Average	70.3	605.3	646.6
		1st Quartile	26.0	135.9	163.2
		Median Value	56.5	389.5	428.9
		3rd Quartile	98.8	737.6	784.6

Table 10. Research assistants per TRAC

Subject group for comparative purposes only		I-O research assistants per TRAC	RG&C research assistants per TRAC	Total research assistants per TRAC
		Sector	Sector	Sector
i	Number of observations	26	47	47
	Total research assistants	477.6	9,995.6	10,473.3
	Average	18.4	212.7	222.8
	1st Quartile	1.0	8.8	10.6
	Median Value	7.4	69.5	90.6
	3rd Quartile	22.9	265.8	276.5
ii	Number of observations	182	353	353
	Total research assistants	864.3	14,126.3	14,990.6
	Average	4.7	40.0	42.5
	1st Quartile	1.2	7.2	8.8
	Median Value	2.7	19.0	21.0
	3rd Quartile	6.5	51.8	54.2
iii	Number of observations	89	158	158
	Total research assistants	235.3	1,468.5	1,703.8
	Average	2.6	9.3	10.8
	1st Quartile	0.6	1.5	2.4
	Median Value	1.2	4.4	6.5
	3rd Quartile	3.0	11.8	14.7
iv	Number of observations	21	38	38
	Total research assistants	53.3	374.6	427.8
	Average	2.5	9.9	11.3
	1st Quartile	1.2	1.8	2.2
	Median Value	1.6	4.2	5.0
	3rd Quartile	2.6	12.5	15.7
v	Number of observations	71	141	141
	Total research assistants	251.2	1,878.6	2,129.7
	Average	3.5	13.3	15.1
	1st Quartile	1.1	1.6	2.1
	Median Value	2.6	5.6	7.7
	3rd Quartile	4.6	13.7	15.0

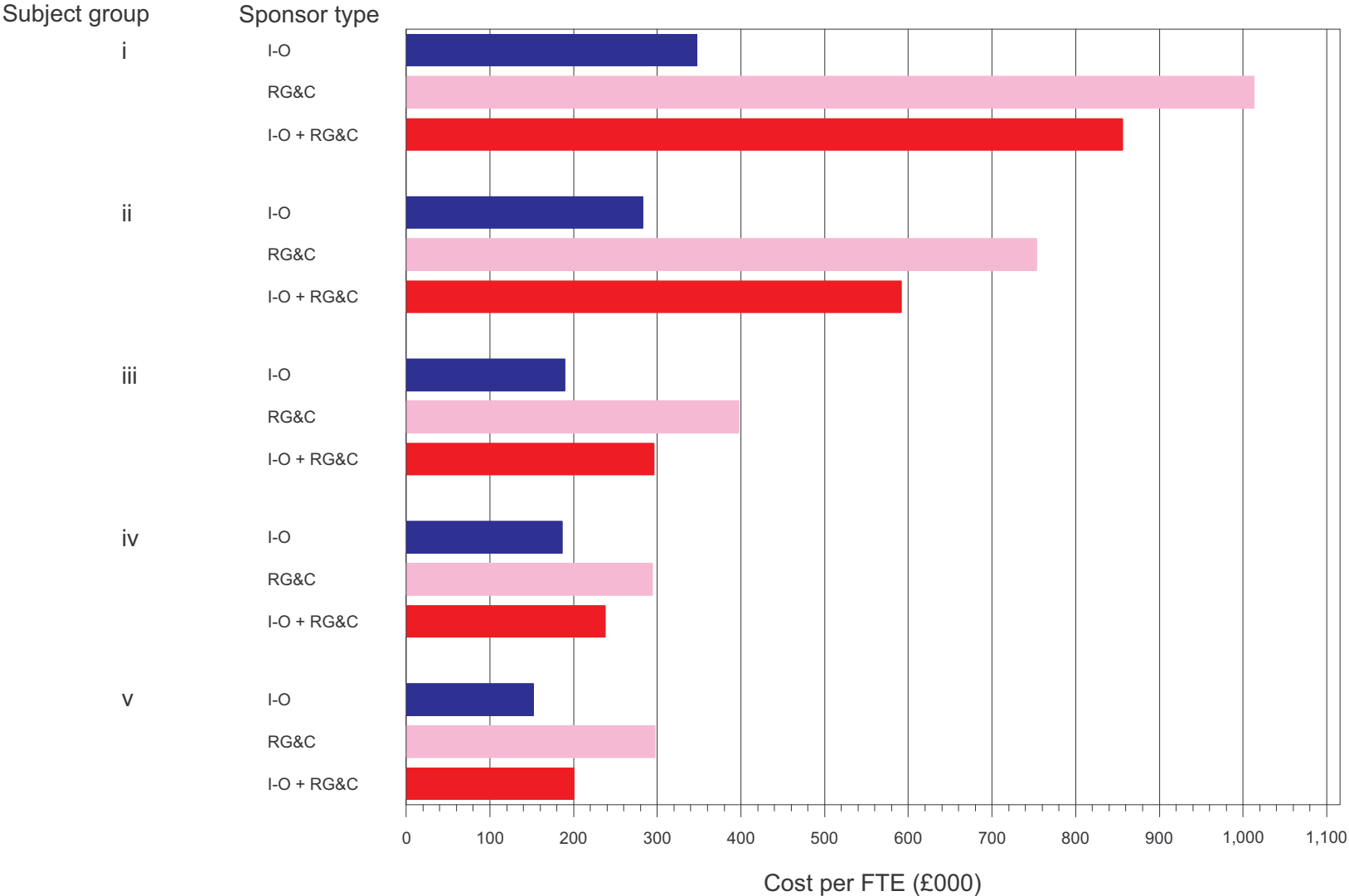
Figure 1. Volumes of activity: research costs for each subject group, by sponsor type
2009-10



I-O=Institution-own funded Research

RG&C=Externally funded Research Grants and Contracts

Figure 2. Research cost per staff FTE: for each subject group, by sponsor type
2009-10



