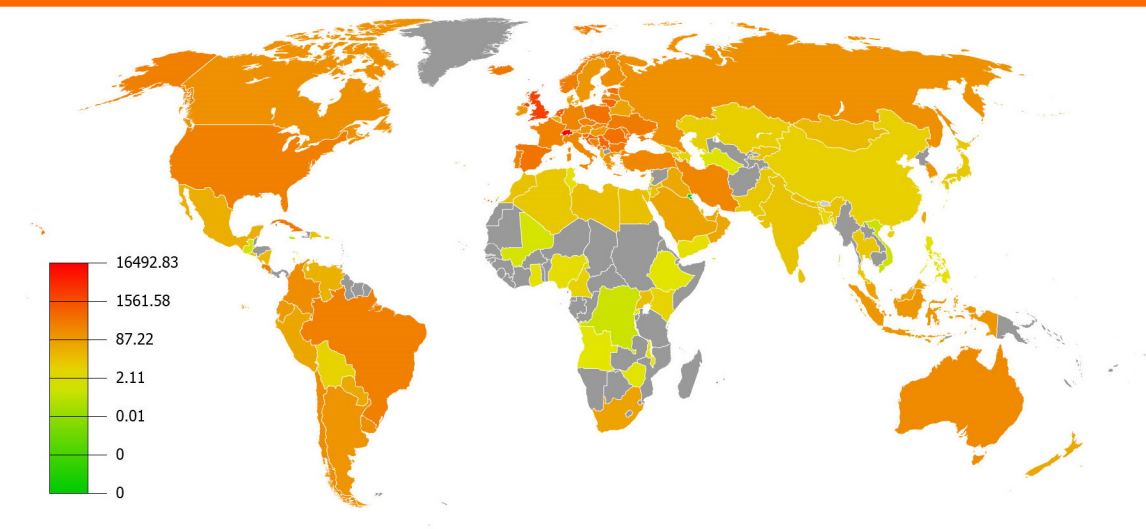


# Gold Open Access by Country 2014-2019



A Supplement to  
Gold Open Access 2014-2019:  
Articles in Journals (GOA5)

Walt Crawford

# GOLD OPEN ACCESS BY COUNTRY 2014-2019

Supplement to *Gold Open  
Access 2014-2019: Articles in  
Journals (GOA5)*

Walt Crawford

Cites & Insights Books  
Livermore, California, 2020

# Gold Open Access by Country 2014-2019

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# Preface

This book is a supplement to *Gold Open Access Journals 2014-2019: Articles in Journals (GOA5)*, providing a look at serious gold open access publishing on a country-by-country (and region) basis.

If you love graphs, you'll hate this publication: the start-date graph has been replaced by a compact table covering broader ranges, and the articles-by-year graph is gone as redundant. The growth-and-shrinkage table has also been eliminated.

Countries with at least 10 OA journals have full details, with some formatting changes to provide a more compact presentation. (As was true last year, table captions are omitted and heading size and spacing is reduced to save space.)

Publisher category and subject tables appear sorted by article count. Table rows with no content are deleted. Order of tables may be adjusted to save space. Tables with no real content for a given country may be deleted.

A partial chapter for each region is followed by chapters for countries within that region, then a chapter offering brief notes on countries with fewer than ten OA journals (except for Pacific/English, which has no such countries).

Overall, this year's survey includes 14% more journals than GOA4 (*Gold Open Access 2013-2018*). The percentage change for each country with ten or more journals appears in the notes for key facts.

The "common correlation" mentioned for many article volume tables is this: it's common for larger journals to charge more per article and for a lower percentage to be no-fee—that is, for the average cost to go down and the no-fee percentage to rise as you move down the size rows.

Thanks again to SPARC for sponsoring this project.

The heatmap on the cover is based on 2019 articles per 100,000 people and was generated at [GunnMap 2](#). The appendix includes details.





# Overall

Most of these tables also appear in *Gold Open Access 2014-2019* and are repeated here for context. Some tables may differ for this book.

## Key facts

	Journals	Articles	Art%	\$/Art
All	13,938	854,018		\$1,023
Fee	4,090	522,018	61%	\$1,673
No-fee	9,848	332,000	39%	
Biomed	3,387	298,675	35%	\$1,437
Fee	1,700	219,123	73%	\$1,959
No-fee	1,687	79,552	27%	
STEM	3,602	350,764	41%	\$1,186
Fee	1,412	255,098	73%	\$1,630
No-fee	2,190	95,666	27%	
H&SS	6,949	204,579	24%	\$137
Fee	978	47,797	23%	\$588
No-fee	5,971	156,782	77%	

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	12,901	13,294	13,097	12,409	11,503	10,434
%No-fee	70%	71%	71%	72%	72%	72%
Articles	854,018	774,427	697,390	631,977	571,627	512,930
%No-fee	39%	44%	46%	48%	47%	47%
Change	10%	11%	10%	11%	11%	

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### Article volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	194	302,199	11%	\$1,815
Large: 150-599	857	167,246	25%	\$1,171
Med.: 60-149	2,640	173,228	54%	\$501
Small: 20-59	7,363	184,935	76%	\$207
Smallest: 0-19	2,884	26,410	82%	\$140

### Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,400+	1,298	348,024	\$781,241,586	\$2,245
\$600-\$1,399	886	74,926	\$72,932,894	\$973
\$200-\$599	594	40,639	\$14,331,004	\$353
\$0.20-\$199	1,312	58,429	\$4,757,973	\$81
No fee	9,848	332,000		
Total	13,938	854,018	\$873,263,457	\$1,023

### Starting date

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	193	329	763	1,547	1,258
No-fee	974	965	2,016	3,602	2,291
Total	1,167	1,294	2,779	5,149	3,549

### Publisher category

Category	Journals	Articles	%No-fee	\$/article
Open Access	2,938	333,939	16%	\$1,539
Univ/college	8,357	277,858	74%	\$182
Traditional	1,188	144,278	23%	\$1,639
Society/govt	1,317	91,863	39%	\$784
Miscellaneous	138	6,080	67%	\$77

**Subject**

<b>Subject</b>	<b>Jour</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	2,963	247,594	30%	\$1,348
Other Sciences	230	70,845	13%	\$1,876
Biology	424	51,081	11%	\$1,872
Engineering	535	50,375	25%	\$1,107
Ecology	367	39,854	29%	\$1,177
Chemistry	181	34,965	16%	\$1,295
Physics	171	34,284	27%	\$1,215
Agriculture	552	33,658	30%	\$848
Education	961	31,758	80%	\$79
Economics	926	25,862	58%	\$164
Earth Sciences	450	23,796	48%	\$778
Language & Literature	893	23,086	87%	\$29
Technology	250	21,807	45%	\$848
Sociology	640	21,247	70%	\$125
Anthropology	549	15,883	71%	\$136
Computer Science	324	14,640	48%	\$600
Zoology	276	14,585	27%	\$666
Mathematics	266	11,955	45%	\$782
History	395	10,952	94%	\$9
Law	441	10,629	90%	\$44
Arts & Architecture	369	10,304	76%	\$120
Miscellany	213	10,210	75%	\$153
Psychology	241	9,943	51%	\$1,009
Political Science	380	9,738	91%	\$43
Religion	288	8,108	67%	\$164
Media & Communications	245	6,659	88%	\$72
Philosophy	243	6,453	93%	\$23
Library Science	165	3,747	96%	\$26

Note that region pages show countries rather than subjects.

# Africa

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	180	7,733			\$264	-74%
Fee	88	4,896	63%	4%	\$417	-75%
No-fee	92	2,837	37%	-6%		
Biomed	44	2,794	36%	3%	\$233	-84%
Fee	22	1,867	67%	-9%	\$348	-82%
No-fee	22	927	33%	25%		
STEM	63	2,025	26%	-36%	\$124	-90%
Fee	19	680	34%	-54%	\$369	-77%
No-fee	44	1,345	66%	144%		
H&SS	73	2,914	38%	57%	\$391	185%
Fee	47	2,349	81%	245%	\$485	-18%
No-fee	26	565	19%	-75%		

Strong in H&SS; higher than usual no-fee percentage in biomed, STEM. 14% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	170	175	176	167	158	143
%No-fee	49%	50%	50%	50%	51%	50%
Articles	7,733	7,657	8,523	6,704	6,536	6,031
%No-fee	37%	37%	43%	37%	38%	37%
Change	1%	-10%	27%	3%	8%	

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	857	11%	\$161
Large: 150-599	11	2,034	23%	\$280
Med.: 60-149	33	2,024	44%	\$279
Small: 20-59	95	2,455	46%	\$290
Smallest: 0-19	39	363	72%	\$158

Reminder: volume is based on peak year 2014-2019, not 2019.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	7	\$10,500	\$1,500
\$600-\$1,399	33	1,441	\$1,246,655	\$865
\$200-\$599	22	1,299	\$452,844	\$349
\$0.20-\$199	32	2,149	\$329,636	\$153
No fee	92	2,837		
Total	180	7,733	\$2,039,635	\$264

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	15	10	18	28	17
No-fee	7	13	19	35	18
Total	22	23	37	63	35

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	85	3,167	60%	\$95
Open Access	62	2,774	12%	\$531
Society/govt	25	1,548	35%	\$138
Miscellaneous	4	163	0%	\$139
Traditional	4	81	60%	\$377

**Countries**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%no-fee</b>	<b>\$/article</b>
Algeria	21	514	100%	\$0
Angola	2	65	100%	\$0
Cameroon	1	173	0%	\$170
Dem. Rep. Congo	1	50	100%	\$0
Ethiopia	5	178	100%	\$0
Ghana	6	84	68%	\$34
Kenya	5	273	12%	\$223
Libya	3	125	53%	\$47
Malawi	1	45	100%	\$0
Mali	1	20	0%	\$112
Morocco	17	555	49%	\$68
Nigeria	8	716	68%	\$52
Rwanda	1	29	100%	\$0
South Africa	100	4,039	23%	\$427
South Sudan	1	40	100%	\$0
Tunisia	5	37	84%	\$22
Uganda	1	765	0%	\$180
Zimbabwe	1	25	100%	\$0

Countries with ten or more journals have their own chapters, followed by a chapter for the other countries—in this case, most of them. Note that the Middle East is not included.

# Algeria

Because no journals have fees, the tables are shorter and different.

## Key facts

	Journals	Articles	Art%	Rel%
All	21	514		
Biomed	3	26	5%	-86%
STEM	13	324	63%	53%
H&SS	5	164	32%	33%

Mostly STEM. 10% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	16	18	20	19	18	16
Articles	514	424	1,258	441	531	399
Change	21%	-66%	185%	-17%	33%	

The oddly erratic numbers have mostly to do with one journal...

## Article volume

	Journals	Articles	Percent	Art/Jrn
Largest: 600+	1	92	18%	92
Med.: 60-149	3	155	30%	52
Small: 20-59	8	204	40%	26
Smallest: 0-19	9	63	12%	7

...that was, but is no longer, very large.



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### Starting date

	2000-04	2005-09	2010-14	2015-19
Journals	4	3	11	3

All recent, most starting 2010-2014.

### Publisher category

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	19	498	97%	26
Society/govt	1	10	2%	10
Open Access	1	6	1%	6

The table speaks for itself.

### Subject

Subject	Journals	Articles	Art/Jrn
Engineering	5	120	24
Other Sciences	2	92	46
Sociology	1	75	75
Agriculture	2	62	31
Economics	1	46	46
Technology	2	41	21
Miscellany	1	30	30
Biology	1	16	16
Language & Literature	2	13	7
Medicine	2	10	5
Physics	1	6	6
Mathematics	1	3	3

# Morocco

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	17	555			\$68	-93%
Fee	3	283	51%	-17%	\$134	-92%
No-fee	14	272	49%	26%		
Biomed	3	32	6%	-84%	\$100	-93%
Fee	1	20	63%	-15%	\$160	-92%
No-fee	2	12	38%	41%		
STEM	11	288	52%	26%	\$48	-96%
Fee	1	76	26%	-64%	\$180	-89%
No-fee	10	212	74%	170%		
H&SS	3	235	42%	77%	\$89	-35%
Fee	1	187	80%	241%	\$112	-81%
No-fee	2	48	20%	-73%		

Generally inexpensive, light in biomed. A high 30% more journals than GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	15	17	16	13	12	7
%No-fee	80%	82%	81%	85%	83%	71%
Articles	555	579	424	257	194	154
%No-fee	49%	52%	75%	78%	77%	64%
Change	-4%	37%	65%	32%	26%	

Small decline after four years of fast growth—and shift toward fees.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	187	0%	\$112
Med.: 60-149	3	190	60%	\$72
Small: 20-59	8	155	87%	\$21
Smallest: 0-19	5	23	100%	\$0

The single large journal is new to GOA5.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$0.20-\$199	3	283	\$37,821	\$134
No fee	14	272	\$0	\$0
Total	17	555	\$37,821	\$68

The most expensive journals have \$180 and \$160 fees.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	0	0	2	1
No-fee	1	2	2	3	6
Total	1	2	2	5	7

Mostly recent, including all fee journals.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	12	431	52%	\$56
Miscellaneous	1	76	0%	\$180
Open Access	2	32	100%	\$0
Society/govt	2	16	100%	\$0

Universities dominate.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Economics	2	219	15%	\$96
Agriculture	2	95	100%	\$0
Chemistry	2	82	7%	\$167
Ecology	3	61	100%	\$0
Medicine	2	32	38%	\$100
Earth Sciences	2	30	100%	\$0
Mathematics	1	20	100%	\$0
Education	1	16	100%	\$0
Biology	1	0		
Computer Science	1	0		

Substantial growth in economics.

# South Africa

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	101	4,079			\$423	-59%
Fee	70	3,091	76%	24%	\$558	-67%
No-fee	31	988	24%	-38%		
Biomed	26	1,046	26%	-27%	\$426	-70%
Fee	15	707	68%	-8%	\$630	-68%
No-fee	11	339	32%	22%		
STEM	22	801	20%	-52%	\$211	-82%
Fee	11	303	38%	-48%	\$559	-66%
No-fee	11	498	62%	128%		
H&SS	53	2,232	55%	128%	\$497	262%
Fee	44	2,081	93%	299%	\$533	-9%
No-fee	9	151	7%	-91%		

High percentage of fee journals, extremely low no-fee H&SS. Generally moderate fees. 16% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	99	99	99	95	89	84
%No-fee	30%	30%	29%	31%	31%	32%
Articles	4,079	3,979	4,058	3,477	3,050	3,035
%No-fee	24%	23%	23%	25%	27%	31%
Change	3%	-2%	17%	14%	0%	

Essentially flat since 2017 after two years of growth.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	4	963	0%	\$490
Med.: 60-149	19	1,249	31%	\$404
Small: 20-59	61	1,672	30%	\$414
Smallest: 0-19	17	195	50%	\$292

No very large journals; all large journals charge fees.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	7	\$10,500	\$1,500
\$600-\$1,399	33	1,441	\$1,246,655	\$865
\$200-\$599	21	1,250	\$428,344	\$343
\$0.20-\$199	15	393	\$38,964	\$99
No fee	31	988		
Total	101	4,079	\$1,724,463	\$423

Substantial growth (from GOA4) among \$600-\$1,399 journals.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	15	9	15	19	12
No-fee	6	6	7	7	5
Total	21	15	22	26	17

Always mostly fee, long history with continuing growth.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	54	2,517	12%	\$570
Univ/college	28	947	29%	\$224
Society/govt	14	526	70%	\$88
Traditional	4	81	60%	\$377
Miscellaneous	1	8	0%	\$104

Surprisingly, university publications mostly have fees.

**Subject**

<b>Subject</b>	<b>Jour</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	25	1,011	30%	\$441
Religion	8	539	0%	\$716
Sociology	4	433	3%	\$292
Education	11	423	9%	\$444
Language & Literature	6	207	0%	\$389
Economics	6	173	0%	\$772
Law	6	162	33%	\$70
Engineering	5	153	37%	\$342
Other Sciences	2	150	100%	\$0
Earth Sciences	1	133	100%	\$0
Ecology	4	133	87%	\$99
Political Science	4	132	0%	\$777
Zoology	3	70	0%	\$752
Computer Science	3	63	14%	\$440
Psychology	1	49	0%	\$791
Miscellany	2	39	31%	\$580
Biology	1	35	100%	\$0
Chemistry	1	34	100%	\$0
Agriculture	1	33	0%	\$277
History	2	30	40%	\$91
Arts & Architecture	1	22	100%	\$0
Media & Communications	1	19	0%	\$877
Technology	1	17	0%	\$440
Mathematics	1	15	0%	\$451
Library Science	1	4	0%	\$138

Truly different, with H&SS fields the most expensive.

## Other African Countries

### Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	41	2,585			\$107	-90%
Fee	15	1,522	59%	-4%	\$182	-89%
No-fee	26	1,063	41%	6%		
Biomed	12	1,690	65%	87%	\$119	-92%
Fee	6	1,140	67%	-8%	\$177	-91%
No-fee	6	550	33%	22%		
STEM	17	612	24%	-42%	\$111	-91%
Fee	7	301	49%	-32%	\$226	-86%
No-fee	10	311	51%	86%		
H&SS	12	283	11%	-54%	\$29	-79%
Fee	2	81	29%	23%	\$101	-83%
No-fee	10	202	71%	-7%		

Strong on biomed, mostly no-fee in STEM and H&SS.

### Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	40	41	41	40	39	36
%No-fee	63%	63%	63%	63%	62%	64%
Articles	2,585	2,675	2,783	2,529	2,761	2,443
%No-fee	41%	46%	42%	39%	34%	32%
Change	-3%	-4%	10%	-8%	13%	

Generally flat since 2015.



**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	765	0%	\$180
Large: 150-599	6	884	52%	\$87
Med.: 60-149	8	430	56%	\$107
Small: 20-59	18	424	68%	\$39
Smallest: 0-19	8	82	94%	\$6

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	49	\$24,500	\$500
\$0.20-\$199	14	1,473	\$252,851	\$172
No fee	26	1,063	\$0	\$0
Total	41	2,585	\$277,351	\$107

All under \$200 except one agriculture journal.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	1	3	7	4
No-fee	0	1	7	14	4
Total	0	2	10	21	8

Almost nothing before 2005.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	26	1,291	70%	\$49
Society/govt	8	996	15%	\$167
Open Access	5	219	0%	\$180
Miscellaneous	2	79	0%	\$103

Mostly universities.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	10	1,555	35%	\$114
Engineering	5	237	41%	\$109
Agriculture	5	152	16%	\$258
Biology	2	135	0%	\$178
Miscellany	2	72	100%	\$0
Zoology	1	61	100%	\$0
Language & Literature	2	59	0%	\$100
Chemistry	1	58	100%	\$0
Other Sciences	2	55	100%	\$0
Sociology	3	55	60%	\$42
Education	1	44	100%	\$0
Earth Sciences	1	27	0%	\$77
Ecology	2	22	73%	\$37
Law	1	17	100%	\$0
Economics	1	15	100%	\$0
Library Science	1	11	100%	\$0
Anthropology	1	10	100%	\$0

**Country Summaries****Angola**

Two no-fee journals, both university-published, 65 articles in 2019.

**Cameroon**

One university-published \$170 medical journal, 173 2019 articles.

**Dem. Rep. Congo**

One no-fee university-published medical journal, 50 articles in 2019.

**Ethiopia**

Five no-fee journals (four university, one society), 178 2019 articles.

**Ghana**

Six journals, half with \$105 fees, 84 articles in 2019.

**Kenya**

Five journals (three with fees), 273 articles in 2019.

**Libya**

Two no-fee and one fee-based, 125 articles in 2019.

**Malawi**

One no-fee university medical journal, 45 articles in 2019.

**Mali**

One \$112 fee-based journal with 20 articles in 2019.

**Nigeria**

Eight journals, half no-fee, 716 articles in 2019.

**Rwanda**

One no-fee university medical journal, 29 articles in 2019.

**Tunisia**

Five journals, one with fees, 37 articles in 2019.

**Uganda**

One society medical journal, \$180 fee, 765 articles in 2019.

**Zimbabwe**

One no-fee journal, 25 articles in 2019.

# Asia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	2,378	79,655			\$173	-83%
Fee	834	37,838	48%	-22%	\$364	-78%
No-fee	1,544	41,817	52%	35%		
Biomed	592	34,654	44%	24%	\$262	-82%
Fee	219	17,726	51%	-30%	\$511	-74%
No-fee	373	16,928	49%	83%		
STEM	678	22,402	28%	-32%	\$176	-85%
Fee	288	12,328	55%	-24%	\$321	-80%
No-fee	390	10,074	45%	65%		
H&SS	1,108	22,599	28%	18%	\$34	-75%
Fee	327	7,784	34%	47%	\$99	-83%
No-fee	781	14,815	66%	-14%		

Mostly no-fee, and most fee journals are inexpensive.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	2,172	2,285	2,254	2,014	1,761	1,523
%No-fee	64%	65%	64%	64%	63%	63%
Articles	79,655	79,487	78,722	73,295	63,709	55,351
%No-fee	52%	54%	53%	54%	52%	53%
Change	0%	1%	7%	15%	15%	

Flat since 2017, after strong growth in 2015 and 2016.

