

# Can the impact of grey literature be assessed? An investigation of UK government publications cited by articles and books

Matthew S. Bickley<sup>1</sup>, Kayvan Kousha<sup>2</sup> and Michael Thelwall<sup>3</sup>

<sup>1</sup> *M.Bickley@wlv.ac.uk*

<sup>2</sup> *K.Kousha@wlv.ac.uk*

<sup>3</sup> *M.Thelwall@wlv.ac.uk*

<sup>1,2,3</sup> Statistical Cybermetrics Research Group (SCRG), University of Wolverhampton, Wulfruna Street, Wolverhampton, WV1 1LY (United Kingdom)

## **Appendices**

## Appendix 1

**Table 1** All 47 policy areas as defined on [www.gov.uk/government/publications](http://www.gov.uk/government/publications), split by years used, with total over all years in repository (1945-2018, Policy areas sorted alphabetically)

<i>Policy area</i>	<i>All years (1945-2018)</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>
Arts and culture	911	76	69	111	83	95
Borders and immigration	2876	331	498	339	338	413
Business and enterprise	8283	477	1735	1147	1291	1496
Children and young people	2697	217	426	381	405	331
Climate change	2982	517	486	390	285	294
Community and society	3166	281	424	586	487	479
Consumer rights and issues	681	65	73	52	46	66
Crime and policing	3648	286	759	691	525	625
Defence and armed forces	3647	216	576	535	635	649
Employment	3438	314	712	503	374	354
Energy	4161	492	662	681	530	541
Environment	7945	681	1054	1077	1195	1158
Equality, rights and citizenship	1337	111	115	192	89	80
Europe	411	29	53	41	55	75
Financial services	357	27	84	76	52	71
Food and farming	2603	204	499	532	353	436
Foreign affairs	2446	246	256	527	265	364
Further education and skills	2269	106	240	347	498	488
Government efficiency, transparency and accountability	12628	1089	2321	1909	1595	1933
Government spending	1192	129	191	134	135	172
Higher education	502	38	67	79	97	92
Housing	2834	167	641	499	393	607
International aid and development	2571	456	329	306	201	199
Law and the justice system	4118	318	697	561	619	651
Local government	1929	272	257	210	158	183
Media and communications	702	56	58	52	86	94
National Health Service	5406	387	769	1027	1219	947
National security	1029	107	143	113	99	121
Northern Ireland	1362	38	94	319	299	339
Pensions and ageing society	586	65	92	91	63	65
Planning and building	1955	256	317	198	241	382
Public health	5170	392	660	728	807	1293
Public safety and emergencies	1565	169	133	130	150	221
Regulation reform	594	72	160	38	31	64
Rural and countryside	909	62	129	169	144	157
Schools	5326	453	864	869	902	905
Science and innovation	1771	161	317	220	288	242
Scotland	555	22	55	113	166	137
Social care	1038	113	106	155	130	103
Sports and leisure	565	65	48	47	33	77
Tax and revenue	6393	582	1295	856	1046	1236
Trade and investment	1719	234	301	274	195	273
Transport	8098	858	1070	1069	940	1357
UK economy	7734	712	1246	1431	1197	1521
Wales	1576	7	209	470	435	352
Welfare	2309	255	370	302	291	323
Wildlife and animal welfare	1565	127	389	210	198	251
<b>Total</b>	<b>137559</b>	<b>12338</b>	<b>22049</b>	<b>20787</b>	<b>19664</b>	<b>22312</b>