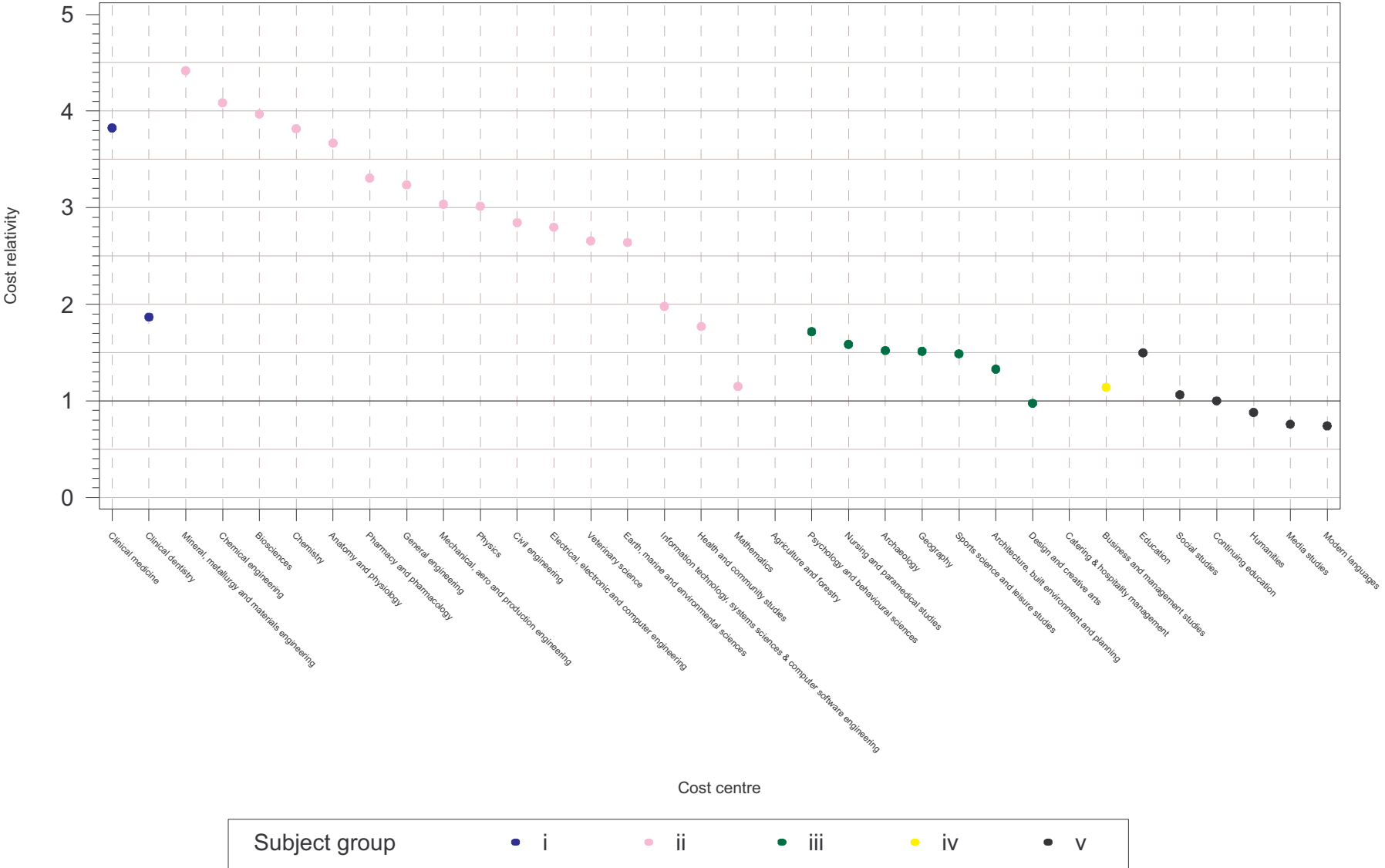
I-O=Institution-own funded Research

RG&C=Externally funded Research Grants and Contracts

I-O + RG&C=Institution-own funded Research + Externally funded Research Grants and Contracts