**Article volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Largest: 600+	8	5,148	33%	\$330
Large: 150-599	111	18,946	37%	\$369
Med.: 60-149	307	18,822	54%	\$173
Small: 20-59	1,239	28,865	59%	\$59
Smallest: 0-19	713	7,874	76%	\$20

**Fees and revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	20	2,456	\$4,320,646	\$1,759
\$600-\$1,399	42	4,707	\$4,376,291	\$930
\$200-\$599	119	11,307	\$3,728,987	\$330
\$0.20-\$199	653	19,368	\$1,359,904	\$70
No fee	1,544	41,817		
Total	2,378	79,655	\$13,785,828	\$173

**Starting date**

	<b>To 1999</b>	<b>2000-04</b>	<b>2005-09</b>	<b>2010-14</b>	<b>2015-19</b>
Fee	48	53	121	309	303
No-fee	59	57	220	584	624
Total	107	110	341	893	927

Rapid increase in recent years.

**Publisher category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Univ/college	1,731	40,868	54%	\$73
Open Access	319	20,465	53%	\$242
Society/govt	217	9,324	42%	\$223
Traditional	102	8,096	59%	\$454
Miscellaneous	9	902	23%	\$97

**Subject**

<b>Subject</b>	<b>Jour</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	534	32,648	50%	\$260
Education	250	5,842	57%	\$42
Economics	223	4,874	65%	\$35
Engineering	116	4,446	55%	\$172
Agriculture	112	3,474	25%	\$214
Zoology	62	2,575	29%	\$185
Language & Literature	124	2,524	65%	\$32
Technology	58	2,490	41%	\$420
Religion	134	2,305	72%	\$37
Biology	58	2,006	33%	\$291
Earth Sciences	47	1,910	55%	\$170
Computer Science	82	1,702	60%	\$32
Ecology	42	1,627	34%	\$141
Law	74	1,369	73%	\$20
Other Sciences	48	1,282	54%	\$93
Mathematics	52	1,220	64%	\$28
Sociology	59	1,165	63%	\$22
Anthropology	45	1,005	73%	\$51
Chemistry	32	842	58%	\$65
Physics	27	834	44%	\$126
Miscellany	27	708	69%	\$15
Political Science	42	678	69%	\$29
Psychology	30	531	79%	\$39
Arts & Architecture	28	462	83%	\$12
Media & Communications	25	438	50%	\$42
Library Science	21	302	91%	\$4
History	16	247	87%	\$12
Philosophy	10	149	68%	\$15

**Country of Publication**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%no-fee</b>	<b>\$/article</b>
Bangladesh	20	795	55%	\$34
China	102	10,167	41%	\$365
Hong Kong	19	845	31%	\$862
India	282	19,124	57%	\$200
Indonesia	1,552	31,870	55%	\$38
Japan	33	1,401	28%	\$935
Kyrgyzstan	3	94	100%	\$0
Malaysia	69	2,244	60%	\$98
Mongolia	4	74	57%	\$32
Nepal	19	552	100%	\$0
Pakistan	55	2,371	29%	\$187
Philippines	10	315	100%	\$0
Singapore	16	480	56%	\$419
South Korea	117	6,821	48%	\$250
Sri Lanka	15	345	100%	\$0
Taiwan	32	1,290	61%	\$274
Thailand	28	815	65%	\$60
Viet Nam	2	52	100%	\$0

More notes on Asia appear in GOA5.

# Bangladesh

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	20	795			\$34	-97%
Fee	7	357	45%	-27%	\$75	-96%
No-fee	13	438	55%	42%		
Biomed	8	344	43%	24%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	8	344	100%	275%		
STEM	9	378	48%	16%	\$51	-96%
Fee	5	284	75%	3%	\$68	-96%
No-fee	4	94	25%	-9%		
H&SS	3	73	9%	-62%	\$100	-27%
Fee	2	73	100%	328%	\$100	-83%
No-fee	1	0	0%	-100%		

Truly odd; biomed is all no-fee; H&SS is all fee. 5% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	19	20	20	19	17	17
%No-fee	63%	65%	65%	63%	65%	65%
Articles	795	761	712	952	876	740
%No-fee	55%	64%	64%	72%	70%	72%
Change	4%	7%	-25%	9%	18%	

The perturbation in 2017 is essentially one journal.



**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	32	100%	\$0
Med.: 60-149	5	399	43%	\$45
Small: 20-59	11	337	62%	\$26
Smallest: 0-19	3	27	100%	\$0

No very large journal—and no large journals after 2016.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$0.20-\$199	7	357	\$26,719	\$75
No fee	13	438	\$0	\$0
Total	20	795	\$26,719	\$34

No journal charges more than \$100.

**Starting date**

	2005-09	2010-14	2015-19
Fee	2	3	2
No-fee	7	4	2
Total	9	7	4

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	8	343	61%	\$24
Society/govt	10	296	32%	\$54
Open Access	2	156	85%	\$15

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	8	344	100%	\$0
Agriculture	4	197	15%	\$40
Zoology	2	92	12%	\$88
Other Sciences	2	80	56%	\$44
Language & Literature	1	49	0%	\$100
Anthropology	1	24	0%	\$100
Engineering	1	9	100%	\$0
Philosophy	1	0		

None of the medical journals charge fees, which is a bit unusual.

# China

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	102	10,167			\$365	-64%
Fee	37	6,030	59%	-3%	\$616	-63%
No-fee	65	4,137	41%	5%		
Biomed	35	4,573	45%	29%	\$473	-67%
Fee	14	3,283	72%	-2%	\$658	-66%
No-fee	21	1,290	28%	6%		
STEM	57	5,140	51%	23%	\$302	-75%
Fee	22	2,747	53%	-27%	\$565	-65%
No-fee	35	2,393	47%	71%		
H&SS	10	454	4%	-81%	\$0	-100%
Fee	1	0	0%	-100%		
No-fee	9	454	100%	30%		

Very little H&SS, and *none* of the H&SS journals are no-fee. 17% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	99	96	86	79	69	55
%No-fee	64%	65%	59%	58%	52%	44%
Articles	10,167	8,963	9,401	8,014	6,640	6,060
%No-fee	41%	40%	38%	42%	27%	23%
Change	13%	-5%	17%	21%	10%	

The number of active journals is growing rapidly, and article counts are mostly up most years.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	1,131	30%	\$195
Large: 150-599	19	4,289	11%	\$564
Med.: 60-149	43	3,594	67%	\$227
Small: 20-59	31	1,098	79%	\$234
Smallest: 0-19	7	55	100%	\$0

Large journals outdo largest in both articles and fee size.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	6	1,012	\$1,847,650	\$1,826
\$600-\$1,399	8	846	\$719,789	\$851
\$200-\$599	15	3,107	\$1,045,775	\$337
\$0.20-\$199	8	1,065	\$99,661	\$94
No fee	65	4,137		
Total	102	10,167	\$3,712,874	\$365

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	3	7	5	15	7
No-fee	1	0	9	15	40
Total	4	7	14	30	47

Not quite half of all journals added in the last five years.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	53	4,096	62%	\$417
Univ/college	23	2,945	31%	\$225
Open Access	17	2,101	23%	\$412
Society/govt	8	973	16%	\$492
Miscellaneous	1	52	100%	\$0

Unusual for traditional publishers to be largest group.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	32	4,371	26%	\$470
Engineering	13	1,444	30%	\$432
Technology	9	1,024	33%	\$311
Earth Sciences	8	989	80%	\$17
Agriculture	6	565	33%	\$784
Physics	4	280	22%	\$208
Zoology	3	253	54%	\$146
Biology	3	202	76%	\$523
Ecology	5	183	68%	\$290
Other Sciences	2	173	54%	\$7
Anthropology	1	128	100%	\$0
Computer Science	3	123	100%	\$0
Chemistry	3	96	100%	\$0
Religion	1	91	100%	\$0
Economics	2	82	100%	\$0
Arts & Architecture	1	66	100%	\$0
Library Science	1	31	100%	\$0
History	1	24	100%	\$0
Education	1	22	100%	\$0
Language & Literature	1	10	100%	\$0
Mathematics	1	10	100%	\$0
Political Science	1	0		

Most subjects are entirely no-fee, but most articles have fees.

# Hong Kong

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	19	845			\$862	-16%
Fee	12	582	69%	13%	\$1,252	-25%
No-fee	7	263	31%	-20%		
Biomed	9	752	89%	154%	\$929	-35%
Fee	5	533	71%	-3%	\$1,310	-33%
No-fee	4	219	29%	9%		
STEM	6	38	4%	-89%	\$248	-79%
Fee	5	28	74%	1%	\$336	-79%
No-fee	1	10	26%	-4%		
H&SS	4	55	7%	-73%	\$382	178%
Fee	2	21	38%	63%	\$1,000	70%
No-fee	2	34	62%	-19%		

Low on H&SS, and fee H&SS is unusually expensive. 5% fewer journals than in GOA4 (that is, one less journal).

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	15	15	17	17	15	13
%No-fee	40%	40%	35%	29%	33%	31%
Articles	845	607	667	1,206	1,436	716
%No-fee	31%	39%	47%	53%	34%	45%
Change	39%	-9%	-45%	-16%	101%	

Up sharply in 2019 but still well below 2016.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	209	0%	\$1,500
Large: 150-599	5	521	40%	\$733
Small: 20-59	3	58	48%	\$414
Smallest: 0-19	10	57	49%	\$167

No medium-sized journals, and the one formerly-big one is expensive.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	209	\$313,500	\$1,500
\$600-\$1,399	3	335	\$402,650	\$1,202
\$200-\$599	7	38	\$12,542	\$330
\$0.20-\$199	1	0	\$0	
No fee	7	263		
Total	19	845	\$728,692	\$862

That formerly-big journal is 43% of all revenue.

**Starting date**

	To 1999	2005-09	2010-14	2015-19
Fee	0	1	6	5
No-fee	1	1	2	3
Total	1	2	8	8

Mostly the past decade; no new journals 2000-2004.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	5	643	15%	\$1,114
Univ/college	1	108	100%	\$0
Open Access	10	84	55%	\$149
Society/govt	3	10	100%	\$0

The traditional publishers are the most expensive, with the only fees higher than \$336.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	8	744	29%	\$935
Education	1	28	100%	\$0
Anthropology	1	21	0%	\$1,000
Zoology	1	17	0%	\$336
Engineering	1	10	100%	\$0
Computer Science	2	9	0%	\$336
Biology	1	8	0%	\$336
Language & Literature	1	6	100%	\$0
Other Sciences	1	2	0%	\$336
Ecology	1	0		
Economics	1	0		

Not unusual: medicine is by far the largest subject. Unusual: anthropology has the highest average cost.



# India

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	282	19,124			\$200	-80%
Fee	85	8,305	43%	-29%	\$462	-72%
No-fee	197	10,819	57%	46%		
Biomed	228	16,756	88%	151%	\$221	-85%
Fee	68	7,381	44%	-40%	\$501	-74%
No-fee	160	9,375	56%	110%		
STEM	31	1,719	9%	-78%	\$75	-94%
Fee	12	770	45%	-38%	\$167	-90%
No-fee	19	949	55%	102%		
H&SS	23	649	3%	-86%	\$15	-89%
Fee	5	154	24%	2%	\$62	-90%
No-fee	18	495	76%	0%		

Predominantly biomed and mostly no-fee. 11% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	264	272	269	261	234	208
%No-fee	70%	70%	69%	68%	65%	63%
Articles	19,124	19,196	19,915	20,705	18,723	16,440
%No-fee	57%	56%	54%	54%	54%	55%
Change	0%	-4%	-4%	11%	14%	

Very slow decline from peak in 2016.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	4	3,155	23%	\$369
Large: 150-599	46	7,097	47%	\$313
Med.: 60-149	81	4,743	72%	\$49
Small: 20-59	140	4,049	81%	\$50
Smallest: 0-19	11	80	65%	\$136

Only the large and largest journals are mostly fee-based.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	6	919	\$1,432,544	\$1,559
\$600-\$1,399	6	1,119	\$1,074,195	\$960
\$200-\$599	28	3,500	\$1,056,015	\$302
\$0.20-\$199	45	2,767	\$270,483	\$98
No fee	197	10,819		
Total	282	19,124	\$3,833,238	\$200

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	5	23	43	13
No-fee	4	13	34	88	58
Total	5	18	57	131	71

Mostly recent, with few very-recent fee journals.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	215	15,704	58%	\$220
Traditional	13	1,002	61%	\$243
Society/govt	17	878	42%	\$55
Univ/college	35	843	87%	\$6
Miscellaneous	2	697	0%	\$126

Unusual in that universities play so little part.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	219	16,086	57%	\$216
Biology	9	670	34%	\$334
Zoology	4	607	38%	\$179
Agriculture	4	290	8%	\$24
Mathematics	3	239	89%	\$7
Language & Literature	6	212	75%	\$37
Economics	4	127	100%	\$0
Technology	5	123	80%	\$59
Physics	3	121	100%	\$0
Chemistry	2	103	57%	\$26
Other Sciences	3	93	76%	\$14
Computer Science	3	65	100%	\$0
Law	2	63	100%	\$0
Education	2	47	60%	\$20
Miscellany	2	47	0%	\$8
Sociology	3	47	100%	\$0
Political Science	1	45	100%	\$0
Ecology	1	44	100%	\$0
Philosophy	1	36	0%	\$10
Engineering	3	34	82%	\$9
Library Science	1	25	100%	\$0
Psychology	1	0		

Medicine dominates, with biology more expensive.

# Indonesia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	1,552	31,870			\$38	-96%
Fee	577	14,398	45%	-26%	\$83	-95%
No-fee	975	17,472	55%	41%		
Biomed	173	4,126	13%	-63%	\$47	-97%
Fee	81	2,180	53%	-28%	\$88	-95%
No-fee	92	1,946	47%	77%		
STEM	447	9,851	31%	-25%	\$61	-95%
Fee	206	5,711	58%	-20%	\$105	-94%
No-fee	241	4,140	42%	54%		
H&SS	932	17,893	56%	134%	\$23	-83%
Fee	290	6,507	36%	56%	\$63	-89%
No-fee	642	11,386	64%	-17%		

Mostly H&SS, mostly no-fee, very low fees—and most of the OA journals in Asia. 16% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	1,399	1,490	1,479	1,290	1,105	939
%No-fee	62%	62%	62%	62%	62%	63%
Articles	31,870	33,021	32,173	28,101	23,791	20,267
%No-fee	55%	57%	58%	59%	58%	60%
Change	-3%	3%	14%	18%	17%	

Leveling off after strong growth 2015-2017.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	653	100%	\$0
Large: 150-599	15	2,440	52%	\$101
Med.: 60-149	84	3,820	39%	\$60
Small: 20-59	863	18,195	50%	\$35
Smallest: 0-19	589	6,762	74%	\$13

Mostly small journals.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	21	1,320	\$397,987	\$302
\$0.20-\$199	556	13,078	\$802,174	\$61
No fee	975	17,472	\$0	\$0
Total	1,552	31,870	\$1,200,161	\$38

Four journals charge more than \$300, with \$550 the highest.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	18	28	62	215	254
No-fee	23	22	121	367	442
Total	41	50	183	582	696

Predominantly 2010-2019, and speeding up recently.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	1,479	30,179	55%	\$37
Society/govt	55	1,097	56%	\$35
Open Access	15	538	43%	\$59
Traditional	2	41	32%	\$39
Miscellaneous	1	15	100%	\$0

Nearly 95% of articles are university-published.

**Subject**

<b>Subject</b>	<b>Jour</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Education	217	5,010	56%	\$22
Economics	192	3,871	62%	\$28
Medicine	140	3,562	50%	\$45
Religion	123	1,860	78%	\$17
Language & Literature	104	1,797	62%	\$22
Agriculture	84	1,751	28%	\$48
Engineering	72	1,408	65%	\$14
Computer Science	64	1,344	52%	\$26
Law	68	1,270	71%	\$21
Ecology	23	1,107	18%	\$138
Zoology	44	1,049	31%	\$59
Sociology	46	1,011	57%	\$25
Mathematics	42	844	51%	\$38
Anthropology	34	665	70%	\$22
Technology	30	657	54%	\$150
Chemistry	24	597	48%	\$87
Biology	33	564	31%	\$57
Political Science	33	505	62%	\$27
Earth Sciences	25	497	39%	\$75
Psychology	26	458	86%	\$7
Media & Communications	22	374	51%	\$42
Other Sciences	24	356	52%	\$31
Arts & Architecture	24	349	77%	\$16
Miscellany	16	336	48%	\$31
Physics	15	241	24%	\$47
History	12	164	81%	\$18
Library Science	10	140	86%	\$5
Philosophy	5	83	100%	\$0

Unusual: medicine isn't the biggest or next-biggest subject.

# Japan

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	33	1,401			\$935	-9%
Fee	15	1,014	72%	18%	\$1,291	-23%
No-fee	18	387	28%	-29%		
Biomed	8	397	28%	-19%	\$998	-31%
Fee	6	329	83%	13%	\$1,204	-39%
No-fee	2	68	17%	-36%		
STEM	12	756	54%	31%	\$1,100	-7%
Fee	8	634	84%	15%	\$1,312	-20%
No-fee	4	122	16%	-41%		
H&SS	13	248	18%	-26%	\$329	140%
Fee	1	51	21%	-12%	\$1,600	172%
No-fee	12	197	79%	4%		

Strong on STEM. The single fee-based H&SS journal is expensive. 27% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	30	32	32	30	27	23
%No-fee	53%	56%	56%	57%	52%	48%
Articles	1,401	1,509	1,351	1,065	1,071	990
%No-fee	28%	24%	31%	33%	29%	26%
Change	-7%	12%	27%	-1%	8%	

Slight slowdown after two strong years.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	543	0%	\$927
Med.: 60-149	9	543	35%	\$1,239
Small: 20-59	12	252	58%	\$510
Smallest: 0-19	9	63	83%	\$79

No very large journals, few large ones.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	4	228	\$577,537	\$2,533
\$600-\$1,399	8	704	\$720,646	\$1,024
\$200-\$599	1	11	\$4,950	\$450
\$0.20-\$199	2	71	\$6,210	\$87
No fee	18	387		
Total	33	1,401	\$1,309,343	\$935

One \$3,790 journal accounts for most of the \$1,400+ revenue.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	2	2	2	3	6
No-fee	3	1	1	10	3
Total	5	3	3	13	9

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Society/govt	14	484	21%	\$870
Univ/college	5	477	29%	\$650
Traditional	4	355	18%	\$1,629
Open Access	9	85	100%	\$0
Miscellaneous	1	0		

Unusual, with most journals coming from societies or government.



**Subject**

<b>Subject</b>	<b>Jour</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Technology	4	512	13%	\$1,209
Medicine	6	328	21%	\$993
Earth Sciences	4	146	3%	\$1,429
Education	3	98	48%	\$833
Anthropology	2	71	100%	\$0
Biology	2	69	0%	\$1,019
Ecology	1	45	0%	\$85
Engineering	1	28	100%	\$0
Physics	1	25	100%	\$0
Religion	1	22	100%	\$0
Arts & Architecture	1	21	100%	\$0
Psychology	1	16	100%	\$0
Library Science	1	9	100%	\$0
Language & Literature	1	6	100%	\$0
Media & Communications	1	5	100%	\$0
Other Sciences	1	0		
Philosophy	1	0		
Political Science	1	0		

Unusually varied for a relatively small group of journals.

# Malaysia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	69	2,244			\$98	-90%
Fee	13	891	40%	-35%	\$246	-85%
No-fee	56	1,353	60%	55%		
Biomed	9	352	16%	-55%	\$79	-95%
Fee	4	239	68%	-7%	\$116	-94%
No-fee	5	113	32%	21%		
STEM	34	1,200	53%	30%	\$100	-92%
Fee	4	413	34%	-53%	\$290	-82%
No-fee	30	787	66%	140%		
H&SS	26	692	31%	29%	\$104	-24%
Fee	5	239	35%	48%	\$301	-49%
No-fee	21	453	65%	-15%		

Mostly no-fee, mostly STEM, most fees are low. 11% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	66	68	68	48	47	45
%No-fee	80%	81%	81%	75%	77%	76%
Articles	2,244	2,379	1,941	1,406	1,113	901
%No-fee	60%	54%	59%	55%	59%	59%
Change	-6%	23%	38%	26%	24%	

Slowdown in 2019 after four strong growth years.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	497	32%	\$159
Med.: 60-149	12	731	48%	\$156
Small: 20-59	27	706	75%	\$38
Smallest: 0-19	27	310	100%	\$0

The common correlation, albeit at low fees and with no largest.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	9	658	\$199,540	\$303
\$0.20-\$199	4	233	\$19,973	\$86
No fee	56	1,353	\$0	\$0
Total	69	2,244	\$219,513	\$98

Only two journals over \$300 and none over \$410.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	3	4	3	2
No-fee	3	2	11	17	23
Total	4	5	15	20	25

Most journals recent, and most of those no-fee.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	41	1,515	57%	\$105
Open Access	22	531	75%	\$78
Society/govt	6	198	48%	\$98

Mostly universities.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Engineering	12	737	59%	\$112
Medicine	7	267	33%	\$79
Language & Literature	4	159	40%	\$181
Religion	3	143	0%	\$302
Agriculture	2	132	15%	\$284
Miscellany	3	93	100%	\$0
Biology	2	85	29%	\$78
Economics	3	80	100%	\$0
Technology	3	78	100%	\$0
Ecology	5	76	100%	\$0
Education	4	76	100%	\$0
Earth Sciences	5	54	100%	\$0
Physics	1	48	100%	\$0
Anthropology	2	44	100%	\$0
Sociology	3	44	100%	\$0
History	2	41	100%	\$0
Zoology	2	28	100%	\$0
Other Sciences	2	22	100%	\$0
Computer Science	1	13	100%	\$0
Library Science	1	12	100%	\$0
Mathematics	1	12	100%	\$0
Arts & Architecture	1	0		

Only six subjects have any fee-based journals—and only religion has fees for all of its OA journals.