## Appendix 2

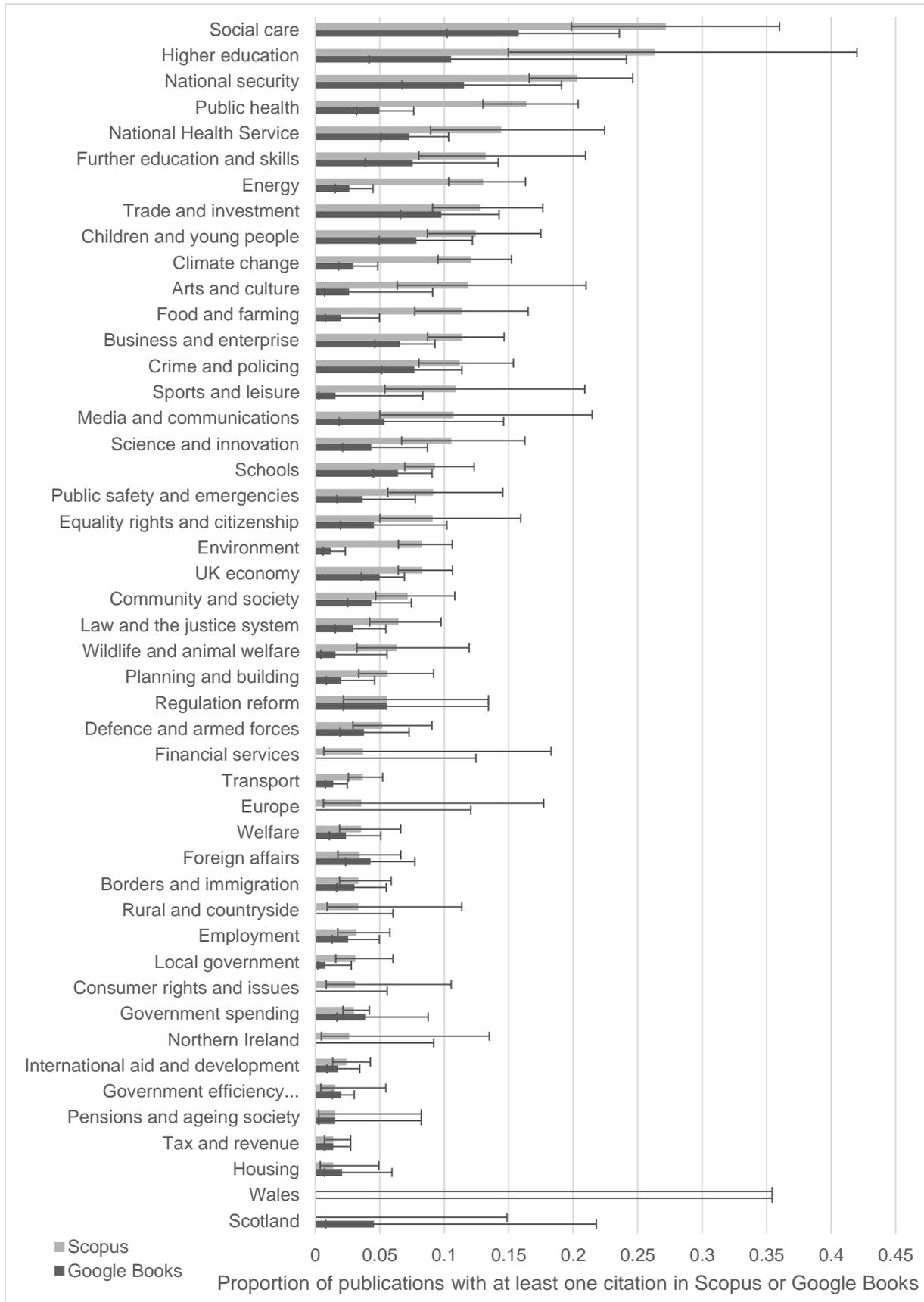
**Table 2** Top 5 most cited articles within each GL area as found by Scopus references, sorted by number of citations within GL area (policy areas defined as in the repository)