Source: 2009-10 TRAC Review of Research Cost Relativities returns

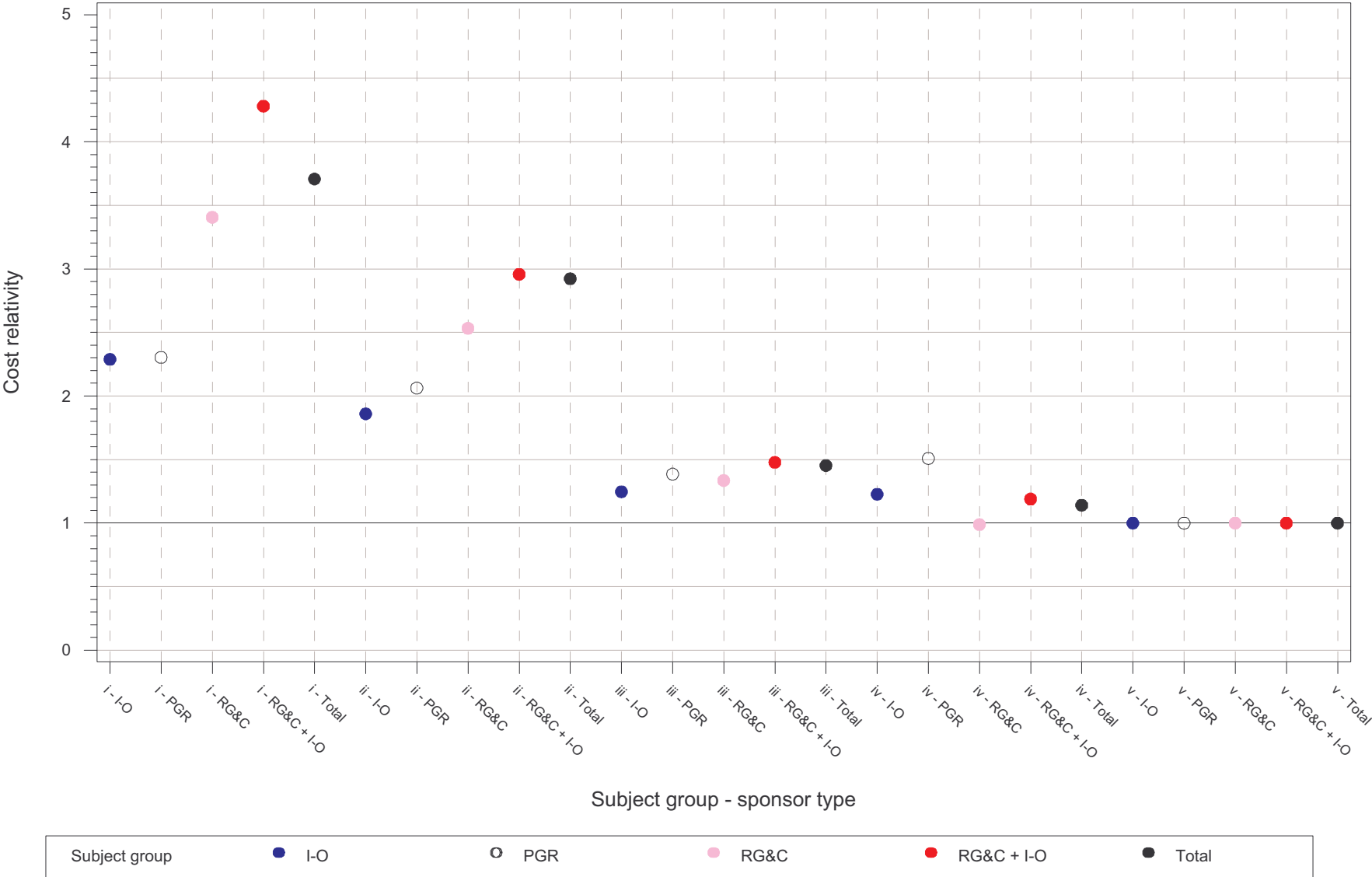
Figure 3. Total research cost relativities: for each cost centre, by subject group
2009-10



Note: No data is shown for cost centre 13 (Agriculture and forestry) and cost centre 26 (Catering and hospitality management) as there were too few respondents in these cost centres.

Source: 2009-10 TRAC Review of Research Cost Relativities returns

Figure 4. Research cost relativities: by sponsor type, grouped by subject group
2009-10



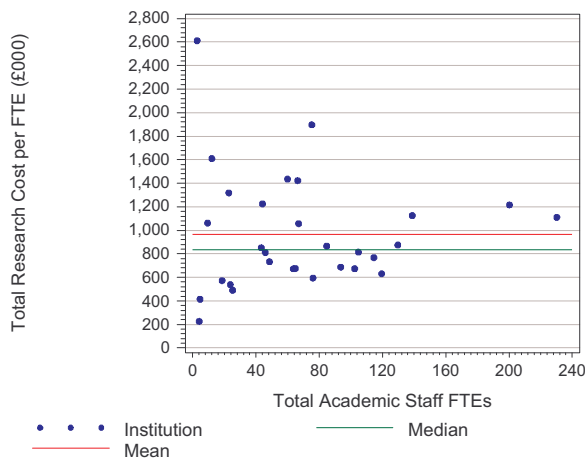
Source: 2009-10 TRAC Review of Research Cost Relativities returns

Plots of 2009-10 Total research cost per FTE and academic staff FTEs for each cost centre

Each plot is a scatter graph of research costs per FTE (£000) against academic staff FTEs, taken from the 2009-10 TRAC Review of Research Cost Relativities data collection. The data have been displayed in this way so that the reader can appreciate the spread of data in any particular cost centre. The red and green lines represent the mean (total subject-related costs divided by total academic staff FTEs) and the median respectively. Also shown for comparison between cost centres, below each chart, are the upper and lower quartiles of the cost per FTE (£). No data is shown for cost centre 13 (Agriculture and forestry) and cost centre 26 (Catering and hospitality management) as there were too few respondents in these cost centres.

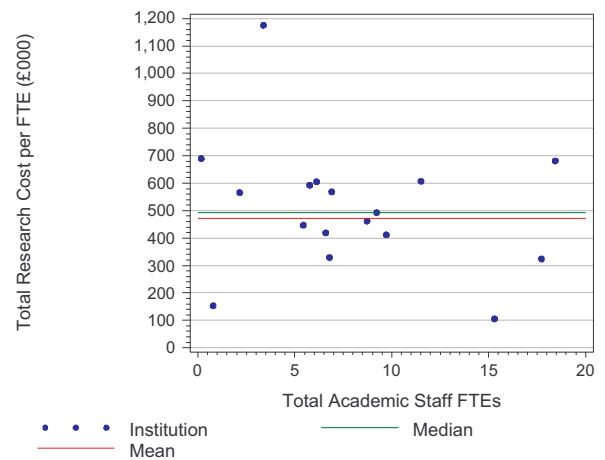
Source: 2009-10 TRAC Review of Research Cost Relativities returns

01 Clinical Medicine



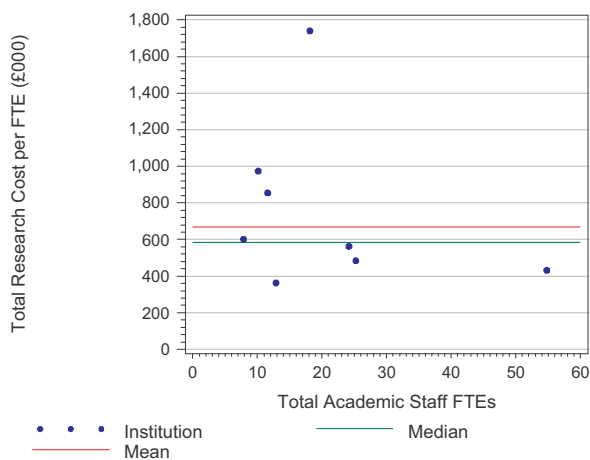
Lower Quartile	Upper Quartile
673,731	1,216,621