# Nepal

All no-fee journals, so fewer and different tables.

## Key facts

	Journals	Articles	Art%	Rel%
All	19	552		
Biomed	12	458	83%	137%
STEM	5	83	15%	-63%
H&SS	2	11	2%	-92%

Predominantly biomed. 27% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	16	18	17	17	15	13
Articles	552	597	478	492	358	344
Change	-8%	25%	-3%	37%	4%	

## Article volume

	Journals	Articles	Percent	Art/Jrn
Med.: 60-149	3	179	32%	60
Small: 20-59	12	351	64%	29
Smallest: 0-19	4	22	4%	6

Only one journal has had more than 80 articles in a year.

## Starting date

	2005-09	2010-14	2015-19
Journals	7	7	5

**Publisher category**

Category	Journals	Articles	Percent	Art/Jrn
Society/govt	9	249	23%	28
Univ/college	8	222	20%	28
Miscellaneous	1	49	4%	49
Open Access	1	32	3%	32

**Subject**

Subject	Journals	Articles	Art/Jrn
Medicine	12	458	38
Agriculture	2	28	14
Other Sciences	1	25	25
Ecology	1	19	19
Mathematics	1	11	11
Sociology	1	11	11
Education	1	0	0

More than four of every five articles are in medicine.

# Pakistan

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	55	2,371			\$187	-82%
Fee	19	1,684	71%	16%	\$263	-84%
No-fee	36	687	29%	-25%		
Biomed	13	1,125	47%	36%	\$315	-78%
Fee	7	1,010	90%	22%	\$351	-82%
No-fee	6	115	10%	-62%		
STEM	14	582	25%	-40%	\$115	-90%
Fee	4	399	69%	-6%	\$168	-90%
No-fee	10	183	31%	15%		
H&SS	28	664	28%	17%	\$32	-77%
Fee	8	275	41%	77%	\$77	-87%
No-fee	20	389	59%	-24%		

Low no-fee percentages, but most fees are low. 12% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	48	53	53	49	43	34
%No-fee	60%	64%	64%	61%	58%	56%
Articles	2,371	2,190	2,064	1,858	1,563	1,300
%No-fee	29%	35%	36%	34%	36%	35%
Change	8%	6%	11%	19%	20%	

Growing every year, but rate of growth has slowed.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	817	0%	\$419
Med.: 60-149	12	788	26%	\$93
Small: 20-59	29	664	58%	\$41
Smallest: 0-19	11	102	100%	\$0

Classic correlation. No very large; all large journals charge fees.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	324	\$259,200	\$800
\$200-\$599	5	439	\$117,600	\$268
\$0.20-\$199	13	921	\$65,957	\$72
No fee	36	687	\$0	\$0
Total	55	2,371	\$442,757	\$187

Most revenue is from the one moderately expensive journal.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	3	5	6	4
No-fee	2	0	8	10	16
Total	3	3	13	16	20

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	39	1,304	35%	\$250
Society/govt	10	875	22%	\$126
Open Access	6	192	21%	\$39



**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	10	938	11%	\$322
Economics	10	290	48%	\$26
Religion	6	189	49%	\$58
Biology	3	187	4%	\$279
Education	5	127	83%	\$17
Zoology	1	120	0%	\$300
Agriculture	2	111	0%	\$200
Engineering	1	90	0%	\$50
Earth Sciences	2	78	0%	\$53
Mathematics	2	68	100%	\$0
Computer Science	2	41	100%	\$0
Sociology	3	35	100%	\$0
Ecology	1	25	100%	\$0
Chemistry	1	23	100%	\$0
Other Sciences	1	13	100%	\$0
Technology	1	13	100%	\$0
Political Science	1	11	100%	\$0
Library Science	1	6	0%	\$100
Psychology	1	6	100%	\$0
Miscellany	1	0		

Medicine most prominent, which is fairly common.

# Philippines

All no-fee journals.

## Key facts

	Journals	Articles	Art%	Rel%
All	10	315		
Biomed	3	90	29%	-18%
STEM	1	11	3%	-91%
H&SS	6	214	68%	184%

Mostly H&SS, almost no STEM. 11% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	10	10	10	10	9	8
Articles	315	262	319	294	400	279
Change	20%	-18%	9%	-27%	43%	

## Article volume

	Journals	Articles	Percent	Art/Jrn
Large: 150-599	1	146	28%	146
Med.: 60-149	2	56	11%	28
Small: 20-59	4	79	15%	20
Smallest: 0-19	3	34	7%	11

No currently-large journals.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Journals	1	2	1	4	2

The surge, such as it was, was 2010-2014.

**Publisher category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	7	225	71%	32
Society/govt	3	90	29%	30

**Subject**

Subject	Journals	Articles	Art/Jrn
Miscellany	3	174	58
Medicine	3	90	30
Philosophy	1	18	18
Language & Literature	1	15	15
Other Sciences	1	11	11
Sociology	1	7	7

This is the first time since 2016 that there were at least ten *DOAJ*-listed journals from the Philippines.

# Singapore

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	16	480			\$419	-59%
Fee	5	210	44%	-28%	\$957	-43%
No-fee	11	270	56%	45%		
Biomed	4	199	41%	19%	\$887	-38%
Fee	3	184	92%	26%	\$959	-51%
No-fee	1	15	8%	-72%		
STEM	6	151	31%	-23%	\$162	-86%
Fee	2	26	17%	-76%	\$943	-42%
No-fee	4	125	83%	204%		
H&SS	6	130	27%	13%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	6	130	100%	30%		

Mostly no-fee except for biomed. 23% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	16	16	13	11	10	8
%No-fee	69%	69%	62%	73%	70%	75%
Articles	480	412	385	323	341	310
%No-fee	56%	61%	45%	54%	55%	44%
Change	17%	7%	19%	-5%	10%	

**Article volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	2	168	0%	\$908
Small: 20-59	11	286	93%	\$73
Smallest: 0-19	3	26	15%	\$1,058

No large journals, and the smallest journals average most expensive.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	16	\$24,000	\$1,500
\$600-\$1,399	3	188	\$173,500	\$923
\$200-\$599	1	6	\$3,519	\$586
No fee	11	270	\$0	\$0
Total	16	480	\$201,019	\$419

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	0	0	2	3
No-fee	1	1	0	3	6
Total	1	1	0	5	9

Mostly recent.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	8	320	36%	\$617
Open Access	4	82	93%	\$43
Univ/college	3	54	100%	\$0
Miscellaneous	1	24	100%	\$0

Surprising strength of traditional publishers (mostly with fees).

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	3	183	8%	\$833
Physics	2	76	74%	\$276
Education	2	64	100%	\$0
Computer Science	2	52	100%	\$0
Arts & Architecture	1	26	100%	\$0
Political Science	1	24	100%	\$0
Mathematics	1	17	100%	\$0
Biology	1	16	0%	\$1,500
Language & Literature	1	12	100%	\$0
Technology	1	6	0%	\$586
Library Science	1	4	100%	\$0

# South Korea

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	117	6,821			\$250	-76%
Fee	50	3,544	52%	-15%	\$482	-71%
No-fee	67	3,277	48%	24%		
Biomed	69	4,339	64%	82%	\$259	-82%
Fee	26	2,313	53%	-27%	\$486	-75%
No-fee	43	2,026	47%	75%		
STEM	21	1,451	21%	-48%	\$315	-73%
Fee	15	913	63%	-13%	\$500	-69%
No-fee	6	538	37%	36%		
H&SS	27	1,031	15%	-37%	\$124	-10%
Fee	9	318	31%	32%	\$401	-32%
No-fee	18	713	69%	-10%		

Mostly biomed, higher no-fee percentage than average, relatively low-cost. A very high 33% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	115	115	112	105	96	90
%No-fee	57%	57%	56%	56%	58%	60%
Articles	6,821	6,764	6,345	6,307	5,157	5,021
%No-fee	48%	48%	44%	45%	48%	46%
Change	1%	7%	1%	22%	3%	

Growth every year, albeit not always *strong* growth.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	11	1,928	45%	\$365
Med.: 60-149	37	2,851	43%	\$225
Small: 20-59	59	1,918	56%	\$182
Smallest: 0-19	10	124	81%	\$119

No largest journals.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	2	72	\$125,415	\$1,742
\$600-\$1,399	11	990	\$791,491	\$799
\$200-\$599	28	1,897	\$754,176	\$398
\$0.20-\$199	9	585	\$36,101	\$62
No fee	67	3,277		
Total	117	6,821	\$1,707,184	\$250

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	20	4	10	11	5
No-fee	14	7	7	31	8
Total	34	11	17	42	13

Most no-fee journals started 2010-2014.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Society/govt	65	3,748	47%	\$209
Traditional	12	1,105	80%	\$107
Univ/college	24	1,025	41%	\$269
Open Access	15	888	19%	\$599
Miscellaneous	1	55	100%	\$0

Another case where societies do most of the OA publishing.



**Subject**

<b>Subject</b>	<b>Jour</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	67	4,200	48%	\$251
Engineering	6	583	89%	\$55
Economics	9	400	73%	\$139
Zoology	4	387	0%	\$564
Agriculture	4	301	0%	\$470
Language & Literature	3	250	100%	\$0
Education	5	165	55%	\$190
Biology	2	139	0%	\$483
Earth Sciences	2	84	0%	\$394
Psychology	1	51	0%	\$343
Anthropology	3	44	34%	\$316
Physics	1	43	0%	\$343
Library Science	2	40	100%	\$0
Media & Communications	1	38	0%	\$70
Computer Science	2	31	0%	\$550
Political Science	2	25	36%	\$256
History	1	18	100%	\$0
Chemistry	1	17	100%	\$0
Ecology	1	5	100%	\$0

Nearly two-thirds medicine.

# Sri Lanka

All no-fee journals.

## Key facts

	Journals	Articles	Art%	Rel%
All	15	345		
Biomed	6	218	63%	81%
STEM	6	94	27%	-34%
H&SS	3	33	10%	-60%

Heavy on biomed, very little H&SS. 15% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	13	15	13	15	14	13
Articles	345	373	402	304	357	336
Change	-8%	-7%	32%	-15%	6%	

Volatile but within a fairly narrow range.

## Article volume

	Journals	Articles	Percent	Art/Jrn
Med.: 60-149	4	192	56%	48
Small: 20-59	6	116	34%	19
Smallest: 0-19	5	37	11%	7

No large journals; the largest in 2019 had 86 articles.

## Starting date

	2000-04	2005-09	2010-14	2015-19
Journals	1	6	7	1

**Publisher category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	11	290	84%	26
Society/govt	3	45	13%	15
Miscellaneous	1	10	3%	10

Another country where universities publish most OA.

**Subject**

Subject	Journals	Articles	Art/Jrn
Medicine	6	218	36
Agriculture	2	56	28
Ecology	1	22	22
Other Sciences	1	13	13
Economics	1	12	12
Law	1	11	11
Sociology	1	10	10
Computer Science	2	3	2

In this case, “mostly biomed” means “mostly medicine.”

# Taiwan

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	32	1,290			\$274	-73%
Fee	7	507	39%	-36%	\$696	-58%
No-fee	25	783	61%	56%		
Biomed	8	677	52%	50%	\$347	-76%
Fee	3	210	31%	-58%	\$1,120	-43%
No-fee	5	467	69%	159%		
STEM	9	370	29%	-30%	\$304	-74%
Fee	2	242	65%	-10%	\$465	-71%
No-fee	7	128	35%	27%		
H&SS	15	243	19%	-21%	\$22	-84%
Fee	2	55	23%	-3%	\$97	-83%
No-fee	13	188	77%	1%		

Mostly no-fee, stronger in biomed. 3% *fewer* journals than in GOA4—that is, one less.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	30	31	31	32	31	29
%No-fee	77%	77%	77%	78%	77%	76%
Articles	1,290	1,312	1,364	1,242	1,073	867
%No-fee	61%	63%	55%	63%	65%	68%
Change	-2%	-4%	10%	16%	24%	

Down just a bit after strong 2015-2017.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	486	63%	\$180
Med.: 60-149	4	327	20%	\$794
Small: 20-59	12	354	89%	\$11
Smallest: 0-19	13	123	80%	\$15

Unusual, with most fees and highest costs in medium-sized journals.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	2	201	\$234,820	\$1,168
\$200-\$599	2	242	\$112,482	\$465
\$0.20-\$199	3	64	\$5,631	\$88
No fee	25	783		
Total	32	1,290	\$352,933	\$274

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	0	4	1	1
No-fee	5	6	4	5	5
Total	6	6	8	6	6

Unusually even distribution.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	5	534	79%	\$210
Univ/college	15	409	40%	\$228
Society/govt	10	299	49%	\$494
Open Access	2	48	100%	\$0

Traditional publishers do more—but societies charge more.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	7	620	66%	\$379
Other Sciences	1	180	0%	\$487
Education	7	126	56%	\$42
Technology	4	77	100%	\$0
Earth Sciences	1	62	0%	\$400
Biology	1	57	100%	\$0
Political Science	1	52	100%	\$0
Library Science	3	35	100%	\$0
Engineering	2	32	100%	\$0
Media & Communications	1	21	100%	\$0
Mathematics	1	19	100%	\$0
Language & Literature	1	8	100%	\$0
Law	2	1	100%	\$0

# Thailand

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	28	815			\$60	-94%
Fee	6	284	35%	-43%	\$173	-90%
No-fee	22	531	65%	68%		
Biomed	4	145	18%	-49%	\$22	-98%
Fee	1	32	22%	-70%	\$100	-95%
No-fee	3	113	78%	193%		
STEM	17	531	65%	59%	\$63	-95%
Fee	3	161	30%	-58%	\$209	-87%
No-fee	14	370	70%	155%		
H&SS	7	139	17%	-29%	\$87	-37%
Fee	2	91	65%	180%	\$133	-77%
No-fee	5	48	35%	-55%		

Mostly STEM, mostly no-fee—except that H&SS is mostly fee! 4% more journals than in GOA4 (that is, one more).

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	23	25	25	24	23	22
%No-fee	74%	76%	76%	75%	74%	73%
Articles	815	897	921	831	723	703
%No-fee	65%	68%	70%	70%	65%	69%
Change	-9%	-3%	11%	15%	3%	

Slow decline after strong 2016-2017. Small shift toward fees.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	150	100%	\$0
Med.: 60-149	7	342	37%	\$115
Small: 20-59	13	280	80%	\$28
Smallest: 0-19	7	43	72%	\$45

The large journal's no-fee; nearly all fees are in medium-sized journals.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	2	89	\$24,400	\$274
\$0.20-\$199	4	195	\$24,594	\$126
No fee	22	531		
Total	28	815	\$48,994	\$60

The priciest journals have \$300 and \$200 fees.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	1	3	1	0
No-fee	1	2	2	11	6
Total	2	3	5	12	6

For whatever reasons, almost all new journals since 2010 are no-fee.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	23	709	69%	\$41
Society/govt	4	82	20%	\$241
Open Access	1	24	100%	\$0

Universities publish the most, societies charge the most.



**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Other Sciences	8	314	70%	\$44
Medicine	4	145	78%	\$22
Ecology	2	101	35%	\$196
Education	2	79	0%	\$129
Engineering	3	51	100%	\$0
Agriculture	2	43	100%	\$0
Law	1	24	100%	\$0
Zoology	1	22	100%	\$0
Political Science	1	16	100%	\$0
Philosophy	1	12	0%	\$161
Anthropology	1	8	100%	\$0
Sociology	1	0		
Technology	1	0		

Education and philosophy are a bit unusual in being 100% fee.

## Other Asian Countries

Three countries with nine journals, including one fee journal.

### Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	9	220			\$11	-99%
Fee	1	32	15%	-76%	\$75	-96%
No-fee	8	188	85%	120%		
Biomed	3	103	47%	34%	\$23	-98%
Fee	1	32	31%	-58%	\$75	-96%
No-fee	2	71	69%	159%		
STEM	3	47	21%	-48%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	3	47	100%	267%		
H&SS	3	70	32%	33%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	3	70	100%	30%		

Even biomed is two-thirds no-fee; the others are entirely no-fee.

### Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	9	9	9	7	6	6
%No-fee	89%	89%	89%	86%	83%	100%
Articles	220	244	284	195	87	77
%No-fee	85%	83%	85%	84%	84%	100%
Change	-10%	-14%	46%	124%	13%	

Guess when the single fee-based journal started publishing?

**Article volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	2	89	100%	\$0
Small: 20-59	6	122	74%	\$20
Smallest: 0-19	1	9	100%	\$0

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$0.20-\$199	1	32	\$2,400	\$75
No fee	8	188		
Total	9	220	\$2,400	\$11

**Starting date**

	2005-09	2010-14	2015-19
Fee	0	0	1
No-fee	1	3	4
Total	1	3	5

None of these are old, and the fee journal is quite recent.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	9	220	85%	\$11

**Subject**

Subject	Journals	Articles	%No-fee	\$/article
Medicine	2	94	66%	\$26
Miscellany	2	58	100%	\$0
Computer Science	1	21	100%	\$0
Engineering	1	20	100%	\$0
Economics	1	12	100%	\$0
Biology	1	9	100%	\$0
Chemistry	1	6	100%	\$0

## **Country Summaries**

### **Kyrgyzstan**

Three no-fee journals (one in each segment), 94 articles in 2019.

### **Mongolia**

Four journals including one \$75 medical journal; 74 2019 articles.

### **Viet Nam**

Two no-fee journals, 52 articles in 2019.

# Eastern Europe

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	2,417	92,234			\$89	-91%
Fee	481	29,635	32%	-47%	\$278	-83%
No-fee	1,936	62,599	68%	75%		
Biomed	374	19,589	21%	-39%	\$95	-93%
Fee	93	6,173	32%	-57%	\$301	-85%
No-fee	281	13,416	68%	157%		
STEM	808	31,854	35%	-16%	\$143	-88%
Fee	190	11,723	37%	-49%	\$388	-76%
No-fee	618	20,131	63%	132%		
H&SS	1,235	40,791	44%	85%	\$45	-67%
Fee	198	11,739	29%	23%	\$155	-74%
No-fee	1,037	29,052	71%	-7%		

Two-thirds no-fee, heavy on H&SS, most fees modest.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	2,200	2,299	2,258	2,186	2,044	1,858
%No-fee	79%	80%	80%	81%	81%	81%
Articles	92,234	94,673	94,490	93,221	90,647	82,112
%No-fee	68%	69%	71%	71%	72%	72%
Change	-3%	0%	1%	3%	10%	

Basically flat since 2016.

### Article volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	11	4,523	52%	\$16
Large: 150-599	128	17,413	46%	\$164
Med.: 60-149	598	35,681	64%	\$109
Small: 20-59	1,261	31,151	84%	\$43
Smallest: 0-19	419	3,466	93%	\$18

Only large (not largest) journals are mostly fee-based, and that barely.

### Fees and revenue

	Journals	Articles	Revenue	\$/article
\$1,400+	6	314	\$588,318	\$1,874
\$600-\$1,399	47	4,144	\$3,756,686	\$907
\$200-\$599	133	7,791	\$2,719,737	\$349
\$0.20-\$199	295	17,386	\$1,159,236	\$67
No fee	1,936	62,599		
Total	2,417	92,234	\$8,223,977	\$89

### Starting date

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	14	35	109	181	142
No-fee	105	168	457	781	425
Total	119	203	566	962	567

New journals still frequent, but not as many as in 2010-2014.