<b>Title (in bold)</b> <i>URL (preceded by gov.uk/government/)</i>	<i>Year</i>	<i>Policy area</i>	<i>GL area</i>	<i>Scopus citations</i>
<b>Housing</b> publications/housing	2016	Tax and revenue	Economics	472
<b>Costs in disputed applications (PG38)</b> publications/costs	2017	Business and enterprise	Economics	259
<b>Sustainability</b> publications/sustainability	2013	Tax and revenue	Economics	112
<b>Facts and figures</b> statistics/facts-and-figures	2014	Business and enterprise	Economics	45
<b>Websites</b> publications/websites	2014	UK economy	Economics	44
<b>SEND code of practice: 0 to 25 years</b> publications/send-code-of-practice-0-to-25	2015	Schools	Education	40
<b>National curriculum in England: computing programmes of study</b> publications/national-curriculum-in-england-computing-programmes-of-study	2013	Schools	Education	34
<b>National curriculum in England: science programmes of study</b> publications/national-curriculum-in-england-science-programmes-of-study	2015	Schools	Education	30
<b>National curriculum in England: framework for key stages 1 to 4</b> publications/national-curriculum-in-england-framework-for-key-stages-1-to-4	2014	Schools	Education	27
<b>National curriculum in England: English programmes of study</b> publications/national-curriculum-in-england-english-programmes-of-study	2014	Schools	Education	25
<b>Climate change</b> publications/climate-change	2017	Environment; Food and farming; Wildlife and animal welfare	Environment	333
<b>Energy consumption in the UK</b> statistics/energy-consumption-in-the-uk	2017	Climate change	Environment	49
<b>Registration, Evaluation and Authorisation of Chemicals (REACH)</b> publications/reach	2014	Environment	Environment	37
<b>Greenhouse gas reporting - Conversion factors 2016</b> publications/greenhouse-gas-reporting-conversion-factors-2016	2016	Climate change; Environment	Environment	20
<b>The Carbon Plan - reducing greenhouse gas emissions</b> publications/the-carbon-plan-reducing-greenhouse-gas-emissions--2	2013	Climate change	Environment	14
<b>Bridges</b> publications/bridges	2015	Government efficiency, transparency and accountability	Government	129
<b>Staffing</b> publications/staffing	2017	Government efficiency, transparency and accountability	Government	72

<b>Open Data Charter</b> publications/open-data-charter	2013	Government efficiency, transparency and accountability	Government	42
<b>Introducing registers</b> publications/registers	2016	Government efficiency, transparency and accountability	Government	42
<b>Government Digital Strategy</b> publications/government-digital-strategy	2013	Government efficiency, transparency and accountability	Government	20
<b>NHS reference costs 2012 to 2013</b> publications/nhs-reference-costs-2012-to-2013	2015	National Health Service	Healthcare	97
<b>NHS reference costs 2014 to 2015</b> publications/nhs-reference-costs-2014-to-2015	2015	National Health Service	Healthcare	84
<b>NHS reference costs 2013 to 2014</b> publications/nhs-reference-costs-2013-to-2014	2015	National Health Service	Healthcare	83
<b>NHS Constitution for England</b> publications/the-nhs-constitution-for-england	2015	National Health Service	Healthcare	65
<b>E-cigarettes: an evidence update</b> publications/e-cigarettes-an-evidence-update	2015	Public health	Healthcare	56
<b>Costs in disputed applications (PG38)</b> publications/costs	2017	Housing	Housing and travel	260
<b>Websites</b> publications/websites	2014	Transport	Housing and travel	44
<b>Spending Review and Autumn Statement 2015: documents</b> publications/spending-review-and-autumn-statement-2015-documents	2015	Housing	Housing and travel	14
<b>Community Energy Strategy</b> publications/community-energy-strategy	2014	Planning and building	Housing and travel	13
<b>National Travel Survey: 2014</b> statistics/national-travel-survey-2014	2015	Transport	Housing and travel	11
<b>Mental health and travelling abroad</b> publications/mental-health	2014	Foreign affairs	International affairs	224
<b>Social media</b> publications/social-media	2015	Wales	International affairs	44
<b>Chemical weapon use by Syrian regime: UK government legal position</b> publications/chemical-weapon-use-by-syrian-regime-uk-government-legal-position	2013	Foreign affairs/ International aid and development	International affairs	12
<b>Prevent duty guidance</b> publications/prevent-duty-guidance	2016	Foreign affairs	International affairs	11
<b>Immigration Act 2014: appeals</b> publications/appeals	2017	Borders and immigration	International affairs	9
<b>Creative Industries Economic Estimates - January 2015</b> statistics/creative-industries-economic-estimates-january-2015	2015	Arts and culture	Leisure	6
<b>Culture White Paper</b> publications/culture-white-paper	2016	Arts and culture	Leisure	4
<b>Quantifying and Valuing the Wellbeing Impacts of Culture and Sport</b> publications/quantifying-and-valuing-the-wellbeing-impacts-of-culture-and-sport	2014	Arts and culture/ Sports and leisure	Leisure	4
<b>2010 to 2015 government policy: museums and galleries</b> publications/2010-to-2015-government-policy-museums-and-galleries	2015	Arts and culture	Leisure	3