02 Clinical Dentistry



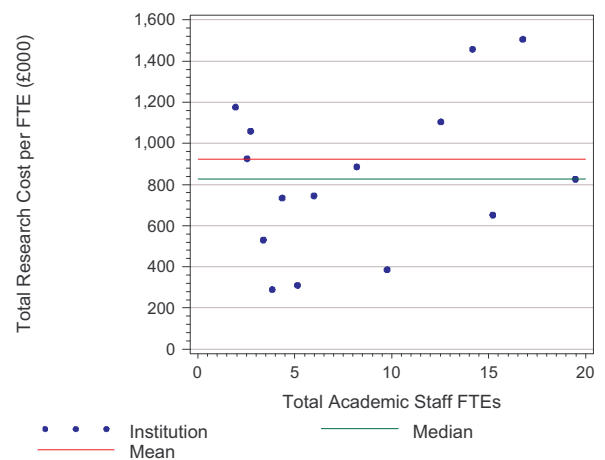
Lower Quartile	Upper Quartile
411,597	605,495

03 Veterinary science



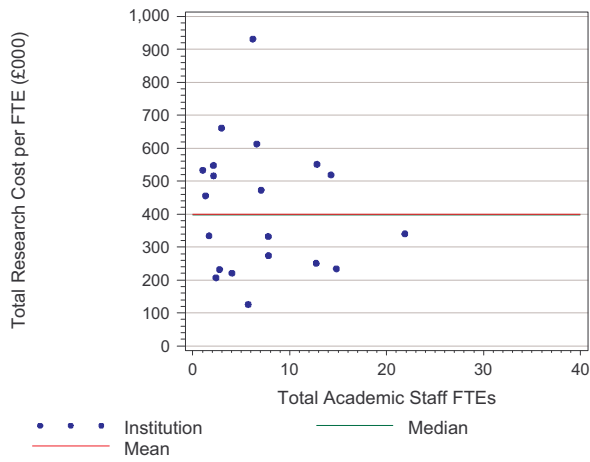
Lower Quartile	Upper Quartile
458,114	914,474

04 Anatomy and physiology



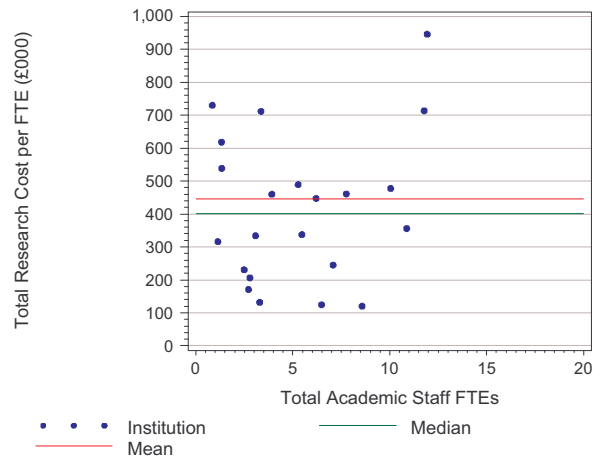
Lower Quartile	Upper Quartile
531,013	1,104,375

05 Nursing and paramedical studies



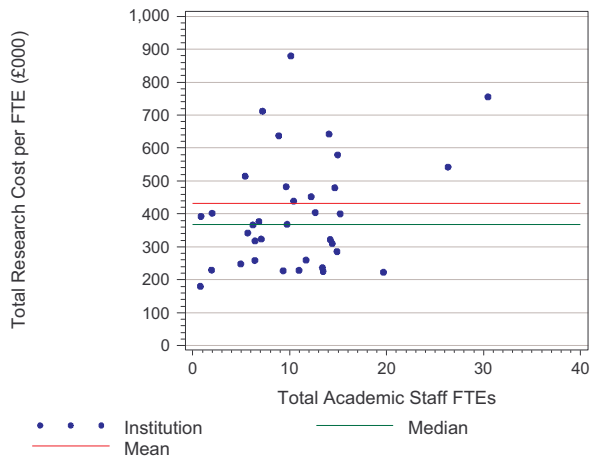
Lower Quartile	Upper Quartile
242,893	540,972

06 Health and community studies



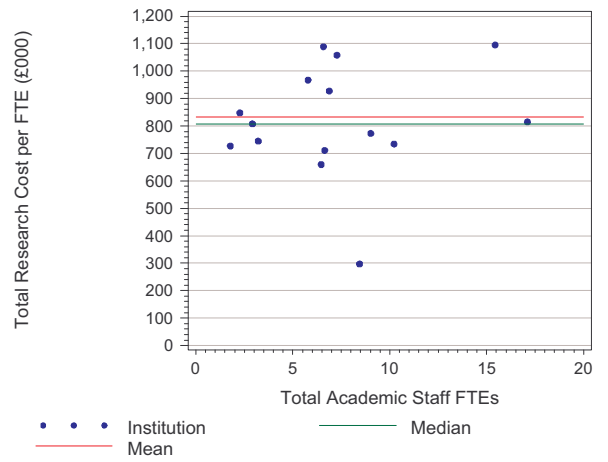
Lower Quartile	Upper Quartile
231,062	538,961

07 Psychology and behavioural sciences



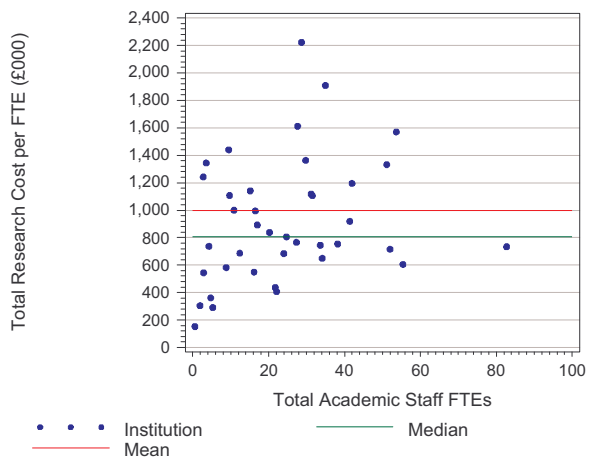
Lower Quartile	Upper Quartile
259,382	482,940