### Publisher category

Category	Journals	Articles	%No-fee	\$/article
Univ/college	1,510	58,320	72%	\$45
Open Access	599	20,250	55%	\$219
Society/govt	215	8,825	66%	\$67
Miscellaneous	40	2,640	82%	\$41
Traditional	53	2,199	57%	\$223

Universities dominate OA publishing

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	311	15,811	71%	\$96
Economics	279	10,197	49%	\$97
Engineering	141	7,187	55%	\$127
Agriculture	124	6,083	51%	\$150
Language & Literature	159	4,627	91%	\$23
Anthropology	112	3,908	52%	\$60
Biology	63	3,778	56%	\$89
Sociology	98	3,603	70%	\$33
Political Science	104	3,568	92%	\$4
Computer Science	75	2,743	81%	\$48
Education	89	2,639	64%	\$37
Earth Sciences	109	2,598	86%	\$82
Technology	66	2,579	78%	\$47
History	69	2,404	81%	\$33
Ecology	72	2,300	52%	\$192
Mathematics	74	2,170	78%	\$183
Law	69	2,126	93%	\$5
Zoology	46	1,906	46%	\$322
Chemistry	43	1,776	61%	\$286
Philosophy	54	1,705	94%	\$9
Arts & Architecture	54	1,671	83%	\$29
Other Sciences	31	1,603	60%	\$105
Miscellany	38	1,379	73%	\$33
Psychology	37	1,311	65%	\$38
Physics	27	909	80%	\$136
Religion	26	716	90%	\$32
Library Science	22	503	100%	\$0
Media & Communications	25	434	100%	\$0

**Country of publication**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%no-fee</b>	<b>\$/article</b>
Albania	5	96	43%	\$85
Armenia	2	37	32%	\$270
Azerbaijan	2	64	100%	\$0
Belarus	11	656	84%	\$24
Bosnia and Herzegovina	23	778	79%	\$105
Bulgaria	60	2,719	37%	\$354
Croatia	121	3,388	86%	\$66
Cyprus	4	163	63%	\$147
Czech Republic	110	2,988	67%	\$123
Estonia	23	694	59%	\$161
Georgia	3	65	100%	\$0
Hungary	34	1,050	92%	\$73
Kazakhstan	4	150	69%	\$83
Latvia	11	458	40%	\$356
Lithuania	74	2,101	63%	\$226
Moldova	30	1,099	64%	\$16
Montenegro	9	442	86%	\$29
North Macedonia	11	904	96%	\$2
Poland	608	18,903	63%	\$188
Romania	345	10,059	65%	\$45
Russia	371	22,906	87%	\$21
Serbia	175	5,055	70%	\$53
Slovakia	46	1,173	78%	\$49
Slovenia	53	1,441	83%	\$71
Turkmenistan	1	9	100%	\$0
Ukraine	281	14,836	42%	\$51



# Belarus

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	11	656			\$24	-98%
Fee	1	103	16%	-74%	\$150	-91%
No-fee	10	553	84%	117%		
Biomed	1	102	16%	-56%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	1	102	100%	275%		
STEM	7	332	51%	23%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	7	332	100%	267%		
H&SS	3	222	34%	41%	\$70	-49%
Fee	1	103	46%	99%	\$150	-74%
No-fee	2	119	54%	-30%		

Light in biomed. One fee journal, in H&SS. 22% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	11	11	11	9	9	7
%No-fee	91%	91%	91%	100%	100%	100%
Articles	656	667	615	489	512	438
%No-fee	84%	86%	94%	100%	100%	100%
Change	-2%	8%	26%	-4%	17%	

**Article volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	6	462	78%	\$33
Small: 20-59	5	194	100%	\$0

No large or very small journals.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$0.20-\$199	1	103	\$15,450	\$150
No fee	10	553		
Total	11	656	\$15,450	\$24

**Starting date**

	2000-04	2005-09	2010-14	2015-19
Fee	0	0	0	1
No-fee	1	2	5	2
Total	1	2	5	3

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	8	476	78%	\$32
Open Access	1	102	100%	\$0
Miscellaneous	1	55	100%	\$0
Society/govt	1	23	100%	\$0

**Subject**

Subject	Journals	Articles	%No-fee	\$/article
Engineering	3	173	100%	\$0
Economics	2	158	35%	\$98
Medicine	1	102	100%	\$0
Computer Science	3	97	100%	\$0
History	1	64	100%	\$0
Other Sciences	1	62	100%	\$0

# Bosnia and Herzegovina

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	23	778			\$105	-90%
Fee	5	162	21%	-66%	\$505	-70%
No-fee	18	616	79%	104%		
Biomed	9	258	33%	-5%	\$313	-78%
Fee	4	138	53%	-27%	\$585	-70%
No-fee	5	120	47%	75%		
STEM	5	255	33%	-20%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	5	255	100%	267%		
H&SS	9	265	34%	42%	\$4	-97%
Fee	1	24	9%	-61%	\$45	-92%
No-fee	8	241	91%	19%		

Mostly no-fee, with no STEM fees at all. 15% more journals than GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	23	23	23	22	21	20
%No-fee	78%	78%	78%	77%	76%	80%
Articles	778	587	577	490	484	486
%No-fee	79%	77%	77%	72%	71%	70%
Change	33%	2%	18%	1%	0%	

No down years, and big gain in 2019.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	203	100%	\$0
Med.: 60-149	3	198	73%	\$76
Small: 20-59	15	327	67%	\$204
Smallest: 0-19	4	50	100%	\$0

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	52	\$57,940	\$1,114
\$200-\$599	2	80	\$22,397	\$280
\$0.20-\$199	2	30	\$1,411	\$47
No fee	18	616		
Total	23	778	\$81,747	\$105

One moderately expensive journal, four less expensive.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	2	0	2	1
No-fee	1	1	4	8	4
Total	1	3	4	10	5

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	17	590	95%	\$13
Society/govt	5	164	35%	\$445
Open Access	1	24	0%	\$45

Another case where universities publish more and societies charge more.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	8	240	43%	\$336
Engineering	3	229	100%	\$0
Language & Literature	2	93	100%	\$0
History	1	69	100%	\$0
Economics	3	64	63%	\$17
Zoology	1	20	100%	\$0
Biology	1	18	100%	\$0
Law	1	16	100%	\$0
Anthropology	1	15	100%	\$0
Miscellany	1	8	100%	\$0
Earth Sciences	1	6	100%	\$0

The only fees are in medicine and economics.

# Bulgaria

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	60	2,719			\$354	-65%
Fee	28	1,720	63%	3%	\$560	-67%
No-fee	32	999	37%	-5%		
Biomed	14	639	24%	-33%	\$185	-87%
Fee	8	534	84%	14%	\$222	-89%
No-fee	6	105	16%	-38%		
STEM	32	1,733	64%	55%	\$486	-59%
Fee	17	1,163	67%	-8%	\$725	-56%
No-fee	15	570	33%	21%		
H&SS	14	347	13%	-47%	\$4	-97%
Fee	3	23	7%	-72%	\$56	-90%
No-fee	11	324	93%	22%		

Mostly STEM, slightly more fee-based than average. 15% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	56	58	57	50	43	35
%No-fee	54%	53%	53%	54%	56%	54%
Articles	2,719	2,512	2,589	2,629	2,058	2,025
%No-fee	37%	35%	35%	31%	45%	32%
Change	8%	-3%	-2%	28%	2%	

At the top of a narrow range over the past four years.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	912	23%	\$502
Med.: 60-149	13	852	23%	\$448
Small: 20-59	31	822	59%	\$134
Smallest: 0-19	13	133	80%	\$96

The common correlation, but with no largest journals.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	6	916	\$757,506	\$827
\$200-\$599	12	439	\$164,514	\$375
\$0.20-\$199	10	365	\$40,607	\$111
No fee	32	999		
Total	60	2,719	\$962,627	\$354

Only two journals top \$1,000, and that barely (\$1,008).

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	1	4	11	11
No-fee	0	3	5	12	12
Total	1	4	9	23	23

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	31	1,645	12%	\$565
Univ/college	19	682	100%	\$0
Society/govt	9	390	30%	\$83
Miscellaneous	1	2	0%	\$469

Predominantly open access publishers, which is unusual.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Zoology	11	883	10%	\$637
Biology	9	362	17%	\$242
Agriculture	4	324	26%	\$651
Medicine	5	277	16%	\$112
Other Sciences	2	249	86%	\$47
Ecology	7	168	48%	\$335
Anthropology	3	88	74%	\$15
Miscellany	3	64	100%	\$0
Education	2	52	100%	\$0
Technology	2	48	100%	\$0
History	1	42	100%	\$0
Philosophy	2	41	100%	\$0
Computer Science	3	39	85%	\$9
Sociology	1	29	100%	\$0
Language & Literature	1	16	100%	\$0
Economics	1	15	100%	\$0
Earth Sciences	1	12	100%	\$0
Physics	1	8	100%	\$0
Mathematics	1	2	0%	\$469

Distinctive: zoology with more than twice the articles of any other.



# Croatia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	121	3,388			\$66	-94%
Fee	7	489	14%	-76%	\$456	-73%
No-fee	114	2,899	86%	120%		
Biomed	17	550	16%	-54%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	17	550	100%	275%		
STEM	37	1,497	44%	8%	\$145	-88%
Fee	6	470	31%	-57%	\$461	-72%
No-fee	31	1,027	69%	152%		
H&SS	67	1,341	40%	65%	\$5	-97%
Fee	1	19	1%	-94%	\$336	-43%
No-fee	66	1,322	99%	29%		

Predominantly no-fee—including all of STEM, the largest segment. 11% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	113	117	116	114	110	105
%No-fee	94%	94%	94%	94%	94%	93%
Articles	3,388	3,456	3,510	3,709	3,556	3,277
%No-fee	86%	83%	86%	88%	88%	87%
Change	-2%	-2%	-5%	4%	9%	

Slight downward drift since 2016.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	346	27%	\$411
Med.: 60-149	18	975	87%	\$45
Small: 20-59	71	1,761	94%	\$21
Smallest: 0-19	30	306	100%	\$0

None very large, and only the large are mostly fee.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	6	431	\$213,299	\$495
\$0.20-\$199	1	58	\$9,742	\$168
No fee	114	2,899		
Total	121	3,388	\$223,041	\$66

The most expensive journal is \$560.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	2	1	3	0
No-fee	25	19	30	24	16
Total	26	21	31	27	16

Strong across the board, with some decline in new journals recently.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	84	2,342	82%	\$88
Society/govt	30	832	91%	\$19
Open Access	4	111	100%	\$0
Traditional	2	95	100%	\$0
Miscellaneous	1	8	100%	\$0

Predominantly universities.

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Engineering	7	552	26%	\$357
Medicine	15	481	100%	\$0
Economics	15	266	93%	\$24
Agriculture	5	227	100%	\$0
Chemistry	5	221	100%	\$0
Law	7	209	100%	\$0
Language & Literature	8	166	100%	\$0
Earth Sciences	7	145	100%	\$0
Ecology	3	125	61%	\$110
Technology	4	110	100%	\$0
Anthropology	7	109	100%	\$0
Philosophy	3	99	100%	\$0
Computer Science	3	93	87%	\$65
History	4	92	100%	\$0
Arts & Architecture	7	91	100%	\$0
Biology	2	69	100%	\$0
Media & Communications	3	61	100%	\$0
Political Science	3	59	100%	\$0
Sociology	2	43	100%	\$0
Education	2	36	100%	\$0
Religion	1	34	100%	\$0
Psychology	1	33	100%	\$0
Miscellany	2	27	100%	\$0
Zoology	2	24	100%	\$0
Library Science	2	16	100%	\$0
Mathematics	1	0		

Engineering largest and by far the most expensive; medicine all no-fee, as are all but three other subjects.

# Czech Republic

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	110	2,988			\$123	-88%
Fee	19	974	33%	-47%	\$379	-77%
No-fee	91	2,014	67%	73%		
Biomed	9	363	12%	-65%	\$392	-73%
Fee	3	244	67%	-8%	\$584	-70%
No-fee	6	119	33%	23%		
STEM	39	1,413	47%	15%	\$145	-88%
Fee	13	652	46%	-37%	\$315	-81%
No-fee	26	761	54%	97%		
H&SS	62	1,212	41%	69%	\$18	-87%
Fee	3	78	6%	-72%	\$272	-54%
No-fee	59	1,134	94%	22%		

Two-thirds no-fee, heavy on H&SS, light on biomed, low cost. 13% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	103	108	109	108	105	93
%No-fee	82%	82%	83%	83%	83%	81%
Articles	2,988	3,221	3,533	3,314	3,458	3,119
%No-fee	67%	66%	69%	69%	68%	66%
Change	-7%	-9%	7%	-4%	11%	

Two weak years leave article levels below 2014.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	278	54%	\$412
Med.: 60-149	14	894	40%	\$165
Small: 20-59	73	1,621	81%	\$66
Smallest: 0-19	21	195	100%	\$0

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	128	\$114,670	\$896
\$200-\$599	13	609	\$236,817	\$389
\$0.20-\$199	5	237	\$17,361	\$73
No fee	91	2,014		
Total	110	2,988	\$368,848	\$123

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	2	7	7	2	1
No-fee	3	8	21	35	24
Total	5	15	28	37	25

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	90	2,567	67%	\$140
Open Access	14	252	45%	\$34
Society/govt	6	169	100%	\$0

Mostly universities, which isn't unusual—and that's the most expensive category, which is unusual.

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Agriculture	11	590	34%	\$221
Engineering	7	347	70%	\$13
Medicine	8	336	27%	\$424
Language & Literature	9	220	100%	\$0
Education	8	183	92%	\$8
Economics	10	179	64%	\$110
Political Science	10	171	100%	\$0
Zoology	2	131	57%	\$153
Mathematics	4	128	100%	\$0
Sociology	4	89	100%	\$0
Law	2	88	100%	\$0
Anthropology	7	65	100%	\$0
Computer Science	4	57	53%	\$239
History	3	57	100%	\$0
Psychology	3	53	100%	\$0
Chemistry	1	50	0%	\$538
Religion	2	50	100%	\$0
Earth Sciences	4	46	43%	\$203
Ecology	2	32	100%	\$0
Technology	3	32	100%	\$0
Biology	1	27	100%	\$0
Philosophy	2	27	100%	\$0
Media & Communications	1	23	100%	\$0
Miscellany	1	7	100%	\$0
Physics	1	0		

Agriculture the largest subject, chemistry most expensive.

# Estonia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	23	694			\$161	-84%
Fee	4	288	41%	-32%	\$387	-77%
No-fee	19	406	59%	50%		
Biomed	0	0	0%	-100%	\$0	-100%
STEM	7	339	49%	19%	\$329	-72%
Fee	4	288	85%	17%	\$387	-76%
No-fee	3	51	15%	-45%		
H&SS	16	355	51%	114%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	16	355	100%	30%		

With no biomed at all, and the only fee journals in STEM, this table is shortened somewhat. Mostly H&SS, mostly no-fee. 28% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	21	22	20	20	19	20
%No-fee	86%	86%	85%	85%	84%	85%
Articles	694	644	634	561	550	517
%No-fee	59%	56%	55%	54%	53%	59%
Change	8%	2%	13%	2%	6%	

Growth each year, albeit not big numbers.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	222	0%	\$336
Med.: 60-149	2	141	65%	\$199
Small: 20-59	15	294	95%	\$30
Smallest: 0-19	5	37	100%	\$0

No very large journals, and the common correlation applies.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	4	288	\$111,535	\$387
No fee	19	406		
Total	23	694	\$111,535	\$161

Two \$560 journals and one \$336, but that has most of the articles. (The fourth fee journal is an earlier version.)

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	1	3	0	0
No-fee	3	0	8	6	2
Total	3	1	11	6	2

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	15	520	45%	\$214
Miscellaneous	2	104	100%	\$0
Society/govt	4	53	100%	\$0
Open Access	2	17	100%	\$0

Mostly university, including all fee journals.



**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Agriculture	3	250	11%	\$298
Language & Literature	4	93	100%	\$0
Economics	1	91	100%	\$0
Anthropology	3	62	100%	\$0
Other Sciences	1	50	0%	\$560
Education	2	30	100%	\$0
History	2	24	100%	\$0
Technology	1	23	100%	\$0
Miscellany	1	19	100%	\$0
Earth Sciences	2	16	0%	\$560
Law	1	15	100%	\$0
Political Science	1	14	100%	\$0
Philosophy	1	7	100%	\$0

The two earth science journals are the same journal, renamed along the way. Another case where agriculture leads.

# Hungary

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	34	1,050			\$73	-93%
Fee	1	80	8%	-88%	\$952	-43%
No-fee	33	970	92%	138%		
Biomed	3	103	10%	-72%	\$739	-49%
Fee	1	80	78%	6%	\$952	-51%
No-fee	2	23	22%	-16%		
STEM	17	653	62%	51%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	17	653	100%	267%		
H&SS	14	294	28%	17%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	14	294	100%	30%		

One fee journal; most articles are in STEM, none with fees. 3% more journals (that is, one more) than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	28	32	31	33	30	27
%No-fee	96%	97%	97%	97%	97%	96%
Articles	1,050	1,090	1,062	1,112	900	828
%No-fee	92%	88%	92%	93%	94%	96%
Change	-4%	3%	-4%	24%	9%	

Largely unchanged since 2016.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	74	100%	\$0
Med.: 60-149	6	482	83%	\$158
Small: 20-59	19	407	100%	\$0
Smallest: 0-19	8	87	100%	\$0

With only one fee journal, no correlation is possible.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	80	\$76,148	\$952
No fee	33	970		
Total	34	1,050	\$76,148	\$73

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	0	0	1	0
No-fee	6	2	7	13	5
Total	6	2	7	14	5

Few new journals in recent years.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	20	658	100%	\$0
Open Access	9	285	72%	\$267
Society/govt	5	107	100%	\$0

Mostly universities, but the fee journal is an OA publisher.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Engineering	3	147	100%	\$0
History	2	120	100%	\$0
Earth Sciences	2	106	100%	\$0
Medicine	3	103	22%	\$739
Technology	2	101	100%	\$0
Chemistry	2	99	100%	\$0
Mathematics	1	99	100%	\$0
Sociology	2	74	100%	\$0
Ecology	4	49	100%	\$0
Zoology	1	32	100%	\$0
Language & Literature	4	31	100%	\$0
Political Science	1	29	100%	\$0
Agriculture	2	20	100%	\$0
Media & Communications	1	16	100%	\$0
Economics	1	15	100%	\$0
Anthropology	2	9	100%	\$0
Education	1	0		

An interesting mix at the top, and a broad range of subjects.

# Latvia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	11	458			\$356	-65%
Fee	3	277	60%	-1%	\$588	-65%
No-fee	8	181	40%	2%		
Biomed	2	31	7%	-81%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	2	31	100%	275%		
STEM	5	182	40%	-3%	\$327	-72%
Fee	2	118	65%	-11%	\$505	-69%
No-fee	3	64	35%	29%		
H&SS	4	245	53%	123%	\$422	207%
Fee	1	159	65%	178%	\$649	10%
No-fee	3	86	35%	-54%		

Mostly H&SS, mostly no-fee, no fees at all in biomed, modest fees. Same journal count as in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	11	11	10	11	10	7
%No-fee	73%	73%	70%	73%	70%	71%
Articles	458	519	387	416	241	123
%No-fee	40%	34%	46%	50%	59%	76%
Change	-12%	34%	-7%	73%	96%	

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	159	0%	\$649
Med.: 60-149	2	118	0%	\$505
Small: 20-59	7	175	100%	\$0
Smallest: 0-19	1	6	100%	\$0

Unusually clear-cut: no fees for smaller, fees for *all* medium and large.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	2	198	\$146,944	\$742
\$200-\$599	1	79	\$15,924	\$202
No fee	8	181		
Total	11	458	\$162,867	\$356

The highest fee is \$1,120.

**Starting date**

	2005-09	2010-14	2015-19
Fee	2	0	1
No-fee	1	4	3
Total	3	4	4

All this millennium.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	7	365	35%	\$327
Univ/college	4	93	58%	\$470

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Economics	2	179	11%	\$577
Other Sciences	1	79	0%	\$202
Computer Science	2	62	37%	\$704
Sociology	1	42	100%	\$0
Physics	1	35	100%	\$0
Education	1	24	100%	\$0
Biology	1	22	100%	\$0
Medicine	1	9	100%	\$0
Engineering	1	6	100%	\$0

Only three subjects have any fees.

# Lithuania

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	74	2,101			\$226	-78%
Fee	14	767	37%	-40%	\$620	-63%
No-fee	60	1,334	63%	63%		
Biomed	5	90	4%	-88%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	5	90	100%	275%		
STEM	20	950	45%	10%	\$428	-64%
Fee	8	577	61%	-16%	\$705	-57%
No-fee	12	373	39%	44%		
H&SS	49	1,061	50%	111%	\$65	-53%
Fee	6	190	18%	-23%	\$361	-39%
No-fee	43	871	82%	7%		

Mostly no-fee, heavy on H&SS, very light on biomed—with no fees. A high 35% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	65	67	69	70	69	65
%No-fee	82%	81%	81%	81%	84%	85%
Articles	2,101	2,225	2,383	2,432	2,164	2,088
%No-fee	63%	62%	64%	66%	80%	77%
Change	-6%	-7%	-2%	12%	4%	

Slow decline since 2016.