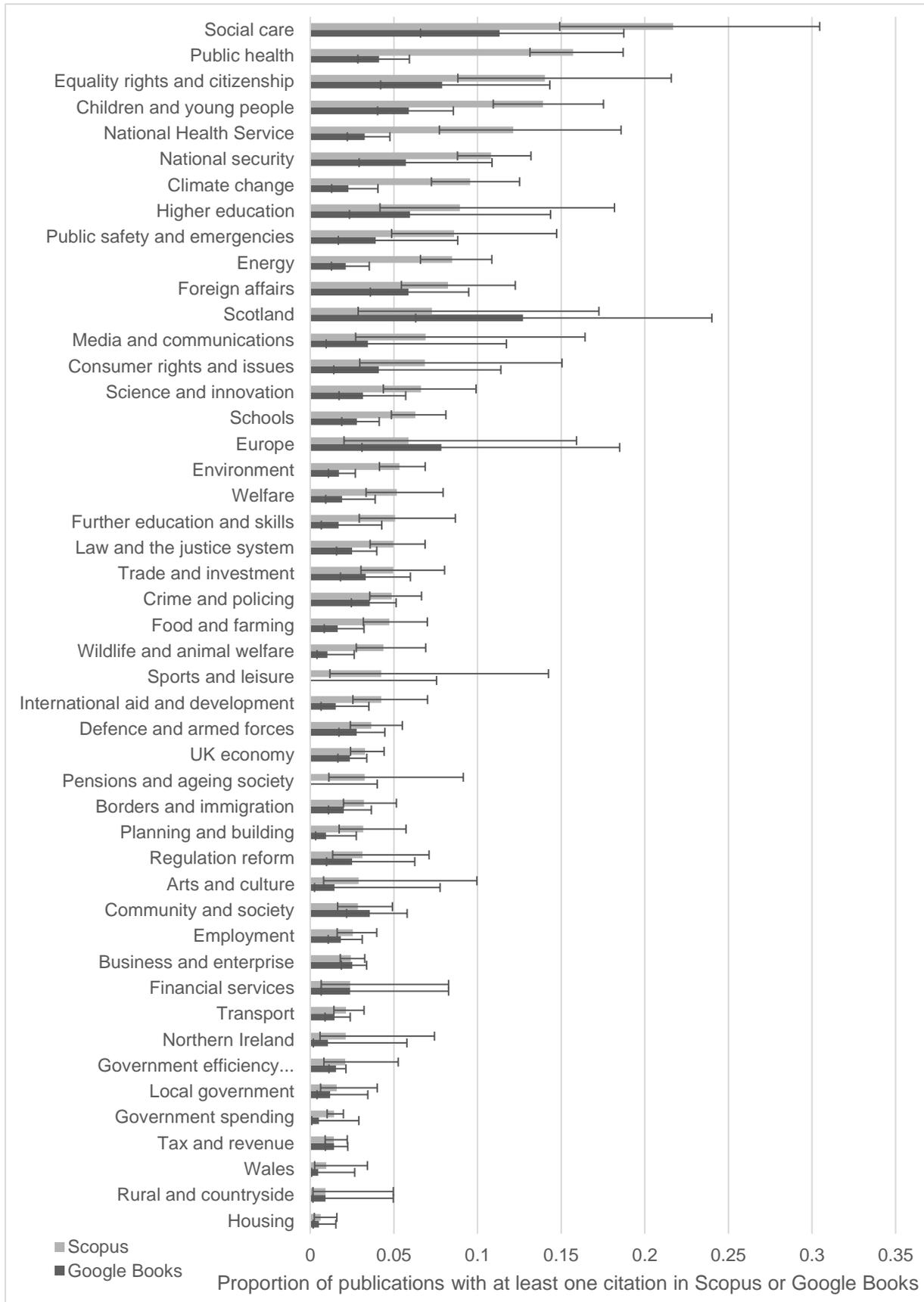
<b>London 2012 Games Maker survey</b> publications/london-2012-games-maker-survey	2013	Sports and leisure	Leisure	3
<b>Energy consumption in the UK</b> statistics/energy-consumption-in-the-uk	2017	Energy	Science	50
<b>Snapshot - UK Science &amp; Innovation Network newsletter for Europe</b> publications/snapshot	2015	Science and innovation	Science	28
<b>Greenhouse gas reporting - Conversion factors 2016</b> publications/greenhouse-gas-reporting-conversion-factors-2016	2016	Energy	Science	20
<b>Performance of the UK research base: international comparison – 2013</b> publications/performance-of-the-uk-research-base-international-comparison-2013	2013	Science and innovation	Science	14
<b>The Carbon Plan - reducing greenhouse gas emissions</b> publications/the-carbon-plan-reducing-greenhouse-gas-emissions--2	2013	Energy	Science	14
<b>Prisoners' criminal backgrounds and proven re-offending after release</b> publications/2012	2013	Crime and policing	Security	3933
<b>Registration, Evaluation and Authorisation of Chemicals (REACH)</b> publications/reach	2014	Defence and armed forces	Security	37
<b>Prison population figures: 2013</b> statistics/prison-population-figures	2014	Crime and policing/ Law and the justice system	Security	37
<b>Prison population figures: 2015</b> statistics/prison-population-figures-2015	2016	Law and the justice system	Security	16
<b>Circular 003/2013: new government domestic violence and abuse definition</b> publications/new-government-domestic-violence-and-abuse-definition	2013	Crime and policing	Security	13
<b>English indices of deprivation 2015</b> statistics/english-indices-of-deprivation-2015	2015	Community and society	Society	121
<b>NDNS: results from Years 1 to 4 (combined)</b> statistics/national-diet-and-nutrition-survey-results-from-years-1-to-4-combined-of-the-rolling-programme-for-2008-and-2009-to-2011-and-2012	2017	Children and young people	Society	45
<b>SEND code of practice: 0 to 25 years</b> publications/send-code-of-practice-0-to-25	2015	Children and young people	Society	40
<b>Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry</b> publications/report-of-the-mid-staffordshire-nhs-foundation-trust-public-inquiry	2013	Equality, rights and citizenship	Society	28
<b>Meningococcal B vaccine: JCVI position statement</b> publications/meningococcal-b-vaccine-jcvi-position-statement	2014	Children and young people	Society	23