08 Pharmacy and pharmacology



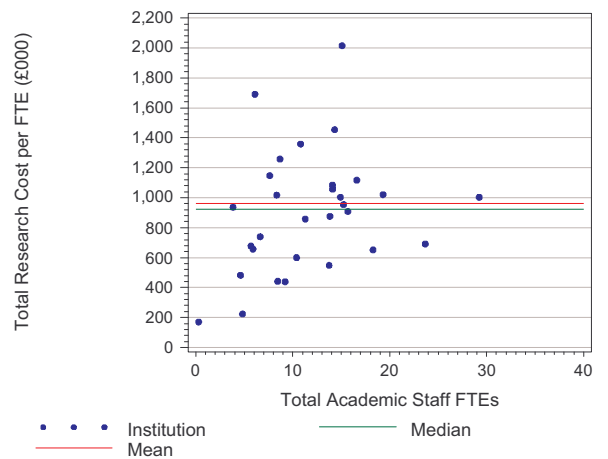
Lower Quartile	Upper Quartile
727,374	967,679

10 Biosciences



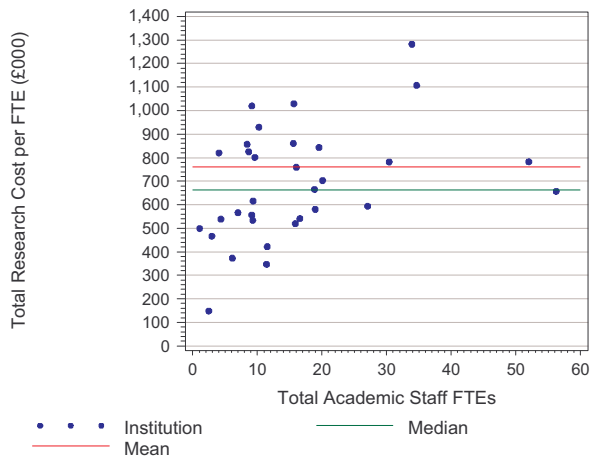
Lower Quartile	Upper Quartile
606,707	1,195,525

11 Chemistry



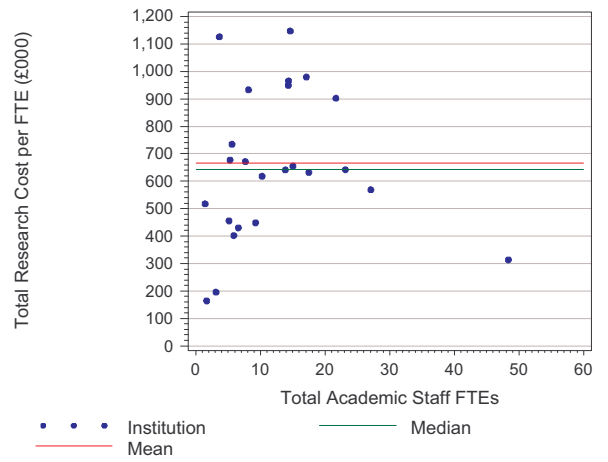
Lower Quartile	Upper Quartile
652,623	1,085,716

12 Physics



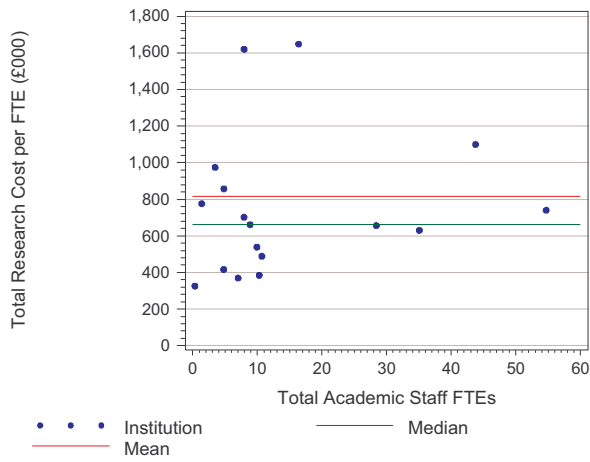
Lower Quartile	Upper Quartile
536,814	834,484

14 Earth, marine and environmental sciences



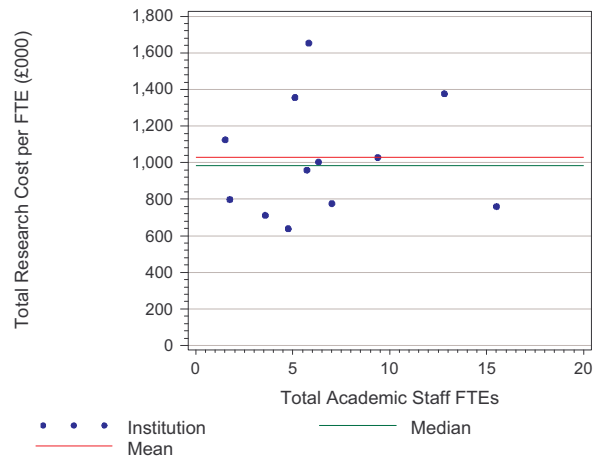
Lower Quartile	Upper Quartile
452,619	917,547

16 General engineering



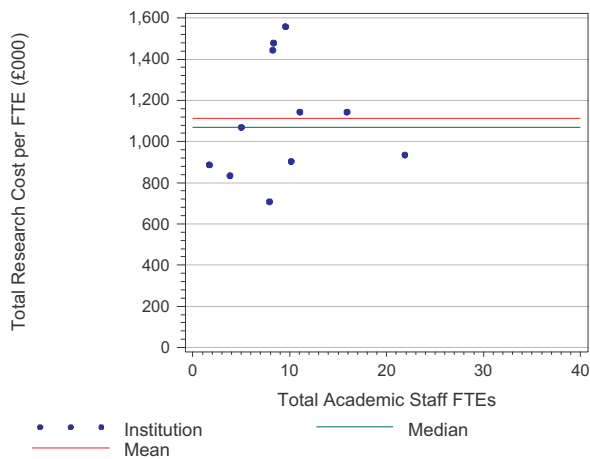
Lower Quartile	Upper Quartile
489,159	858,592