**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	364	0%	\$833
Med.: 60-149	12	704	63%	\$178
Small: 20-59	45	955	85%	\$49
Smallest: 0-19	15	78	100%	\$0

Another case with all (well, both) large journals charging fees.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	197	\$209,575	\$1,064
\$200-\$599	10	564	\$265,376	\$471
\$0.20-\$199	3	6	\$336	\$56
No fee	60	1,334		
Total	74	2,101	\$475,288	\$226

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	0	2	4	8
No-fee	2	7	18	18	15
Total	2	7	20	22	23

Continued strong new-journal activity.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	61	1,573	79%	\$94
Open Access	10	489	12%	\$670
Miscellaneous	2	39	100%	\$0
Society/govt	1	0		

Universities publish the most, but OA publishers have the revenue.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Engineering	6	416	19%	\$435
Economics	8	300	37%	\$229
Ecology	3	226	3%	\$956
Language & Literature	10	189	100%	\$0
Mathematics	4	146	100%	\$0
Sociology	10	135	100%	\$0
Education	5	109	100%	\$0
Law	4	107	100%	\$0
Medicine	5	90	100%	\$0
Agriculture	1	56	100%	\$0
Earth Sciences	3	45	100%	\$0
Other Sciences	1	39	100%	\$0
Political Science	2	36	100%	\$0
Philosophy	1	35	100%	\$0
History	1	29	100%	\$0
Psychology	2	29	100%	\$0
Library Science	1	23	100%	\$0
Media & Communications	2	22	100%	\$0
Technology	1	22	0%	\$448
Religion	1	20	100%	\$0
Arts & Architecture	1	18	100%	\$0
Anthropology	1	9	100%	\$0
Computer Science	1	0		

Pure coincidence that all three fee subjects begin with E...

# Moldova

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	30	1,099			\$16	-98%
Fee	9	397	36%	-41%	\$44	-97%
No-fee	21	702	64%	64%		
Biomed	1	48	4%	-88%	\$228	-84%
Fee	1	48	100%	36%	\$228	-88%
No-fee	0	0	0%	-100%		
STEM	7	267	24%	-41%	\$2	-100%
Fee	1	32	12%	-84%	\$15	-99%
No-fee	6	235	88%	223%		
H&SS	22	784	71%	198%	\$8	-94%
Fee	7	317	40%	73%	\$19	-97%
No-fee	15	467	60%	-22%		

Mostly H&SS, mostly no-fee, mostly very small fees if any. 7% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	27	29	27	26	25	23
%No-fee	67%	69%	67%	73%	72%	74%
Articles	1,099	1,238	1,013	1,039	1,102	1,019
%No-fee	64%	60%	61%	64%	65%	66%
Change	-11%	22%	-3%	-6%	8%	

**Article volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	13	749	62%	\$7
Small: 20-59	15	339	67%	\$36
Smallest: 0-19	2	11	100%	\$0

No large journals...

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	48	\$10,928	\$228
\$0.20-\$199	8	349	\$6,606	\$19
No fee	21	702		
Total	30	1,099	\$17,535	\$16

...or large fees, with \$228 the most expensive journal.

**Starting date**

	To 1999	2005-09	2010-14	2015-19
Fee	0	6	0	3
No-fee	1	10	4	6
Total	1	16	4	9

Note the missing column: no new journals 2000-2004.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	22	723	58%	\$6
Society/govt	7	332	86%	\$33
Open Access	1	44	0%	\$44

Not unusual: mostly universities, but fees are mostly society.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Arts & Architecture	3	214	79%	\$9
History	3	128	55%	\$6
Economics	5	99	15%	\$15
Engineering	2	89	100%	\$0
Anthropology	3	81	100%	\$0
Education	1	74	0%	\$15
Sociology	2	69	16%	\$12
Technology	1	61	100%	\$0
Chemistry	2	52	38%	\$9
Medicine	1	48	0%	\$228
Political Science	1	47	100%	\$0
Zoology	1	47	100%	\$0
Law	1	36	100%	\$0
Psychology	2	36	100%	\$0
Computer Science	1	18	100%	\$0
Language & Literature	1	0		

The top three, and six of the top seven, are all H&SS.

# North Macedonia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	11	904			\$2	-100%
Fee	2	36	4%	-93%	\$38	-98%
No-fee	9	868	96%	147%		
Biomed	2	767	85%	143%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	2	767	100%	275%		
STEM	3	59	7%	-84%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	3	59	100%	267%		
H&SS	6	78	9%	-64%	\$18	-87%
Fee	2	36	46%	98%	\$38	-93%
No-fee	4	42	54%	-30%		

Predominantly biomed—with no fees at all. Few fees elsewhere. High 38% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	9	10	9	10	10	7
%No-fee	78%	80%	78%	80%	80%	100%
Articles	904	608	379	299	361	312
%No-fee	96%	95%	93%	90%	93%	100%
Change	49%	60%	27%	-17%	16%	

While the numbers are still small, articles tripled since 2016.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	751	100%	\$0
Med.: 60-149	1	0		
Small: 20-59	6	114	80%	\$11
Smallest: 0-19	3	39	67%	\$4
Smallest: 0-19	11	904	96%	\$2

And there it is: mostly one fast-growing no-fee medical journal.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$0.20-\$199	2	36	\$1,382	\$38
No fee	9	868	\$0	\$0
Total	11	904	\$1,382	\$2

The most expensive journal charges \$54.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	0	0	1	1
No-fee	1	1	1	4	2
Total	1	1	1	5	3

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	2	751	100%	\$0
Univ/college	8	143	75%	\$10
Society/govt	1	10	100%	\$0

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	2	767	100%	\$0
Other Sciences	1	27	100%	\$0
Economics	1	24	100%	\$0
Political Science	1	23	0%	\$54
Zoology	1	22	100%	\$0
Language & Literature	1	18	100%	\$0
Sociology	2	13	0%	\$11
Earth Sciences	1	10	100%	\$0
Education	1	0		

Sociology and Political Science have the only (modest) fees.



# Poland

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	608	18,903			\$188	-82%
Fee	123	6,959	37%	-40%	\$510	-70%
No-fee	485	11,944	63%	63%		
Biomed	97	3,756	20%	-43%	\$279	-81%
Fee	27	1,555	41%	-44%	\$673	-66%
No-fee	70	2,201	59%	120%		
STEM	225	7,059	37%	-9%	\$285	-76%
Fee	64	3,297	47%	-36%	\$611	-63%
No-fee	161	3,762	53%	95%		
H&SS	286	8,088	43%	79%	\$60	-56%
Fee	32	2,107	26%	12%	\$231	-61%
No-fee	254	5,981	74%	-4%		

Mostly no-fee, heavy on H&SS and light on biomed. The most OA journals of any Eastern European country, but not the most articles. 16% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	523	556	562	546	505	460
%No-fee	78%	79%	80%	79%	79%	78%
Articles	18,903	20,107	21,087	20,280	18,540	16,304
%No-fee	63%	67%	68%	68%	66%	66%
Change	-6%	-5%	4%	9%	14%	

Slight declines since 2017, and slight shift toward fees.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	760	0%	\$52
Large: 150-599	20	2,275	39%	\$325
Med.: 60-149	112	6,553	52%	\$306
Small: 20-59	350	8,484	81%	\$86
Smallest: 0-19	125	831	94%	\$38

Not the common correlation, since the single largest journal is low-fee.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	6	314	\$588,318	\$1,874
\$600-\$1,399	28	2,022	\$1,965,004	\$972
\$200-\$599	47	2,608	\$834,987	\$320
\$0.20-\$199	42	2,015	\$160,389	\$80
No fee	485	11,944		
Total	608	18,903	\$3,548,698	\$188

The priciest journal has a \$2,240 fee.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	4	7	27	54	31
No-fee	13	21	110	232	109
Total	17	28	137	286	140

Strong in the early teens, with somewhat fewer new journals since.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	345	9,255	60%	\$269
Univ/college	212	7,102	72%	\$79
Society/govt	24	1,301	41%	\$157
Traditional	25	1,219	58%	\$244
Miscellaneous	2	26	77%	\$12

OA publishers do the most, which is somewhat unusual.

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Medicine	80	3,393	62%	\$248
Economics	63	1,695	61%	\$140
Anthropology	27	1,500	33%	\$71
Engineering	38	1,189	49%	\$259
Technology	21	945	63%	\$92
Ecology	24	925	40%	\$122
Sociology	26	895	79%	\$75
Language & Literature	41	863	97%	\$18
Agriculture	35	850	52%	\$375
Mathematics	27	819	49%	\$483
Political Science	26	701	98%	\$4
Earth Sciences	27	692	72%	\$270
Chemistry	15	525	13%	\$875
Philosophy	17	456	100%	\$0
Computer Science	13	453	91%	\$10
Biology	17	363	28%	\$562
Zoology	14	361	65%	\$69
Religion	14	359	89%	\$59
Law	18	340	90%	\$16
Physics	9	300	48%	\$392
Miscellany	7	289	62%	\$72
History	10	236	100%	\$0
Psychology	6	178	83%	\$57
Library Science	8	170	100%	\$0
Education	9	150	100%	\$0
Arts & Architecture	8	144	100%	\$0
Media & Communications	6	112	100%	\$0
Other Sciences	2	0		

Medicine tops the list, common for countries with many journals—but chemistry is the most expensive.

# Romania

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	345	10,059			\$45	-96%
Fee	67	3,554	35%	-42%	\$127	-92%
No-fee	278	6,505	65%	66%		
Biomed	39	1,719	17%	-51%	\$104	-93%
Fee	14	965	56%	-23%	\$186	-91%
No-fee	25	754	44%	65%		
STEM	97	2,960	29%	-28%	\$33	-97%
Fee	16	718	24%	-67%	\$137	-92%
No-fee	81	2,242	76%	178%		
H&SS	209	5,380	53%	123%	\$32	-77%
Fee	37	1,871	35%	49%	\$92	-84%
No-fee	172	3,509	65%	-15%		

Almost two-thirds no-fee, and mostly H&SS. 9% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	296	323	322	327	318	302
%No-fee	78%	80%	80%	80%	80%	79%
Articles	10,059	10,132	10,357	11,036	11,858	11,073
%No-fee	65%	66%	67%	65%	65%	66%
Change	-1%	-2%	-6%	-7%	7%	

Slowly declining ever since 2015.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	12	1,472	32%	\$54
Med.: 60-149	77	4,593	53%	\$69
Small: 20-59	186	3,436	90%	\$13
Smallest: 0-19	70	558	89%	\$13

No largest journals, and the common correlation isn't there.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	57	\$38,298	\$672
\$200-\$599	12	712	\$193,656	\$272
\$0.20-\$199	54	2,785	\$217,628	\$78
No fee	278	6,505		
Total	345	10,059	\$449,582	\$45

Note that the priciest journal is near the bottom of its price range.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	2	1	30	28	6
No-fee	11	30	93	108	36
Total	13	31	123	136	42

A sharp decline in new journals over the past five years.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	261	7,484	69%	\$33
Society/govt	30	1,304	47%	\$71
Open Access	41	949	44%	\$116
Miscellaneous	6	191	92%	\$3
Traditional	7	131	85%	\$5

Predominantly universities.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Economics	60	1,628	53%	\$31
Medicine	33	1,551	38%	\$116
Agriculture	18	1,062	75%	\$24
Anthropology	21	869	34%	\$87
Engineering	16	616	66%	\$13
Political Science	29	601	84%	\$4
Language & Literature	25	533	89%	\$10
Sociology	15	399	38%	\$61
Computer Science	14	319	63%	\$179
Miscellany	8	257	74%	\$29
History	11	250	100%	\$0
Philosophy	9	233	86%	\$18
Education	11	204	90%	\$6
Earth Sciences	18	178	100%	\$0
Biology	6	168	100%	\$0
Law	6	161	94%	\$10
Mathematics	9	155	100%	\$0
Technology	4	135	100%	\$0
Physics	4	127	100%	\$0
Arts & Architecture	5	123	100%	\$0
Zoology	4	120	56%	\$42
Other Sciences	4	99	34%	\$29
Ecology	5	98	100%	\$0
Media & Communications	6	97	100%	\$0
Chemistry	1	51	100%	\$0
Library Science	2	16	100%	\$0
Psychology	1	9	100%	\$0

Economics has more articles than medicine, at an even lower cost.

# Russia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	371	22,906			\$21	-98%
Fee	34	2,902	13%	-79%	\$164	-90%
No-fee	337	20,004	87%	125%		
Biomed	91	6,146	27%	-23%	\$5	-100%
Fee	3	201	3%	-96%	\$143	-93%
No-fee	88	5,945	97%	263%		
STEM	113	6,803	30%	-28%	\$29	-98%
Fee	12	1,539	23%	-69%	\$129	-92%
No-fee	101	5,264	77%	184%		
H&SS	167	9,957	43%	81%	\$25	-82%
Fee	19	1,162	12%	-50%	\$213	-64%
No-fee	148	8,795	88%	15%		

The most articles of any Eastern European country. Very high no-fee percentage. Strong in H&SS. 28% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	356	362	353	339	303	258
%No-fee	91%	91%	92%	92%	92%	92%
Articles	22,906	23,352	22,868	22,847	22,866	19,954
%No-fee	87%	90%	91%	90%	92%	91%
Change	-2%	2%	0%	0%	15%	

Basically flat since 2015.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	5	946	100%	\$0
Large: 150-599	42	6,132	77%	\$39
Med.: 60-149	172	10,874	88%	\$20
Small: 20-59	142	4,867	95%	\$4
Smallest: 0-19	10	87	100%	\$0

Another case where the largest journals have no fees (yes, each of the five had 600+ articles in some year since 2013).

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	8	617	\$253,543	\$411
\$0.20-\$199	26	2,285	\$221,072	\$97
No fee	337	20,004		
Total	371	22,906	\$474,615	\$21

What fees there are, are mostly very low.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	1	5	12	16
No-fee	14	13	79	142	89
Total	14	14	84	154	105

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	245	14,322	96%	\$12
Open Access	74	4,532	60%	\$43
Society/govt	27	1,936	92%	\$10
Miscellaneous	16	1,633	90%	\$38
Traditional	9	483	71%	\$44

Mostly universities.



**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Medicine	83	5,689	97%	\$5
Engineering	18	1,595	74%	\$23
Language & Literature	23	1,587	98%	\$0
Economics	32	1,520	94%	\$9
Political Science	15	1,385	100%	\$0
Agriculture	15	1,356	42%	\$69
Sociology	15	1,180	83%	\$8
Earth Sciences	18	879	94%	\$6
History	14	855	69%	\$86
Computer Science	13	841	99%	\$0
Law	14	672	100%	\$0
Psychology	11	553	77%	\$37
Arts & Architecture	8	529	71%	\$85
Technology	11	511	86%	\$36
Education	8	487	84%	\$89
Biology	8	457	98%	\$2
Other Sciences	8	385	64%	\$31
Ecology	10	383	84%	\$86
Miscellany	7	367	69%	\$33
Mathematics	9	348	100%	\$0
Philosophy	7	329	100%	\$0
Chemistry	5	304	100%	\$0
Anthropology	7	291	69%	\$101
Religion	2	113	100%	\$0
Physics	3	105	100%	\$0
Zoology	3	96	100%	\$0
Media & Communications	3	69	100%	\$0
Library Science	1	20	100%	\$0

Medicine first; anthropology the only three-digit average cost.

# Serbia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	175	5,055			\$53	-95%
Fee	18	1,507	30%	-51%	\$177	-89%
No-fee	157	3,548	70%	81%		
Biomed	21	749	15%	-58%	\$43	-97%
Fee	6	316	42%	-42%	\$101	-95%
No-fee	15	433	58%	117%		
STEM	57	2,188	43%	5%	\$98	-92%
Fee	6	949	43%	-40%	\$225	-86%
No-fee	51	1,239	57%	108%		
H&SS	97	2,118	42%	75%	\$10	-93%
Fee	6	242	11%	-51%	\$90	-85%
No-fee	91	1,876	89%	16%		

Predominantly no-fee, light on biomed. 13% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	170	174	165	158	151	145
%No-fee	89%	90%	90%	90%	89%	90%
Articles	5,055	4,931	4,906	5,163	4,908	5,084
%No-fee	70%	73%	76%	76%	77%	79%
Change	3%	1%	-5%	5%	-3%	

Little change since 2014.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	4	1,020	8%	\$212
Med.: 60-149	26	1,422	77%	\$22
Small: 20-59	94	2,133	90%	\$8
Smallest: 0-19	51	480	93%	\$4

The common correlation is here, such as it is.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	211	\$94,513	\$448
\$0.20-\$199	17	1,296	\$172,901	\$133
No fee	157	3,548		
Total	175	5,055	\$267,415	\$53

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	6	1	7	4
No-fee	10	40	16	61	30
Total	10	46	17	68	34

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	132	3,641	76%	\$39
Society/govt	39	1,292	58%	\$91
Open Access	4	122	38%	\$54

Predominantly universities.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Engineering	13	872	27%	\$123
Medicine	19	575	45%	\$56
Economics	23	548	68%	\$33
Other Sciences	5	301	22%	\$323
Law	8	233	100%	\$0
Technology	5	202	100%	\$0
Chemistry	5	197	62%	\$46
Language & Literature	6	196	100%	\$0
Anthropology	11	183	96%	\$4
Biology	2	174	100%	\$0
Sociology	7	171	66%	\$16
Earth Sciences	9	158	100%	\$0
Education	8	157	100%	\$0
Arts & Architecture	10	150	100%	\$0
Agriculture	7	135	100%	\$0
History	8	128	100%	\$0
Philosophy	3	109	100%	\$0
Zoology	3	95	100%	\$0
Mathematics	4	93	100%	\$0
Miscellany	2	89	100%	\$0
Computer Science	3	87	100%	\$0
Psychology	4	55	100%	\$0
Ecology	3	48	100%	\$0
Religion	2	48	100%	\$0
Media & Communications	2	20	100%	\$0
Political Science	2	20	100%	\$0
Library Science	1	11	100%	\$0

# Slovakia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	46	1,173			\$49	-95%
Fee	7	262	22%	-63%	\$218	-87%
No-fee	39	911	78%	100%		
Biomed	7	327	28%	-20%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	7	327	100%	275%		
STEM	23	503	43%	4%	\$106	-91%
Fee	6	238	47%	-35%	\$224	-86%
No-fee	17	265	53%	93%		
H&SS	16	343	29%	22%	\$12	-91%
Fee	1	24	7%	-70%	\$168	-71%
No-fee	15	319	93%	21%		

No fees for biomed, and three-quarters no-fee in general. 7% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	42	43	45	44	40	34
%No-fee	83%	84%	84%	84%	85%	91%
Articles	1,173	1,151	1,199	1,255	1,034	912
%No-fee	78%	77%	75%	73%	82%	88%
Change	2%	-4%	-4%	21%	13%	

Down slightly from 2016 peak.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	195	100%	\$0
Med.: 60-149	3	209	10%	\$196
Small: 20-59	26	622	92%	\$17
Smallest: 0-19	16	147	83%	\$39

Another case where large journals have no fees.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	5	193	\$52,313	\$271
\$0.20-\$199	2	69	\$4,931	\$71
No fee	39	911		
Total	46	1,173	\$57,244	\$49

The most expensive journal charges \$280.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	1	0	2	4
No-fee	2	2	6	19	10
Total	2	3	6	21	14

Most new journals began 2010-2014, falling off in recent years.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	24	667	90%	\$7
Open Access	19	316	84%	\$39
Miscellaneous	2	176	19%	\$227
Society/govt	1	14	100%	\$0

Mostly university publishers.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Biology	2	216	100%	\$0
Agriculture	5	210	32%	\$191
Medicine	5	111	100%	\$0
Engineering	5	98	65%	\$89
Earth Sciences	4	64	100%	\$0
Philosophy	2	60	100%	\$0
Anthropology	2	47	100%	\$0
Other Sciences	1	45	0%	\$20
Miscellany	1	41	100%	\$0
Computer Science	2	35	86%	\$32
Sociology	2	34	100%	\$0
Economics	2	32	25%	\$126
Library Science	1	32	100%	\$0
Arts & Architecture	1	28	100%	\$0
Ecology	3	22	100%	\$0
Education	1	20	100%	\$0
Psychology	1	20	100%	\$0
Law	1	15	100%	\$0
Religion	1	14	100%	\$0
Mathematics	1	13	100%	\$0
Technology	1	11	0%	\$224
Zoology	1	5	100%	\$0
Language & Literature	1	0		

Unusual in several ways.