Appendix 3



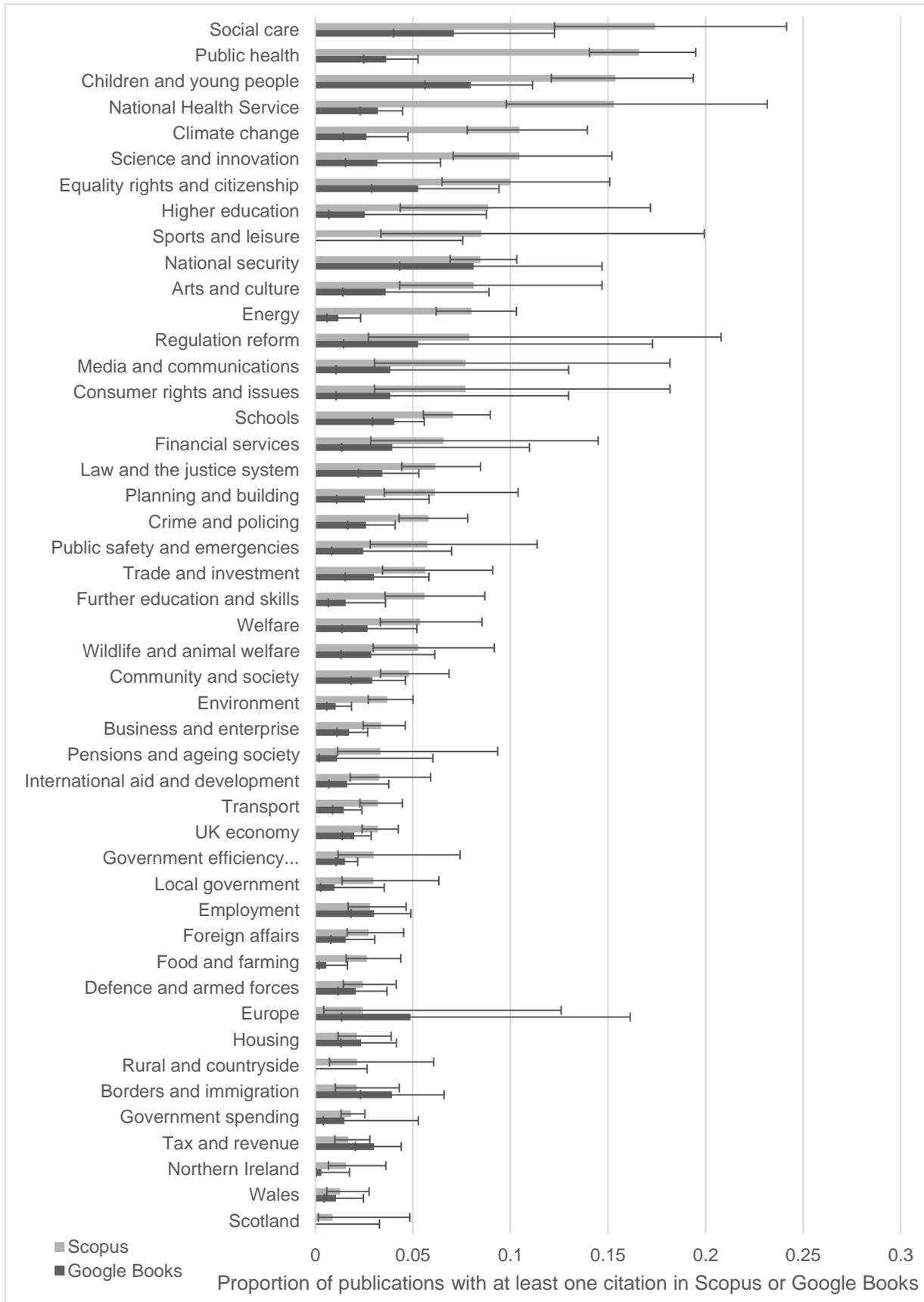
**Fig. 1** Proportion of UK government publications in 2013 with at least one citation in Scopus or Google Books with 95% confidence interval across 47 areas (Sorted by largest Scopus cited)