17 Chemical engineering



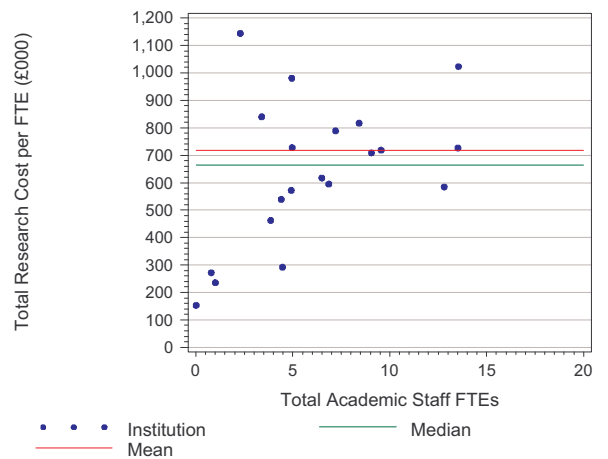
Lower Quartile	Upper Quartile
768,480	1,240,624

18 Mineral, metallurgy and materials engineering



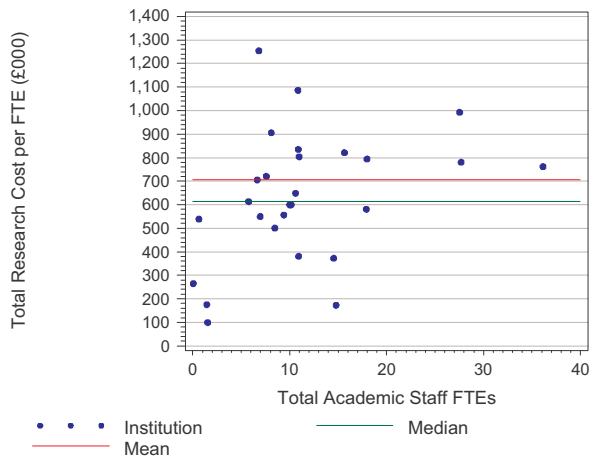
Lower Quartile	Upper Quartile
887,118	1,444,527

19 Civil engineering



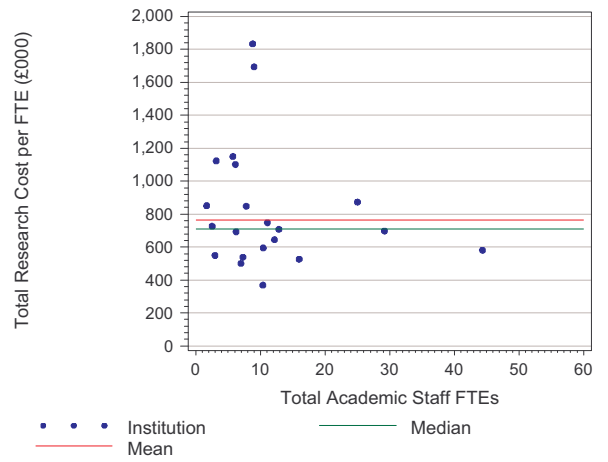
Lower Quartile	Upper Quartile
501,212	803,339

20 Electrical, electronic and computer engineering



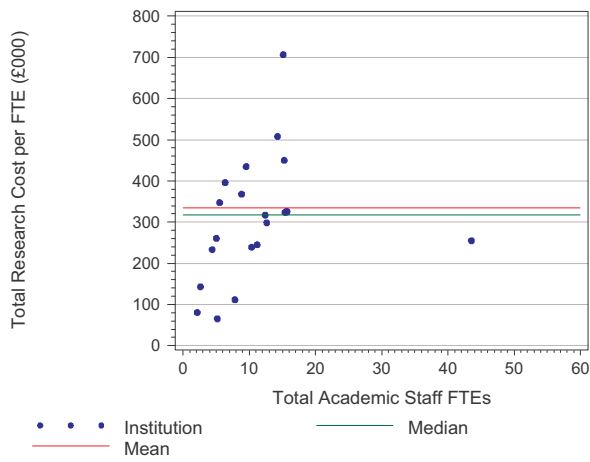
Lower Quartile	Upper Quartile
501,297	804,634

21 Mechanical, aero and production engineering



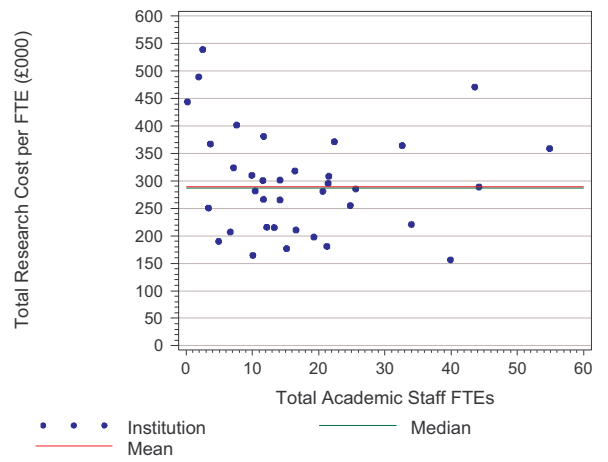
Lower Quartile	Upper Quartile
581,605	873,809