# Slovenia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	53	1,441			\$71	-93%
Fee	4	245	17%	-72%	\$419	-75%
No-fee	49	1,196	83%	113%		
Biomed	4	158	11%	-69%	\$293	-80%
Fee	1	59	37%	-49%	\$784	-60%
No-fee	3	99	63%	135%		
STEM	13	511	35%	-14%	\$110	-91%
Fee	3	186	36%	-50%	\$303	-81%
No-fee	10	325	64%	133%		
H&SS	36	772	54%	124%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	36	772	100%	30%		

Mostly H&SS (no fees at all), four out of five articles no-fee. 4% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	52	52	53	52	51	50
%No-fee	92%	92%	92%	92%	92%	92%
Articles	1,441	1,448	1,689	1,382	1,449	1,406
%No-fee	83%	83%	84%	87%	85%	86%
Change	0%	-14%	22%	-5%	3%	



**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	147	11%	\$299
Med.: 60-149	5	288	100%	\$0
Small: 20-59	34	876	87%	\$67
Smallest: 0-19	12	130	100%	\$0

Both large journals exceeded 150 articles in at least one earlier year.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	59	\$46,249	\$784
\$200-\$599	3	186	\$56,327	\$303
No fee	49	1,196		
Total	53	1,441	\$102,576	\$71

A bit different: no journals with nominal (\$0.01-\$199) fees.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	2	1	0	0
No-fee	6	11	14	14	4
Total	7	13	15	14	4

Strong throughout the millennium, fewer new journals after 2014.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	38	948	86%	\$46
Society/govt	9	336	84%	\$37
Open Access	5	132	55%	\$350
Miscellaneous	1	25	100%	\$0

Universities predominate, as is frequently the case.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Language & Literature	10	229	100%	\$0
Engineering	2	161	0%	\$315
Medicine	4	158	63%	\$293
Economics	7	144	100%	\$0
Education	5	124	100%	\$0
Chemistry	1	114	100%	\$0
Agriculture	3	99	100%	\$0
Earth Sciences	4	79	100%	\$0
Anthropology	3	71	100%	\$0
Sociology	3	65	100%	\$0
Miscellany	2	59	100%	\$0
Arts & Architecture	3	47	100%	\$0
Technology	2	33	100%	\$0
Physics	1	25	0%	\$224
Law	1	12	100%	\$0
Political Science	1	11	100%	\$0
Psychology	1	10	100%	\$0

Unusual to have language & literature top the list.

# Ukraine

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	281	14,836			\$51	-95%
Fee	129	8,665	58%	-4%	\$88	-95%
No-fee	152	6,171	42%	7%		
Biomed	50	3,723	25%	-28%	\$25	-98%
Fee	24	2,013	54%	-26%	\$46	-98%
No-fee	26	1,710	46%	72%		
STEM	92	3,799	26%	-38%	\$14	-99%
Fee	31	1,449	38%	-48%	\$38	-98%
No-fee	61	2,350	62%	127%		
H&SS	139	7,314	49%	106%	\$84	-39%
Fee	74	5,203	71%	204%	\$118	-80%
No-fee	65	2,111	29%	-62%		

Very high fee percentage for Eastern Europe. Oddly, STEM is mostly no-fee. Very high 52% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	267	271	247	226	205	180
%No-fee	55%	55%	53%	55%	55%	56%
Articles	14,836	15,599	14,692	13,939	13,874	12,401
%No-fee	42%	43%	46%	44%	45%	48%
Change	-5%	6%	5%	0%	12%	

Down slightly in 2019 after two positive years.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	4	2,066	32%	\$17
Large: 150-599	34	3,614	24%	\$91
Med.: 60-149	101	5,483	39%	\$65
Small: 20-59	115	3,418	67%	\$11
Smallest: 0-19	27	255	82%	\$7

Not the common correlation.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	5	435	\$344,352	\$792
\$200-\$599	4	533	\$134,553	\$252
\$0.20-\$199	120	7,697	\$281,301	\$37
No fee	152	6,171		
Total	281	14,836	\$760,205	\$51

Only one journal charges more than \$800, at \$1,009.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	2	3	19	53	52
No-fee	6	8	27	65	46
Total	8	11	46	118	98

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	229	12,953	41%	\$36
Open Access	26	817	51%	\$127
Society/govt	11	414	43%	\$21
Miscellaneous	6	381	63%	\$10
Traditional	9	271	1%	\$632

Predominantly university—and note the high traditional charges.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Economics	40	3,097	8%	\$145
Biology	14	1,902	43%	\$22
Medicine	36	1,821	49%	\$27
Education	20	881	19%	\$29
Agriculture	12	730	32%	\$28
Engineering	17	697	57%	\$18
Computer Science	12	613	58%	\$10
Political Science	11	471	68%	\$13
Language & Literature	10	378	21%	\$221
Mathematics	12	355	87%	\$2
Arts & Architecture	8	327	72%	\$6
Technology	7	319	66%	\$9
History	8	310	59%	\$13
Psychology	4	299	0%	\$64
Sociology	4	298	6%	\$22
Anthropology	10	288	58%	\$26
Philosophy	6	284	83%	\$4
Other Sciences	4	267	100%	\$0
Physics	6	264	100%	\$0
Ecology	8	224	38%	\$44
Law	5	222	51%	\$12
Library Science	6	215	100%	\$0
Earth Sciences	8	162	56%	\$13
Miscellany	3	152	43%	\$32
Chemistry	4	98	69%	\$1
Religion	3	78	56%	\$17
Zoology	2	70	100%	\$0
Media & Communications	1	14	100%	\$0

Unusual, with the only three-digit average charges being in H&SS.

## Other Eastern European Countries

Thirty journals from seven countries.

### Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	30	1,026			\$65	-94%
Fee	6	248	24%	-60%	\$271	-84%
No-fee	24	778	76%	95%		
Biomed	2	60	6%	-83%	\$37	-97%
Fee	1	20	33%	-55%	\$112	-94%
No-fee	1	40	67%	150%		
STEM	9	351	34%	-17%	\$35	-97%
Fee	1	47	13%	-82%	\$263	-84%
No-fee	8	304	87%	218%		
H&SS	19	615	60%	150%	\$85	-38%
Fee	4	181	29%	26%	\$290	-51%
No-fee	15	434	71%	-8%		

Three-quarters no-fee, mostly H&SS.

### Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	27	30	29	21	20	20
%No-fee	78%	80%	83%	81%	80%	80%
Articles	1,026	1,186	1,010	829	732	746
%No-fee	76%	80%	87%	84%	78%	81%
Change	-13%	17%	22%	13%	-2%	

Down in 2019 from a peak in 2018.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	12	684	82%	\$54
Small: 20-59	12	306	58%	\$100
Smallest: 0-19	6	36	100%	\$0

No large journals.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	4	193	\$59,056	\$306
\$0.20-\$199	2	55	\$8,119	\$148
No fee	24	778		
Total	30	1,026	\$67,174	\$65

The priciest journal charges \$400.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	1	1	1	2
No-fee	1	1	5	7	10
Total	2	2	6	8	12

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	21	836	77%	\$71
Society/govt	5	148	63%	\$55
Open Access	3	42	100%	\$0
Traditional	1	0		

Mostly universities, and those journals have the highest average fees.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Anthropology	4	221	73%	\$58
Agriculture	3	174	100%	\$0
Economics	3	143	100%	\$0
Education	4	108	44%	\$221
Sociology	2	67	48%	\$88
Chemistry	2	65	28%	\$190
Medicine	2	60	67%	\$37
Physics	1	45	100%	\$0
Psychology	1	36	100%	\$0
Computer Science	1	29	100%	\$0
Technology	1	26	100%	\$0
Philosophy	1	25	0%	\$400
Language & Literature	3	15	100%	\$0
Mathematics	1	12	100%	\$0
Political Science	1	0		

Philosophy the most expensive?

**Country Profiles****Albania**

Five journals, three no-fee, 96 articles in 2019.

**Armenia**

Two journals, one no-fee, 37 articles in 2019.

**Azerbaijan**

Two journals, no fees, 64 articles in 2019.

**Cyprus**

Three journals, two no-fee, 62 articles in 2019.

**Georgia**

Three journals, no fees, 65 articles in 2019.



**Kazakhstan**

Four journals, three no-fee, 150 articles in 2019.

**Montenegro**

Nine journals, eight no-fee, 442 articles in 2019.

**Turkmenistan**

One no-fee journal with nine articles in 2019.

# Latin America

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	2,684	100,119			\$42	-96%
Fee	149	14,951	15%	-76%	\$281	-83%
No-fee	2,535	85,168	85%	119%		
Biomed	350	19,553	20%	-44%	\$100	-93%
Fee	50	4,754	24%	-67%	\$411	-79%
No-fee	300	14,799	76%	184%		
STEM	556	22,081	22%	-46%	\$76	-94%
Fee	83	6,745	31%	-58%	\$249	-85%
No-fee	473	15,336	69%	155%		
H&SS	1,778	58,485	58%	144%	\$10	-93%
Fee	16	3,452	6%	-75%	\$165	-72%
No-fee	1,762	55,033	94%	23%		

Predominantly no-fee, mostly H&SS, 393 more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	2,475	2,608	2,618	2,564	2,445	2,277
%No-fee	94%	94%	94%	94%	94%	94%
Articles	100,119	99,282	96,049	89,916	82,910	76,174
%No-fee	85%	87%	87%	87%	86%	84%
Change	1%	3%	7%	8%	9%	

Growth is slowing, but still growing every year.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	3	4,017	42%	\$110
Large: 150-599	88	14,883	58%	\$154
Med.: 60-149	529	33,270	84%	\$39
Small: 20-59	1,700	44,449	98%	\$4
Smallest: 0-19	364	3,500	99%	\$2

Highest average costs in large, not largest, journals—but still low.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	4	425	\$679,900	\$1,600
\$600-\$1,399	10	941	\$691,310	\$735
\$200-\$599	61	5,865	\$1,929,640	\$329
\$0.20-\$199	74	7,720	\$901,279	\$117
No fee	2,535	85,168		
Total	2,684	100,119	\$4,202,129	\$42

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	44	28	36	32	9
No-fee	393	344	633	800	365
Total	437	372	669	832	374

Slowing down of new journals in last five years.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	2,334	80,956	90%	\$27
Society/govt	276	14,513	73%	\$104
Open Access	53	3,928	34%	\$127
Miscellaneous	15	446	100%	\$0
Traditional	6	276	100%	\$0

Predominantly universities—and the few traditional are no-fee.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	321	17,849	77%	\$78
Education	246	11,807	100%	\$0
Sociology	203	7,885	70%	\$56
Language & Literature	186	6,281	100%	\$0
Agriculture	129	6,273	48%	\$116
Miscellany	81	4,289	87%	\$11
Anthropology	134	3,980	92%	\$16
Economics	184	3,847	100%	\$1
Law	166	3,752	99%	\$0
History	113	3,386	100%	\$0
Earth Sciences	91	2,747	98%	\$2
Engineering	82	2,638	94%	\$11
Arts & Architecture	81	2,497	100%	\$0
Zoology	48	2,495	36%	\$220
Psychology	74	2,359	94%	\$2
Political Science	100	2,347	99%	\$0
Ecology	69	2,317	78%	\$21
Media & Communications	74	2,279	100%	\$2
Other Sciences	50	2,239	92%	\$3
Philosophy	69	1,957	100%	\$0
Biology	29	1,704	59%	\$336
Technology	29	1,312	74%	\$53
Religion	31	910	96%	\$2
Library Science	36	909	100%	\$0
Chemistry	13	719	35%	\$258
Mathematics	19	567	100%	\$0
Computer Science	17	387	88%	\$9
Physics	9	387	68%	\$121

Nine subjects have no fees anywhere in Latin America.

**Country of publication**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%no-fee</b>	<b>\$/article</b>
Argentina	252	5,761	94%	\$5
Bahamas	1	6	100%	\$0
Barbados	1	50	100%	\$0
Bolivia	5	72	100%	\$0
Brazil	1,424	64,714	80%	\$59
Chile	123	3,409	77%	\$63
Colombia	360	8,745	99%	\$2
Costa Rica	65	1,780	100%	\$0
Cuba	93	4,347	100%	\$0
Dominican Republic	6	151	100%	\$0
Ecuador	59	1,799	100%	\$0
El Salvador	4	65	100%	\$0
Guam	1	5	0%	\$350
Guatemala	2	16	100%	\$0
Jamaica	1	1	0%	\$1,000
Mexico	132	5,221	93%	\$17
Nicaragua	8	157	100%	\$0
Paraguay	17	364	100%	\$0
Peru	69	1,928	95%	\$9
Puerto Rico	4	12	100%	\$0
Uruguay	25	530	100%	\$0
Venezuela	32	986	98%	\$8

# Argentina

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	252	5,761			\$5	-100%
Fee	10	353	6%	-90%	\$77	-95%
No-fee	242	5,408	94%	141%		
Biomed	14	676	12%	-66%	\$13	-99%
Fee	1	139	21%	-72%	\$62	-97%
No-fee	13	537	79%	198%		
STEM	39	725	13%	-69%	\$25	-98%
Fee	8	188	26%	-64%	\$95	-94%
No-fee	31	537	74%	172%		
H&SS	199	4,360	76%	216%	\$0	-100%
Fee	1	26	1%	-97%	\$29	-95%
No-fee	198	4,334	99%	30%		

Even more heavily no-fee and H&SS than most of Latin America. 25% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	235	244	248	238	224	203
%No-fee	96%	96%	96%	96%	96%	95%
Articles	5,761	5,781	5,663	5,307	4,704	4,067
%No-fee	94%	94%	94%	95%	93%	90%
Change	0%	2%	7%	13%	16%	

Flat after five years of growth.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	123	100%	\$0
Med.: 60-149	14	1,000	75%	\$20
Small: 20-59	161	3,853	98%	\$1
Smallest: 0-19	76	785	97%	\$5

No very large; nearly all fees are in medium-sized journals.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	2	56	\$11,200	\$200
\$0.20-\$199	8	297	\$16,028	\$54
No fee	242	5,408		
Total	252	5,761	\$27,228	\$5

The two priciest journals both charge \$200; only one other above \$100.

**Starting dates**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	2	1	7	0	0
No-fee	20	15	56	101	50
Total	22	16	63	101	50

The surge was 2010-2014, but new titles continue to emerge.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	210	4,624	95%	\$3
Society/govt	36	1,023	88%	\$13
Open Access	4	65	89%	\$22
Miscellaneous	2	49	100%	\$0

Predominantly universities, typical for Latin America.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	13	655	79%	\$13
History	26	649	100%	\$0
Language & Literature	23	636	100%	\$0
Sociology	30	598	100%	\$0
Anthropology	26	558	95%	\$1
Arts & Architecture	18	386	100%	\$0
Education	14	323	100%	\$0
Agriculture	14	319	49%	\$46
Media & Communications	10	257	100%	\$0
Law	7	227	100%	\$0
Economics	13	203	100%	\$0
Political Science	11	184	100%	\$0
Psychology	8	120	100%	\$0
Other Sciences	3	96	100%	\$0
Earth Sciences	7	90	100%	\$0
Religion	4	78	100%	\$0
Zoology	4	70	100%	\$0
Philosophy	6	62	100%	\$0
Engineering	3	56	100%	\$0
Library Science	2	40	100%	\$0
Miscellany	1	39	100%	\$0
Computer Science	3	34	100%	\$0
Technology	1	31	100%	\$0
Physics	2	25	0%	\$123
Biology	1	21	100%	\$0
Ecology	2	4	100%	\$0

Only physics has three-digit average fees.



# Brazil

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	1,424	64,714			\$59	-94%
Fee	116	13,196	20%	-67%	\$290	-83%
No-fee	1,308	51,518	80%	105%		
Biomed	190	13,309	21%	-41%	\$136	-91%
Fee	43	4,321	32%	-56%	\$419	-79%
No-fee	147	8,988	68%	154%		
STEM	279	14,595	23%	-45%	\$103	-91%
Fee	62	5,991	41%	-44%	\$251	-85%
No-fee	217	8,604	59%	116%		
H&SS	955	36,810	57%	137%	\$14	-90%
Fee	11	2,884	8%	-66%	\$181	-69%
No-fee	944	33,926	92%	20%		

Since Brazil accounts for more than half of all Latin America OA journals, it's not surprising that this profile resembles the larger one. 14% more journals than in GOA4. (The no-fee percentage is a bit *lower* than for Latin America as a whole, but still a very high 80%.)

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	1,291	1,385	1,392	1,371	1,316	1,215
%No-fee	91%	92%	92%	92%	92%	91%
Articles	64,714	64,896	62,632	58,384	54,046	50,076
%No-fee	80%	82%	82%	82%	80%	78%
Change	0%	4%	7%	8%	8%	

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	2,935	21%	\$151
Large: 150-599	69	11,602	50%	\$194
Med.: 60-149	401	25,290	82%	\$43
Small: 20-59	870	24,227	98%	\$2
Smallest: 0-19	82	660	99%	\$1

Only the largest journals are mostly fee articles.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	3	391	\$628,900	\$1,608
\$600-\$1,399	7	817	\$613,210	\$751
\$200-\$599	47	5,330	\$1,775,169	\$333
\$0.20-\$199	59	6,658	\$815,636	\$123
No fee	1,308	51,518		
Total	1,424	64,714	\$3,832,914	\$59

The priciest journal charges \$1,700.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	37	23	23	25	8
No-fee	193	187	345	392	191
Total	230	210	368	417	199

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	1,207	49,495	86%	\$38
Society/govt	178	11,546	68%	\$127
Open Access	31	3,361	25%	\$138
Traditional	3	161	100%	\$0
Miscellaneous	5	151	100%	\$0

Predominantly universities, but societies and OA publishers charge more.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	174	12,197	69%	\$104
Education	144	6,906	100%	\$0
Sociology	84	5,119	54%	\$86
Language & Literature	121	4,616	100%	\$0
Agriculture	70	4,546	41%	\$131
Miscellany	42	2,569	98%	\$2
Law	107	2,448	98%	\$1
Economics	96	2,434	100%	\$0
Anthropology	63	2,420	88%	\$27
Earth Sciences	55	1,945	97%	\$3
History	55	1,921	100%	\$0
Zoology	25	1,752	14%	\$297
Ecology	42	1,604	70%	\$27
Psychology	37	1,604	91%	\$2
Media & Communications	42	1,459	100%	\$0
Arts & Architecture	35	1,428	100%	\$0
Political Science	51	1,345	100%	\$0
Engineering	23	1,209	86%	\$25
Philosophy	33	1,141	100%	\$0
Biology	16	1,112	46%	\$484
Technology	15	990	66%	\$71
Other Sciences	21	987	82%	\$6
Library Science	25	709	100%	\$0
Religion	20	691	95%	\$3
Chemistry	5	558	16%	\$333
Mathematics	11	448	100%	\$0
Physics	5	319	69%	\$138
Computer Science	7	237	80%	\$15

# Chile

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	123	3,409			\$63	-94%
Fee	6	801	23%	-62%	\$266	-84%
No-fee	117	2,608	77%	97%		
Biomed	15	525	15%	-56%	\$248	-83%
Fee	4	232	44%	-40%	\$561	-71%
No-fee	11	293	56%	110%		
STEM	21	572	17%	-59%	\$75	-94%
Fee	1	66	12%	-84%	\$650	-60%
No-fee	20	506	88%	224%		
H&SS	87	2,312	68%	183%	\$17	-87%
Fee	1	503	22%	-7%	\$80	-86%
No-fee	86	1,809	78%	2%		

Very strong on H&SS. 15% more journals than in GOA4

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	115	118	119	115	105	97
%No-fee	95%	95%	95%	95%	94%	94%
Articles	3,409	3,324	2,919	2,894	2,492	2,224
%No-fee	77%	81%	85%	84%	82%	84%
Change	3%	14%	1%	16%	12%	

Strong 2018, and slight growth in 2019.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	503	0%	\$80
Med.: 60-149	9	604	64%	\$183
Small: 20-59	83	2,013	96%	\$31
Smallest: 0-19	30	289	100%	\$0

While the no-fee percentage shows the common correlation, fees don't.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	34	\$51,000	\$1,500
\$600-\$1,399	2	123	\$77,100	\$627
\$200-\$599	2	141	\$44,850	\$318
\$0.20-\$199	1	503	\$40,240	\$80
No fee	117	2,608		
Total	123	3,409	\$213,190	\$63

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	2	2	2	0
No-fee	25	14	30	31	17
Total	25	16	32	33	17

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	110	3,027	77%	\$55
Society/govt	5	179	75%	\$63
Open Access	6	149	62%	\$230
Miscellaneous	2	54	100%	\$0

The usual for Latin America.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Miscellany	4	546	8%	\$74
Medicine	13	429	68%	\$225
Sociology	12	224	100%	\$0
Philosophy	8	220	100%	\$0
History	10	201	100%	\$0
Language & Literature	7	171	100%	\$0
Media & Communications	4	143	100%	\$0
Agriculture	3	142	54%	\$302
Political Science	7	142	100%	\$0
Earth Sciences	6	134	100%	\$0
Education	6	134	100%	\$0
Arts & Architecture	7	130	100%	\$0
Law	6	118	100%	\$0
Anthropology	5	98	100%	\$0
Biology	2	96	0%	\$350
Psychology	4	94	100%	\$0
Zoology	1	91	100%	\$0
Engineering	4	83	100%	\$0
Ecology	4	64	100%	\$0
Religion	3	57	100%	\$0
Technology	1	44	100%	\$0
Economics	3	31	100%	\$0
Computer Science	1	12	100%	\$0
Library Science	1	3	100%	\$0
Chemistry	1	2	100%	\$0

Only four subjects have any fees at all.