Appendix 4



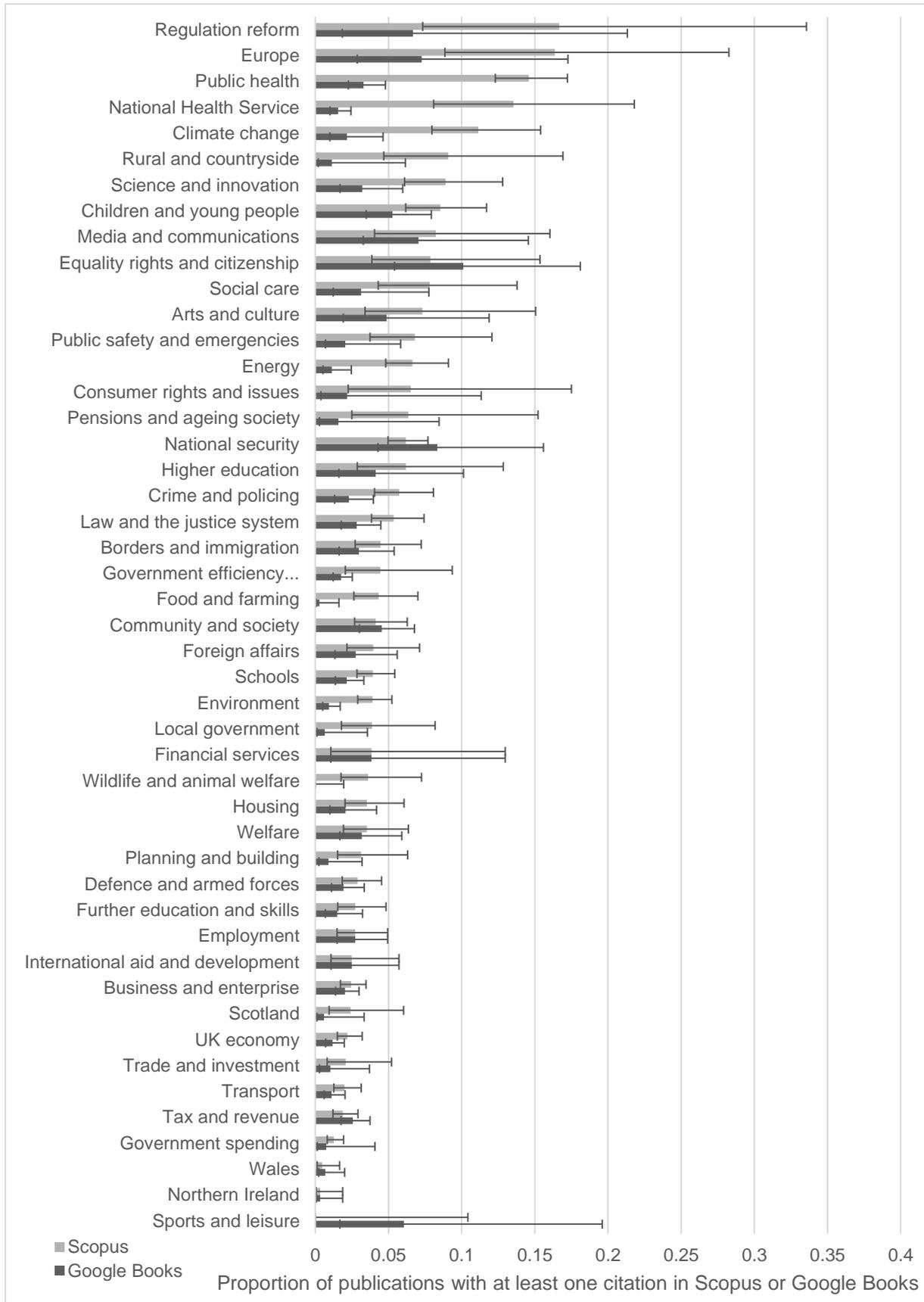
**Fig. 2** Proportion of UK government publications in 2014 with at least one citation in Scopus or Google Books with 95% confidence interval across 47 areas (Sorted by largest Scopus cited)