23 Architecture, built environment and planning



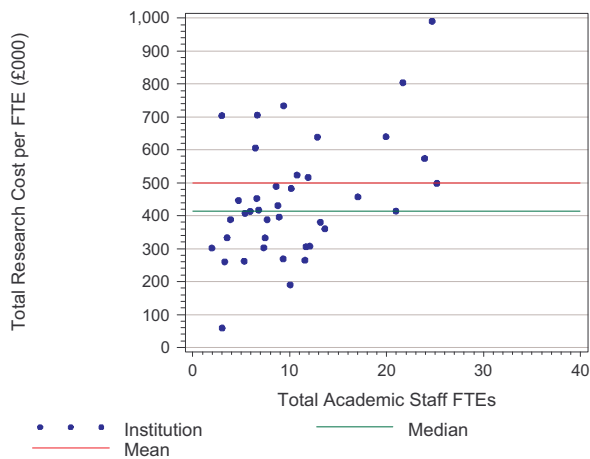
Lower Quartile	Upper Quartile
239,384	367,986

24 Mathematics



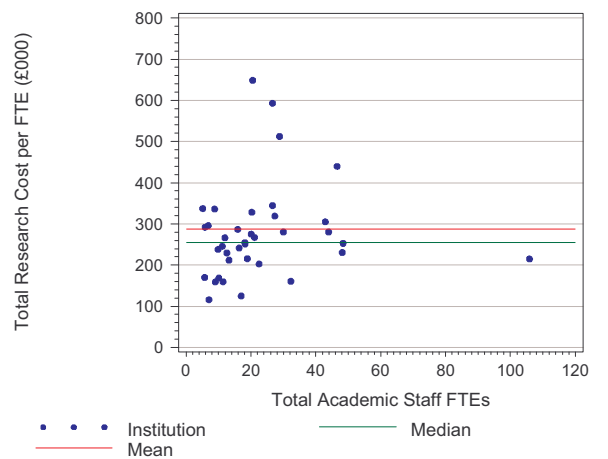
Lower Quartile	Upper Quartile
215,588	361,960

25 Information technology, systems sciences and computer software engineering



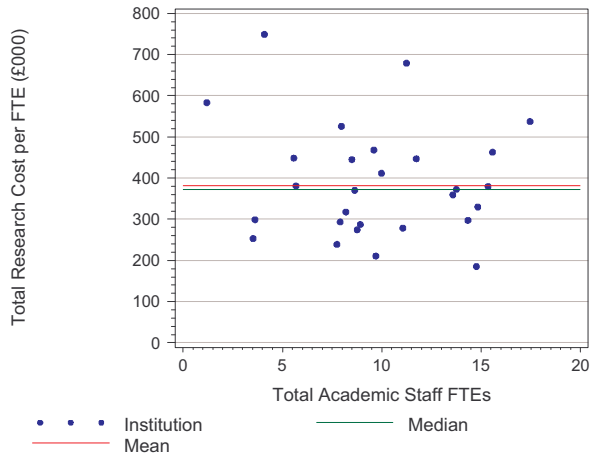
Lower Quartile	Upper Quartile
307,793	523,513

27 Business and management studies



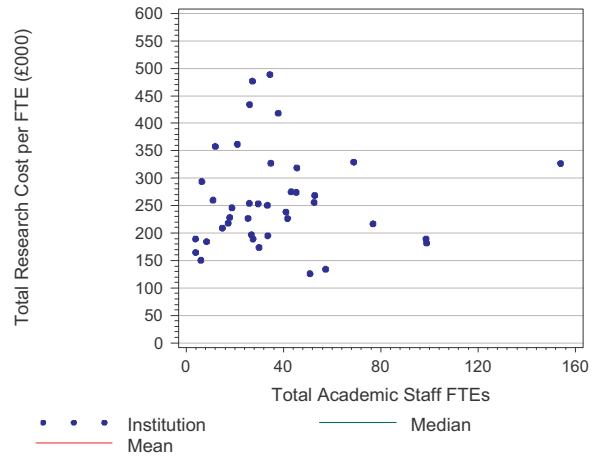
Lower Quartile	Upper Quartile
215,143	305,196

28 Geography



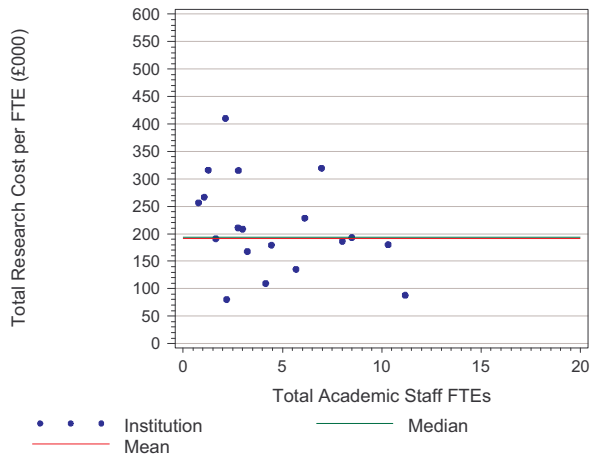
Lower Quartile	Upper Quartile
290,400	455,901

29 Social studies



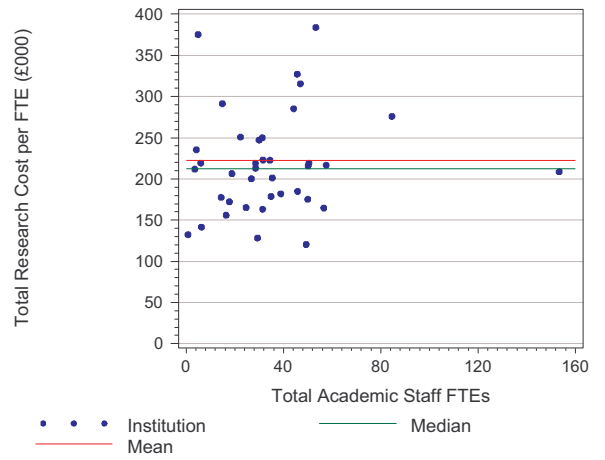
Lower Quartile	Upper Quartile
192,570	322,917