# Colombia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	360	8,745			\$2	-100%
Fee	3	115	1%	-98%	\$125	-93%
No-fee	357	8,630	99%	154%		
Biomed	43	1,548	18%	-49%	\$4	-100%
Fee	1	61	4%	-95%	\$100	-95%
No-fee	42	1,487	96%	261%		
STEM	80	1,845	21%	-49%	\$5	-100%
Fee	2	54	3%	-96%	\$154	-91%
No-fee	78	1,791	97%	256%		
H&SS	237	5,352	61%	155%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	237	5,352	100%	30%		

No H&SS fees at all. 13% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	335	351	354	352	347	332
%No-fee	99%	99%	99%	99%	99%	99%
Articles	8,745	8,834	9,576	9,053	9,075	8,306
%No-fee	99%	99%	99%	99%	99%	99%
Change	-1%	-8%	6%	0%	9%	

Down slightly from a 2017 peak.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	5	670	100%	\$0
Med.: 60-149	27	1,345	95%	\$5
Small: 20-59	265	6,095	99%	\$1
Smallest: 0-19	63	635	100%	\$0

The three fee-charging journals are medium or small.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	38	\$7,600	\$200
\$0.20-\$199	2	77	\$6,827	\$89
No fee	357	8,630		
Total	360	8,745	\$14,427	\$2

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	2	0	1	0	0
No-fee	66	68	96	106	21
Total	68	68	97	106	21

Sharp drop in new journals since 2015.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	343	8,095	99%	\$1
Society/govt	9	316	81%	\$19
Open Access	4	185	100%	\$0
Traditional	2	82	100%	\$0
Miscellaneous	2	67	100%	\$0



**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Medicine	38	1,238	95%	\$5
Sociology	31	816	100%	\$0
Education	27	759	100%	\$0
Engineering	28	727	100%	\$0
Economics	36	595	100%	\$0
Law	32	582	100%	\$0
Political Science	15	367	100%	\$0
Language & Literature	15	341	100%	\$0
Anthropology	14	312	100%	\$0
Philosophy	12	311	100%	\$0
Biology	5	310	100%	\$0
Agriculture	12	293	95%	\$2
Psychology	13	277	100%	\$0
History	11	265	100%	\$0
Arts & Architecture	9	262	100%	\$0
Miscellany	12	248	100%	\$0
Other Sciences	8	197	100%	\$0
Earth Sciences	7	167	100%	\$0
Media & Communications	6	143	100%	\$0
Zoology	5	142	73%	\$54
Technology	4	87	100%	\$0
Ecology	6	78	100%	\$0
Computer Science	3	57	100%	\$0
Religion	3	55	100%	\$0
Mathematics	4	42	100%	\$0
Chemistry	2	34	100%	\$0
Physics	1	21	100%	\$0
Library Science	1	19	100%	\$0

Medicine, agriculture, zoology—the only fees.

# Costa Rica

No fees in any journals.

## Key facts

	Journals	Articles	Art%	Rel%
All	65	1,780		
Biomed	6	160	9%	-74%
STEM	16	553	31%	-24%
H&SS	43	1,067	60%	150%

Mostly H&SS, as is true for Latin America in general. 23% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	64	65	65	65	61	58
Articles	1,780	1,730	1,631	1,741	1,330	1,228
Change	3%	6%	-6%	31%	8%	

Back to growth after slight decline in 2017.

## Article volume

	Journals	Articles	Percent	Art/Jrn
Large: 150-599	1	152	9%	152
Med.: 60-149	12	700	39%	58
Small: 20-59	31	711	40%	23
Smallest: 0-19	21	217	12%	10

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Journals	17	11	16	19	2

Another case where new journals have dropped sharply since 2015.

**Publisher category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	63	1,732	97%	27
Society/govt	2	48	3%	24

**Subject**

Subject	Journals	Articles	Art/Jrn
Education	6	251	42
Ecology	3	176	59
Sociology	7	166	24
Medicine	6	160	27
Engineering	2	124	62
Language & Literature	4	116	29
Miscellany	3	115	38
Agriculture	5	93	19
Other Sciences	2	88	44
Law	2	69	35
Anthropology	3	53	18
History	3	48	16
Philosophy	2	44	22
Psychology	3	44	15
Arts & Architecture	2	40	20
Earth Sciences	2	37	19
Political Science	2	33	17
Economics	3	30	10
Library Science	2	29	15
Religion	1	29	29
Zoology	1	20	20
Mathematics	1	15	15

# Cuba

Another country with no fees.

## Key facts

	Journals	Articles	Art%	Rel%
All	93	4,347		
Biomed	31	1,614	37%	6%
STEM	28	892	21%	-50%
H&SS	34	1,841	42%	77%

18% more journals than in GOA4. More biomed than is typical of Latin America, but on par with the world as a whole.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	84	89	90	88	82	79
Articles	4,347	4,658	4,185	4,126	3,848	3,556
Change	-7%	11%	1%	7%	8%	

## Article volume

	Journals	Articles	Percent	Art/Jrn
Large: 150-599	7	1,079	25%	154
Med.: 60-149	25	1,683	39%	67
Small: 20-59	57	1,536	35%	27
Smallest: 0-19	4	49	1%	12

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Journals	13	18	22	32	8

Another case of diminishing new journals since 2015.

**Publisher category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	76	3,723	86%	49
Society/govt	16	619	14%	39
Open Access	1	5	0%	5

Predominantly universities.

**Subject**

Subject	Journals	Articles	Art/Jrn
Medicine	30	1,609	54
Education	15	1,481	99
Agriculture	10	312	31
Anthropology	5	126	25
Earth Sciences	4	119	30
Engineering	4	97	24
Ecology	2	96	48
Chemistry	2	87	44
Zoology	2	70	35
Economics	4	64	16
Sociology	4	53	13
Technology	2	53	27
Computer Science	1	36	36
Library Science	2	36	18
Arts & Architecture	1	30	30
Political Science	2	26	13
Media & Communications	1	25	25
Physics	1	22	22
Biology	1	5	5

# Ecuador

Also no fees.

## Key facts

	Journals	Articles	Art%	Rel%
All	59	1,799		
Biomed	7	221	12%	-65%
STEM	16	351	20%	-52%
H&SS	36	1,227	68%	185%

Very strong in H&SS. High 37% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	57	59	53	49	38	36
Articles	1,799	1,682	1,503	1,389	1,005	682
Change	7%	12%	8%	38%	47%	

Growing every year.

## Article volume

	Journals	Articles	Percent	Art/Jrn
Large: 150-599	2	184	10%	92
Med.: 60-149	7	428	24%	61
Small: 20-59	38	1,041	58%	27
Smallest: 0-19	12	146	8%	12

Most articles are in small journals.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Journals	3	2	8	23	23

Most journals in past ten years, with many in the past five.

**Publisher category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	58	1,781	99%	31
Miscellaneous	1	18	1%	18

**Subject**

Subject	Journals	Articles	Art/Jrn
Miscellany	7	409	58
Sociology	8	285	36
Medicine	6	168	28
Arts & Architecture	5	143	29
Education	4	124	31
Engineering	4	118	30
Economics	5	86	17
Technology	3	66	22
Other Sciences	2	61	31
Language & Literature	1	56	56
Biology	1	53	53
Philosophy	2	50	25
Agriculture	3	48	16
History	1	35	35
Law	1	20	20
Ecology	1	19	19
Political Science	1	19	19
Earth Sciences	1	15	15
Chemistry	1	13	13
Computer Science	1	11	11
Media & Communications	1	0	0

# Mexico

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	132	5,221			\$17	-98%
Fee	8	373	7%	-88%	\$233	-86%
No-fee	124	4,848	93%	139%		
Biomed	13	514	10%	-72%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	13	514	100%	275%		
STEM	30	1,299	25%	-39%	\$67	-94%
Fee	7	351	27%	-63%	\$247	-85%
No-fee	23	948	73%	168%		
H&SS	89	3,408	65%	172%	\$0	-100%
Fee	1	22	1%	-97%	\$8	-99%
No-fee	88	3,386	99%	30%		

Nearly two-thirds H&SS; no biomed fees (and essentially no H&SS fees). 10% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	130	132	131	128	126	121
%No-fee	94%	94%	94%	95%	94%	94%
Articles	5,221	4,515	4,187	3,765	3,466	3,317
%No-fee	93%	91%	92%	95%	94%	94%
Change	16%	8%	11%	9%	4%	

Growth every year, including strong growth in 2019.



**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	1,082	100%	\$0
Large: 150-599	1	120	100%	\$0
Med.: 60-149	20	1,327	81%	\$42
Small: 20-59	89	2,491	95%	\$12
Smallest: 0-19	21	201	100%	\$0

What few fees there are, are all in medium and small journals.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	5	216	\$65,922	\$305
\$0.20-\$199	3	157	\$20,867	\$133
No fee	124	4,848		
Total	132	5,221	\$86,789	\$17

Only one journal (\$450 fee) charges more than \$290.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	2	2	1	2	1
No-fee	31	14	27	41	11
Total	33	16	28	43	12

Once again, a substantial drop in new titles over the past five years.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	117	4,729	93%	\$16
Society/govt	8	300	80%	\$30
Miscellaneous	3	107	100%	\$0
Open Access	3	52	100%	\$0
Traditional	1	33	100%	\$0

Predominantly (as in 91%) universities.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Education	11	1,359	100%	\$0
Medicine	12	486	100%	\$0
Sociology	13	391	100%	\$0
Agriculture	6	314	19%	\$194
Other Sciences	7	312	100%	\$0
Economics	14	290	100%	\$0
Ecology	5	258	88%	\$23
Anthropology	10	247	100%	\$0
Earth Sciences	6	214	100%	\$0
Language & Literature	9	214	100%	\$0
History	5	211	100%	\$0
Political Science	7	190	88%	\$1
Miscellany	5	137	100%	\$0
Philosophy	5	129	100%	\$0
Zoology	2	116	41%	\$171
Arts & Architecture	4	78	100%	\$0
Law	2	59	100%	\$0
Engineering	2	49	100%	\$0
Library Science	1	40	100%	\$0
Media & Communications	2	40	100%	\$0
Biology	1	28	100%	\$0
Mathematics	1	23	100%	\$0
Psychology	1	23	100%	\$0
Chemistry	1	13	100%	\$0

Agriculture and zoology have the only significant fees.

# Paraguay

No fees.

## Key facts

	Journals	Articles	Art%	Rel%
All	17	364		
Biomed	8	191	52%	50%
STEM	4	67	18%	-55%
H&SS	5	106	29%	22%

Mostly biomed. 125% more journals than GOA4—more than doubled!

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	16	16	17	17	14	14
Articles	364	373	343	338	280	214
Change	-2%	9%	1%	21%	31%	

Tiny dropoff after four years of varying growth.

## Article volume

	Journals	Articles	Percent	Art/Jrn
Small: 20-59	13	323	89%	25
Smallest: 0-19	4	41	11%	10

Most of the journals are *quite* small—only two had more than 30 articles in 2019.

**Starting date**

	2000-04	2005-09	2010-14	2015-19
Journals	1	6	8	2

Another sharp drop in new titles after 2014.

**Publisher category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	12	245	67%	20
Society/govt	5	119	33%	24

**Subject**

Subject	Journals	Articles	Art/Jrn
Medicine	8	191	24
Sociology	3	54	18
Engineering	2	38	19
Law	1	33	33
Economics	1	19	19
Agriculture	1	16	16
Zoology	1	13	13

In this case, “mostly biomed” means mostly medicine.

# Peru

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	69	1,928			\$9	-99%
Fee	2	90	5%	-92%	\$191	-89%
No-fee	67	1,838	95%	145%		
Biomed	12	561	29%	-17%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	12	561	100%	275%		
STEM	21	547	28%	-31%	\$31	-97%
Fee	2	90	16%	-77%	\$191	-88%
No-fee	19	457	84%	206%		
H&SS	36	820	43%	78%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	36	820	100%	30%		

The only fees are in STEM. Very high 50% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	69	67	66	63	57	53
%No-fee	97%	97%	97%	97%	96%	96%
Articles	1,928	1,825	1,822	1,606	1,409	1,214
%No-fee	95%	95%	97%	96%	97%	97%
Change	6%	0%	13%	14%	16%	

No down years.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	10	679	91%	\$23
Small: 20-59	44	1,065	97%	\$2
Smallest: 0-19	15	184	100%	\$0

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	62	\$15,500	\$250
\$0.20-\$199	1	28	\$1,680	\$60
No fee	67	1,838		
Total	69	1,928	\$17,180	\$9

Both fee-based journals are in agriculture.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	0	0	2	0
No-fee	15	6	10	18	18
Total	15	6	10	20	18

The pace of new journals has held up quite well here.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	59	1,692	95%	\$10
Society/govt	8	189	100%	\$0
Open Access	2	47	100%	\$0

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	11	495	100%	\$0
Agriculture	4	178	49%	\$97
Zoology	3	161	100%	\$0
Education	5	141	100%	\$0
Psychology	4	120	100%	\$0
Media & Communications	4	110	100%	\$0
Law	5	104	100%	\$0
Language & Literature	4	101	100%	\$0
Engineering	6	93	100%	\$0
Biology	1	66	100%	\$0
History	2	56	100%	\$0
Anthropology	3	55	100%	\$0
Miscellany	2	47	100%	\$0
Economics	4	44	100%	\$0
Mathematics	1	35	100%	\$0
Other Sciences	3	33	100%	\$0
Earth Sciences	2	21	100%	\$0
Library Science	1	19	100%	\$0
Technology	1	16	100%	\$0
Political Science	1	13	100%	\$0
Ecology	1	10	100%	\$0
Sociology	1	10	100%	\$0

Medicine is largest and entirely no-fee.

# Uruguay

No fees.

## Key facts

	Journals	Articles	Art%	Rel%
All	25	530		
Biomed	4	105	20%	-43%
STEM	5	49	9%	-77%
H&SS	16	376	71%	196%

Mostly H&SS. High 39% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	23	25	25	22	22	20
Articles	530	518	532	416	443	417
Change	2%	-3%	28%	-6%	6%	

Erratic, but essentially back to peak levels.

## Article volume

	Journals	Articles	Percent	Art/Jrn
Med.: 60-149	1	23	4%	23
Small: 20-59	16	421	79%	26
Smallest: 0-19	8	86	16%	11

The medium journal had 85 articles in 2014, 61 in 2015.



**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Journals	1	3	8	9	4

Another case of declining new title production since 2015.

**Publisher category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	20	381	72%	19
Society/govt	4	108	20%	27
Open Access	1	41	8%	41

Not as predominantly universities as some countries.

**Subject**

Subject	Journals	Articles	Art/Jrn
Medicine	4	105	26
Psychology	2	74	37
Media & Communications	2	61	31
Law	2	56	28
Education	3	39	13
Anthropology	2	38	19
Language & Literature	1	30	30
Miscellany	1	26	26
Sociology	1	23	23
Technology	1	18	18
Engineering	2	16	8
Political Science	1	15	15
Zoology	1	15	15
Library Science	1	14	14
Ecology	1	0	0

# Venezuela

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	32	986			\$8	-99%
Fee	2	17	2%	-97%	\$450	-73%
No-fee	30	969	98%	153%		
Biomed	4	83	8%	-76%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	4	83	100%	275%		
STEM	8	490	50%	21%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	8	490	100%	267%		
H&SS	20	413	42%	75%	\$19	-87%
Fee	2	17	4%	-82%	\$450	-23%
No-fee	18	396	96%	25%		

The only fees are in H&SS. Very little biomed. 10% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	27	27	29	29	25	23
%No-fee	93%	93%	93%	93%	92%	91%
Articles	986	606	612	492	365	350
%No-fee	98%	98%	93%	95%	90%	88%
Change	63%	-1%	24%	35%	4%	

Huge increase in 2019; doubled since 2016.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	450	100%	\$0
Med.: 60-149	2	161	100%	\$0
Small: 20-59	15	276	94%	\$28
Smallest: 0-19	14	99	100%	\$0

Both fee journals *were* small in earlier years, now even smaller.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	2	17	\$7,650	\$450
No fee	30	969		
Total	32	986	\$7,650	\$8

Both fee journals charge \$450.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	0	2	0	0
No-fee	5	3	3	9	10
Total	5	3	5	9	10

More new titles in past five years than in previous five.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	31	986	98%	\$8
Society/govt	1	0		

A clean sweep: all 2019 articles were published by universities.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Other Sciences	2	450	100%	\$0
Miscellany	3	129	100%	\$0
Sociology	6	96	100%	\$0
Education	3	94	100%	\$0
Medicine	4	83	100%	\$0
Law	1	36	100%	\$0
Economics	3	34	82%	\$79
Engineering	1	13	100%	\$0
Political Science	1	13	100%	\$0
Chemistry	1	12	100%	\$0
Media & Communications	1	11	0%	\$450
Technology	1	7	100%	\$0
Mathematics	1	4	100%	\$0
Zoology	1	4	100%	\$0
Computer Science	1	0		
Language & Literature	1	0		
Philosophy	1	0		

## Other Latin American Countries

Nine countries with a total of 33 journals.

### Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	33	535			\$5	-99%
Fee	2	6	1%	-98%	\$458	-73%
No-fee	31	529	99%	154%		
Biomed	3	46	9%	-75%	\$22	-98%
Fee	1	1	2%	-97%	\$1,000	-49%
No-fee	2	45	98%	267%		
STEM	9	96	18%	-56%	\$18	-98%
Fee	1	5	5%	-93%	\$350	-79%
No-fee	8	91	95%	248%		
H&SS	21	393	73%	207%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	21	393	100%	30%		

Two tiny fee-charging journals; no fees in H&SS.

### Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	29	30	29	27	28	26
%No-fee	93%	93%	93%	93%	93%	92%
Articles	535	540	444	405	447	523
%No-fee	99%	96%	98%	97%	91%	94%
Change	-1%	22%	10%	-9%	-15%	

**Article volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	1	30	100%	\$0
Small: 20-59	18	397	100%	\$3
Smallest: 0-19	14	108	95%	\$16

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	1	\$1,000	\$1,000
\$200-\$599	1	5	\$1,750	\$350
No fee	31	529		
Total	33	535	\$2,750	\$5

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	0	0	1	0
No-fee	4	2	6	11	8
Total	5	2	6	12	8

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	28	446	99%	\$6
Society/govt	4	66	100%	\$0
Open Access	1	23	100%	\$0

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Education	8	196	100%	\$0
Anthropology	3	73	100%	\$0
Sociology	3	50	100%	\$0
Zoology	2	41	100%	\$0
Medicine	2	33	97%	\$30
Media & Communications	1	30	100%	\$0
Miscellany	1	24	100%	\$0
Economics	2	17	100%	\$0
Engineering	1	15	100%	\$0
Other Sciences	2	15	100%	\$0
Biology	1	13	100%	\$0
Agriculture	1	12	100%	\$0
Ecology	2	8	100%	\$0
Earth Sciences	1	5	0%	\$350
Psychology	2	3	100%	\$0
Political Science	1	0		

**Country Summaries****Bahamas**

One no-fee journal, six articles in 2019.

**Barbados**

One no-fee journal, 50 articles in 2019. (Eagle-eyed readers may note that GOA4 showed two Bahamas and zero Barbados. That was an error that only affected the summaries.)

**Bolivia**

Five no-fee journals, same as in GOA4. 72 articles in 2019.

**Dominican Republic**

Six no-fee journals, all new to GOA5. 151 articles in 2019.

**El Salvador**

Four no-fee journals, up from three in *GOA4*. 65 2019 articles.

**Guam**

One \$350 journal, same as in *GOA4*, with five 2019 articles.<sup>1</sup>

**Guatemala**

Two no-fee journals, down from three in *GOA4*. 16 2019 articles.

**Jamaica**

One \$1,000 journal, same as in *GOA4*, with one article in 2019.

**Nicaragua**

Eight no-fee journals (six active), up from six in *GOA4*. 157 articles in 2019.

**Puerto Rico**

Four no-fee journals, same as in *GOA4*. Three active in 2019, with a total of 12 articles.

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<sup>1</sup> Yes, it's still here rather than in Asia where it belongs.