Appendix 5



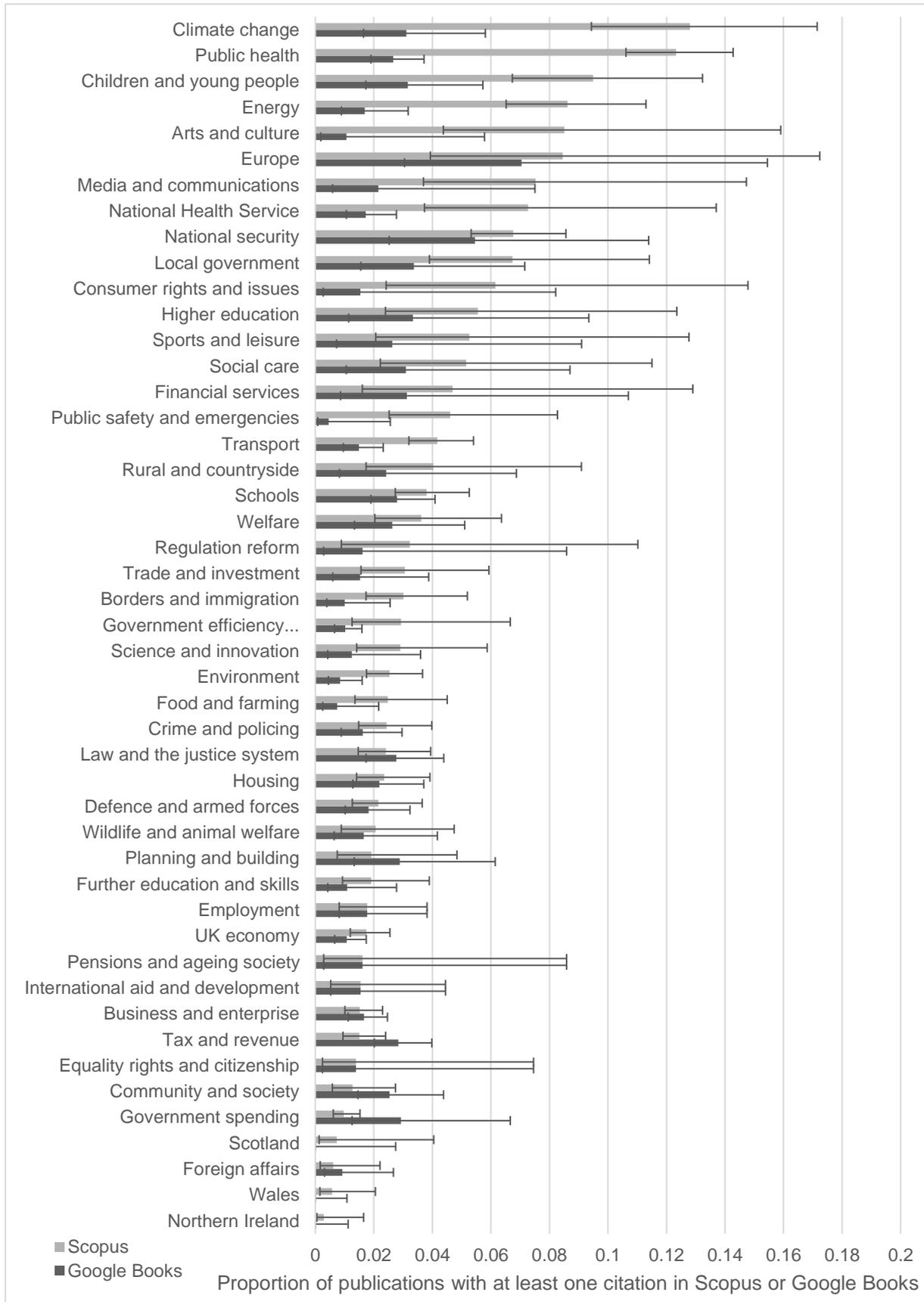
**Fig. 3** Proportion of UK government publications in 2015 with at least one citation in Scopus or Google Books with 95% confidence interval across 47 areas (Sorted by largest Scopus cited)

Appendix 6



**Fig. 4** Proportion of UK government publications in 2016 with at least one citation in Scopus or Google Books with 95% confidence interval across 47 areas (Sorted by largest Scopus cited)

Appendix 7



**Fig. 5** Proportion of UK government publications in 2017 with at least one citation in Scopus or Google Books with 95% confidence interval across 47 areas (Sorted by largest Scopus cited)