30 Media studies



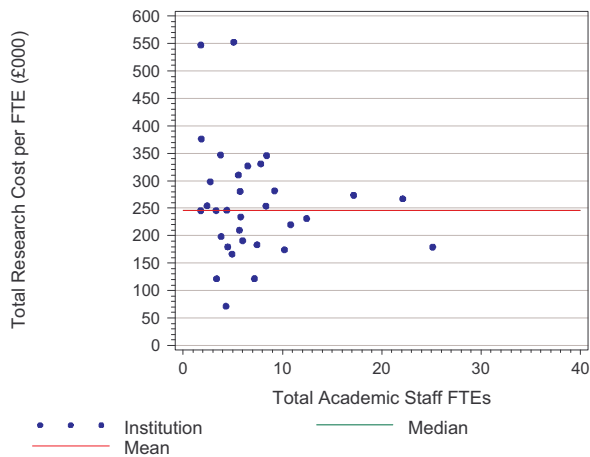
Lower Quartile	Upper Quartile
167,901	266,850

31 Humanities and language based studies



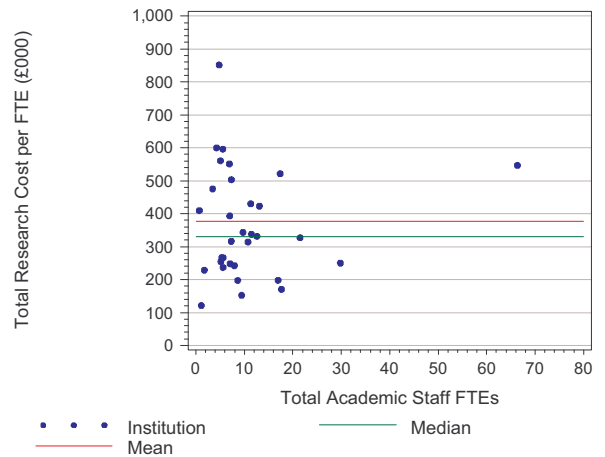
Lower Quartile	Upper Quartile
175,374	247,335

33 Design and creative arts



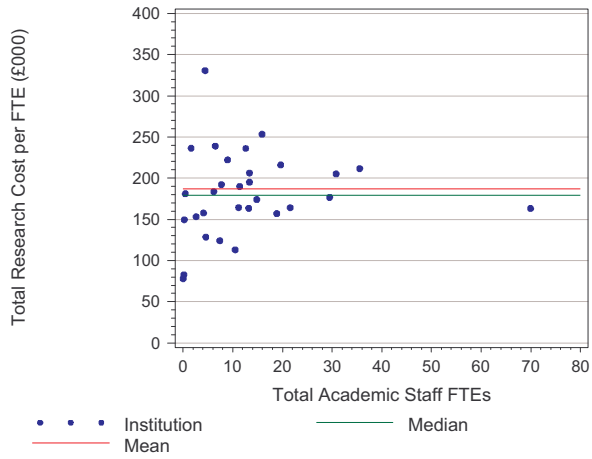
Lower Quartile	Upper Quartile
187,212	304,450

34 Education



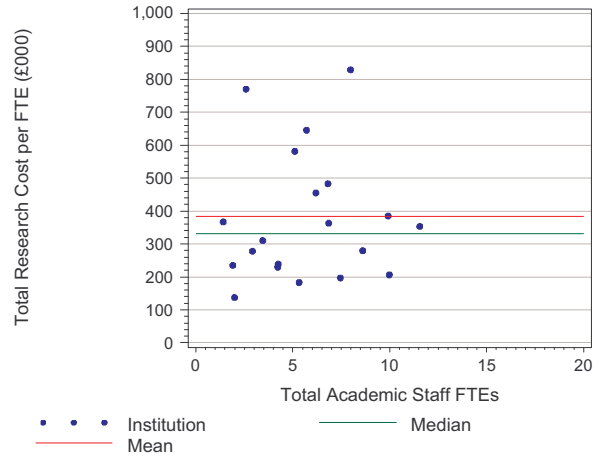
Lower Quartile	Upper Quartile
245,533	489,798

35 Modern languages



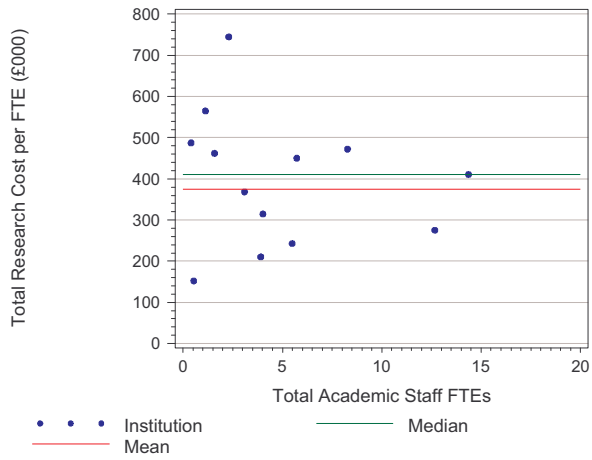
Lower Quartile	Upper Quartile
157,062	211,782

37 Archaeology



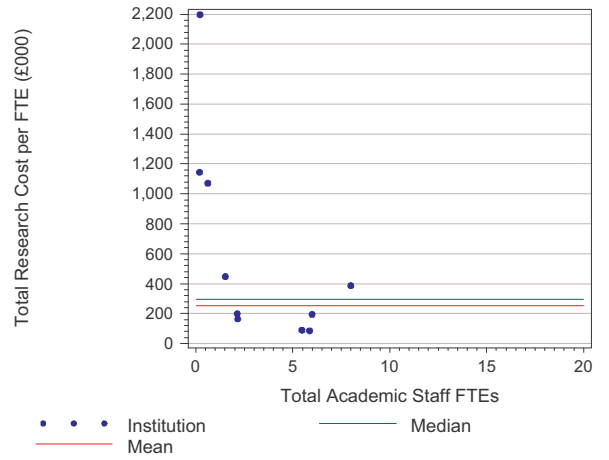
Lower Quartile	Upper Quartile
232,769	469,424

38 Sports science and leisure studies



Lower Quartile	Upper Quartile
275,643	472,585

41 Continuing education



Lower Quartile	Upper Quartile
164,157	1,072,248