# Middle East

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	1,043	44,197			\$80	-92%
Fee	222	13,525	31%	-50%	\$262	-84%
No-fee	821	30,672	69%	79%		
Biomed	376	18,660	42%	21%	\$85	-94%
Fee	55	4,421	24%	-68%	\$358	-82%
No-fee	321	14,239	76%	186%		
STEM	300	12,624	29%	-30%	\$89	-92%
Fee	86	4,521	36%	-51%	\$248	-85%
No-fee	214	8,103	64%	135%		
H&SS	367	12,913	29%	22%	\$65	-53%
Fee	81	4,583	35%	52%	\$183	-69%
No-fee	286	8,330	65%	-16%		

More than two-thirds no-fee. 16% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	996	1,019	999	948	859	750
%No-fee	79%	78%	78%	78%	78%	76%
Articles	44,197	44,566	41,492	40,369	34,648	30,319
%No-fee	69%	67%	66%	65%	66%	65%
Change	-1%	7%	3%	17%	14%	

**Article volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Largest: 600+	5	1,572	45%	\$155
Large: 150-599	58	10,013	43%	\$213
Med.: 60-149	215	14,202	74%	\$57
Small: 20-59	634	16,988	81%	\$21
Smallest: 0-19	131	1,422	91%	\$9

**Fees and revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	2	124	\$227,005	\$1,831
\$600-\$1,399	13	1,484	\$1,536,998	\$1,036
\$200-\$599	40	3,138	\$1,074,434	\$342
\$0.20-\$199	167	8,779	\$706,075	\$80
No fee	821	30,672		
Total	1,043	44,197	\$3,544,512	\$80

**Starting date**

	<b>To 1999</b>	<b>2000-04</b>	<b>2005-09</b>	<b>2010-14</b>	<b>2015-19</b>
Fee	13	16	64	99	30
No-fee	54	75	126	344	222
Total	67	91	190	443	252

**Publisher category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Univ/college	747	29,084	73%	\$39
Open Access	151	6,368	78%	\$67
Traditional	49	4,202	55%	\$362
Society/govt	84	3,794	49%	\$109
Miscellaneous	12	749	45%	\$55

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	350	17,619	78%	\$61
Engineering	56	2,792	69%	\$91
Education	66	2,595	85%	\$20
Agriculture	54	2,492	50%	\$32
Economics	67	2,255	39%	\$146
Zoology	28	1,405	33%	\$102
Other Sciences	26	1,394	59%	\$272
Sociology	40	1,342	70%	\$29
Language & Literature	36	1,270	63%	\$32
Arts & Architecture	14	1,074	19%	\$107
Biology	26	1,041	47%	\$487
Religion	34	1,016	92%	\$8
Earth Sciences	29	982	89%	\$5
Anthropology	26	858	50%	\$230
Chemistry	18	812	76%	\$223
Ecology	27	746	61%	\$43
Technology	14	668	87%	\$5
Mathematics	26	648	92%	\$5
Psychology	17	582	70%	\$16
Computer Science	18	568	77%	\$62
History	15	396	74%	\$20
Political Science	14	347	88%	\$5
Miscellany	8	339	79%	\$7
Law	11	308	89%	\$7
Philosophy	6	216	42%	\$149
Library Science	7	190	100%	\$0
Media & Communications	6	125	83%	\$12
Physics	4	117	79%	\$26

**Country of Publication**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%no-fee</b>	<b>\$/article</b>
Egypt	32	1,635	26%	\$224
Iran	513	18,850	68%	\$50
Iraq	42	2,017	21%	\$93
Israel	2	56	100%	\$0
Jordan	4	198	61%	\$53
Kuwait	1	0		
Lebanon	1	34	100%	\$0
Oman	7	272	100%	\$0
Palestine	1	0		
Qatar	4	48	88%	\$124
Saudi Arabia	18	2,165	49%	\$565
Turkey	403	18,269	84%	\$38
United Arab Emirates	10	567	24%	\$201
Yemen	5	86	77%	\$35

# Egypt

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	32	1,635			\$224	-78%
Fee	19	1,218	74%	22%	\$301	-82%
No-fee	13	417	26%	-34%		
Biomed	10	269	16%	-53%	\$53	-96%
Fee	4	51	19%	-74%	\$278	-86%
No-fee	6	218	81%	204%		
STEM	18	1,078	66%	61%	\$288	-76%
Fee	12	893	83%	14%	\$347	-79%
No-fee	6	185	17%	-37%		
H&SS	4	288	18%	-26%	\$146	6%
Fee	3	274	95%	307%	\$154	-74%
No-fee	1	14	5%	-94%		

Strong on STEM and specifically fee-based STEM. A rare case with 38% fewer journals than in GOA4. Note that GOA4 showed 58% no-fee articles in 2018, compared to 30% for 2018 in this report.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	30	32	31	29	25	24
%No-fee	40%	41%	39%	41%	48%	46%
Articles	1,635	2,205	1,201	1,326	981	818
%No-fee	26%	30%	37%	28%	36%	35%
Change	-26%	84%	-9%	35%	20%	

Erratic, but still doubled since 2014.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	6	984	7%	\$288
Med.: 60-149	5	284	79%	\$63
Small: 20-59	15	307	29%	\$201
Smallest: 0-19	6	60	65%	\$53

Most lost journals were small or medium: there are *more* large journals.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	6	383	\$256,467	\$670
\$200-\$599	2	80	\$22,000	\$275
\$0.20-\$199	11	755	\$88,130	\$117
No fee	13	417		
Total	32	1,635	\$366,597	\$224

No remaining very expensive journals, and less than half as much revenue from \$600-\$1,399 journals.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	1	1	10	6
No-fee	0	1	0	10	2
Total	1	2	1	20	8

Another case of fewer new titles in 2015-19 than in 2010-14.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	12	772	42%	\$332
Society/govt	7	522	0%	\$147
Univ/college	7	265	22%	\$76
Open Access	6	76	45%	\$177

Note: there were 34 traditional in GOA4. Still the largest segment.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Zoology	6	487	10%	\$115
Engineering	3	335	2%	\$634
Medicine	8	255	83%	\$51
Arts & Architecture	1	240	0%	\$150
Earth Sciences	2	118	100%	\$0
Ecology	2	37	27%	\$73
Anthropology	2	34	0%	\$179
Computer Science	1	33	0%	\$700
Agriculture	1	28	0%	\$85
Physics	1	25	0%	\$120
Other Sciences	1	15	0%	\$719
Biology	2	14	50%	\$75
Library Science	1	14	100%	\$0
Mathematics	1	0		

A dozen fewer medical journals than GOA4, but a higher average cost.

# Iran

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	513	18,850			\$50	-95%
Fee	128	6,111	32%	-47%	\$155	-91%
No-fee	385	12,739	68%	74%		
Biomed	236	10,415	55%	58%	\$70	-95%
Fee	37	3,105	30%	-59%	\$236	-88%
No-fee	199	7,310	70%	164%		
STEM	147	4,875	26%	-37%	\$23	-98%
Fee	42	1,528	31%	-57%	\$72	-96%
No-fee	105	3,347	69%	152%		
H&SS	130	3,560	19%	-21%	\$29	-79%
Fee	49	1,478	42%	78%	\$71	-88%
No-fee	81	2,082	58%	-24%		

Light on H&SS—but more fees there than elsewhere. Low costs in general. 19% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	490	505	499	485	449	407
%No-fee	75%	75%	75%	75%	73%	71%
Articles	18,850	19,018	19,423	19,747	18,534	17,265
%No-fee	68%	67%	66%	64%	62%	60%
Change	-1%	-2%	-2%	7%	7%	

Slow downward trend since 2016, but still above 2015 numbers.



**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	525	0%	\$400
Large: 150-599	17	2,346	60%	\$54
Med.: 60-149	93	5,791	60%	\$70
Small: 20-59	362	9,736	76%	\$21
Smallest: 0-19	40	452	91%	\$6

Not the common correlation, with medium costing more than large.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	2	157	\$102,061	\$650
\$200-\$599	20	1,652	\$570,271	\$345
\$0.20-\$199	106	4,302	\$275,449	\$64
No fee	385	12,739		
Total	513	18,850	\$947,781	\$50

The priciest journal charges \$750.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	9	10	37	66	6
No-fee	21	17	65	192	90
Total	30	27	102	258	96

Huge influx of new journals 2010-2014, now back to earlier levels.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	444	15,766	72%	\$34
Society/govt	43	1,975	49%	\$142
Traditional	9	567	16%	\$74
Open Access	14	430	63%	\$178
Miscellaneous	3	112	46%	\$38

Predominantly universities.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	218	9,863	70%	\$70
Engineering	26	1,067	88%	\$10
Agriculture	28	930	29%	\$34
Economics	26	614	62%	\$24
Ecology	20	568	63%	\$41
Education	17	557	68%	\$22
Biology	18	552	69%	\$74
Chemistry	13	546	100%	\$0
Earth Sciences	18	536	81%	\$10
Psychology	11	447	61%	\$20
Zoology	9	408	32%	\$61
Anthropology	10	369	29%	\$38
Sociology	12	305	51%	\$82
Language & Literature	16	303	58%	\$21
Religion	12	286	72%	\$30
Mathematics	13	276	89%	\$5
Computer Science	11	272	69%	\$42
Technology	5	151	77%	\$8
Philosophy	4	142	57%	\$24
Law	6	138	75%	\$15
Miscellany	3	109	36%	\$21
Political Science	5	104	59%	\$17
Library Science	3	92	100%	\$0
Physics	3	92	100%	\$0
History	3	55	24%	\$58
Other Sciences	1	29	100%	\$0
Media & Communications	1	21	0%	\$71
Arts & Architecture	1	18	100%	\$0

No subject reaches three-digit costs. Unusual: chemistry all no-fee.

# Iraq

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	42	2,017			\$93	-91%
Fee	33	1,598	79%	30%	\$117	-93%
No-fee	9	419	21%	-47%		
Biomed	7	214	11%	-70%	\$181	-87%
Fee	7	214	100%	36%	\$181	-91%
No-fee	0	0	0%	-100%		
STEM	28	1,463	73%	77%	\$81	-93%
Fee	21	1,125	77%	6%	\$106	-94%
No-fee	7	338	23%	-15%		
H&SS	7	340	17%	-30%	\$86	-37%
Fee	5	259	76%	226%	\$113	-81%
No-fee	2	81	24%	-69%		

Predominantly fee-based, albeit with generally low fees. Very high 82% more journals than in GOA4, and 16 of the 19 additions charge fees.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	40	41	38	31	26	22
%No-fee	23%	20%	21%	19%	15%	14%
Articles	2,017	2,059	2,117	1,671	1,258	1,011
%No-fee	21%	14%	18%	18%	9%	5%
Change	-2%	-3%	27%	33%	24%	

Two years of small declines after three years of large increases.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	5	657	28%	\$101
Med.: 60-149	12	708	9%	\$79
Small: 20-59	20	600	24%	\$105
Smallest: 0-19	5	52	54%	\$30

No common correlation. Small most costly, medium highest fee%.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	4	263	\$58,651	\$223
\$0.20-\$199	29	1,335	\$128,388	\$96
No fee	9	419		
Total	42	2,017	\$187,038	\$93

The priciest journal charges \$300.

**Starting date**

	2000-04	2005-09	2010-14	2015-19
Fee	3	16	6	8
No-fee	1	0	3	5
Total	4	16	9	13

No early journals.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	41	1,963	21%	\$94
Open Access	1	54	0%	\$42

Pretty nearly all universities.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Engineering	8	423	3%	\$74
Other Sciences	8	362	21%	\$96
Technology	4	301	82%	\$8
Medicine	7	214	0%	\$181
Agriculture	2	176	0%	\$185
Education	2	144	0%	\$123
Zoology	3	98	0%	\$103
Sociology	2	81	100%	\$0
History	1	60	0%	\$76
Ecology	1	56	0%	\$100
Chemistry	1	38	0%	\$63
Economics	1	29	0%	\$150
Arts & Architecture	1	26	0%	\$100
Computer Science	1	9	0%	\$34

Sociology and technology stand out for being the only mostly-no-fee subjects; agriculture edges out medicine as the highest cost.

# Saudi Arabia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	18	2,165			\$565	-45%
Fee	5	1,109	51%	-16%	\$1,102	-34%
No-fee	13	1,056	49%	25%		
Biomed	9	1,281	59%	69%	\$564	-61%
Fee	3	709	55%	-25%	\$1,019	-48%
No-fee	6	572	45%	68%		
STEM	6	844	39%	-5%	\$592	-50%
Fee	2	400	47%	-35%	\$1,250	-23%
No-fee	4	444	53%	93%		
H&SS	3	40	2%	-92%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	3	40	100%	30%		

Almost no H&SS (and no H&SS fees), strong on biomed. Same journal count as in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	16	17	18	18	18	18
%No-fee	69%	71%	72%	72%	72%	72%
Articles	2,165	1,671	1,702	1,412	1,262	1,082
%No-fee	49%	54%	44%	46%	54%	53%
Change	30%	-2%	21%	12%	17%	

Very strong 2019. Doubled since 2014.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	7	1,518	27%	\$805
Small: 20-59	7	564	100%	\$0
Smallest: 0-19	4	83	100%	\$0

No large journals, and all fee journals are medium-sized.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	4	938	\$1,172,500	\$1,250
\$200-\$599	1	171	\$49,832	\$291
No fee	13	1,056		
Total	18	2,165	\$1,222,332	\$565

Four journals all charge \$1,250.

**Starting date**

	To 1999	2005-09	2010-14	2015-19
Fee	1	4	0	0
No-fee	2	6	4	1
Total	3	10	4	1

No new journals 2000-2004, and only one since 2015.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	12	1,850	49%	\$634
Society/govt	1	171	0%	\$291
Univ/college	5	144	100%	\$0

Mostly traditional publishers, which is unusual. Or, rather, *one* traditional publisher (Elsevier).

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	8	909	63%	\$283
Biology	1	372	0%	\$1,250
Other Sciences	1	262	0%	\$1,250
Computer Science	1	217	100%	\$0
Chemistry	1	138	0%	\$1,250
Engineering	1	107	100%	\$0
Agriculture	1	77	100%	\$0
Mathematics	1	43	100%	\$0
Law	1	40	100%	\$0
Education	1	0		
Religion	1	0		



# Turkey

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	403	18,269			\$38	-96%
Fee	27	2,953	16%	-74%	\$233	-86%
No-fee	376	15,316	84%	116%		
Biomed	104	6,016	33%	-6%	\$4	-100%
Fee	3	316	5%	-93%	\$81	-96%
No-fee	101	5,700	95%	256%		
STEM	88	4,234	23%	-44%	\$17	-99%
Fee	4	545	13%	-82%	\$134	-92%
No-fee	84	3,689	87%	219%		
H&SS	211	8,019	44%	83%	\$73	-47%
Fee	20	2,092	26%	12%	\$281	-52%
No-fee	191	5,927	74%	-4%		

Strong on H&SS, predominantly no-fee, relatively low fees when they exist. 21% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	388	391	379	352	312	255
%No-fee	93%	93%	93%	92%	92%	91%
Articles	18,269	18,298	15,899	14,898	11,736	9,377
%No-fee	84%	79%	77%	74%	79%	82%
Change	0%	15%	7%	27%	25%	

Flat 2019 after four growth years. Nearly doubled from 2014.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	4	1,047	68%	\$32
Large: 150-599	21	4,108	56%	\$90
Med.: 60-149	92	6,411	91%	\$41
Small: 20-59	214	5,912	97%	\$3
Smallest: 0-19	72	791	95%	\$4

Decidedly atypical pattern.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	98	\$176,400	\$1,800
\$200-\$599	9	965	\$370,180	\$384
\$0.20-\$199	17	1,890	\$140,558	\$74
No fee	376	15,316		
Total	403	18,269	\$687,138	\$38

One expensive journal, but no others charge more than \$500.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	2	6	15	3
No-fee	29	53	49	124	121
Total	30	55	55	139	124

Rapid growth of new titles since 2010 continues in 2015-2019.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	227	10,046	87%	\$32
Open Access	120	5,571	81%	\$58
Society/govt	33	1,126	80%	\$6
Traditional	14	889	100%	\$0
Miscellaneous	9	637	44%	\$57

Mostly universities.

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Medicine	99	5,913	95%	\$4
Education	43	1,815	96%	\$12
Economics	38	1,552	32%	\$193
Agriculture	20	1,268	69%	\$11
Language & Literature	19	939	64%	\$36
Sociology	25	936	75%	\$11
Engineering	14	844	100%	\$0
Religion	21	730	100%	\$0
Other Sciences	11	669	100%	\$0
Anthropology	13	435	69%	\$408
Zoology	10	412	69%	\$128
Arts & Architecture	9	370	46%	\$45
Earth Sciences	9	328	100%	\$0
Mathematics	10	309	100%	\$0
History	11	281	100%	\$0
Political Science	9	243	100%	\$0
Miscellany	5	230	100%	\$0
Technology	5	216	100%	\$0
Psychology	5	119	100%	\$0
Law	3	107	100%	\$0
Media & Communications	5	104	100%	\$0
Biology	5	103	100%	\$0
Chemistry	3	90	77%	\$70
Ecology	4	85	100%	\$0
Library Science	3	84	100%	\$0
Philosophy	2	74	14%	\$389
Computer Science	2	13	100%	\$0

Unusual, with three H&SS subjects the most expensive.

# United Arab Emirates

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	10	567			\$201	-80%
Fee	6	433	76%	25%	\$264	-84%
No-fee	4	134	24%	-39%		
Biomed	3	140	25%	-29%	\$361	-75%
Fee	1	26	19%	-75%	\$1,946	-1%
No-fee	2	114	81%	206%		
STEM	4	9	2%	-96%	\$222	-81%
Fee	3	4	44%	-39%	\$500	-69%
No-fee	1	5	56%	104%		
H&SS	3	418	74%	208%	\$147	7%
Fee	2	403	96%	313%	\$153	-74%
No-fee	1	15	4%	-95%		

Very heavy on H&SS and almost all fees, very light on STEM—and both STEM and biomed mostly no-fee. 33% *fewer* journals than in GOA4, but that count included eight journals with no 2017 or 2018 articles.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	10	10	10	9	6	3
%No-fee	40%	40%	40%	33%	33%	67%
Articles	567	546	371	443	206	150
%No-fee	24%	29%	39%	28%	53%	75%
Change	4%	47%	-16%	115%	37%	

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	400	0%	\$150
Med.: 60-149	2	114	77%	\$444
Small: 20-59	4	45	91%	\$44
Smallest: 0-19	3	8	63%	\$188

Too few journals for patterns to mean much.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	26	\$50,605	\$1,946
\$200-\$599	4	7	\$3,500	\$500
\$0.20-\$199	1	400	\$60,000	\$150
No fee	4	134		
Total	10	567	\$114,105	\$201

All four journals in the \$200-\$599 row charge \$500.

**Starting date**

	2000-04	2005-09	2010-14	2015-19
Fee	0	0	1	5
No-fee	1	1	1	1
Total	1	1	2	6

Rare case where *most* activity is within the past five years. No early journals, at least ones that have survived.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	2	415	4%	\$145
Open Access	7	126	94%	\$28
Traditional	1	26	0%	\$1,946

Universities publish the most, but don't charge the most.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Arts & Architecture	1	400	0%	\$150
Medicine	3	140	81%	\$361
Education	1	15	100%	\$0
Agriculture	1	5	100%	\$0
Economics	1	3	0%	\$500
Other Sciences	1	2	0%	\$500
Computer Science	1	1	0%	\$500
Engineering	1	1	0%	\$500

One large arts & architecture journal—and only two no-fee subjects.

## Other Middle Eastern Countries

Eight countries, 25 journals (one less than in GOA4).

### Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	25	694			\$28	-97%
Fee	4	103	15%	-76%	\$190	-89%
No-fee	21	591	85%	119%		
Biomed	7	325	47%	34%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	7	325	100%	275%		
STEM	9	121	17%	-58%	\$66	-94%
Fee	2	26	21%	-70%	\$307	-81%
No-fee	7	95	79%	188%		
H&SS	9	248	36%	49%	\$47	-66%
Fee	2	77	31%	33%	\$150	-74%
No-fee	7	171	69%	-10%		

Predominantly no-fee, including all of biomed.

### Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	22	23	24	24	23	21
%No-fee	82%	83%	83%	83%	91%	90%
Articles	694	769	779	872	671	616
%No-fee	85%	86%	87%	93%	95%	92%
Change	-10%	-1%	-11%	30%	9%	

Continued slow slide since 2016.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	0		
Med.: 60-149	4	330	83%	\$26
Small: 20-59	15	305	85%	\$36
Smallest: 0-19	5	59	100%	\$0

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	6	\$5,970	\$995
\$0.20-\$199	3	97	\$13,550	\$140
No fee	21	591		
Total	25	694	\$19,520	\$28

Except for the \$995 journal, none charges more than \$150.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	0	0	1	2
No-fee	2	2	5	10	2
Total	3	2	5	11	4

Another case where 2010-2014 more active than 2015-2019.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	21	485	95%	\$18
Open Access	3	111	31%	\$95
Traditional	1	98	100%	\$0



**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	7	325	100%	\$0
Education	2	64	100%	\$0
Economics	1	57	0%	\$150
Other Sciences	3	55	89%	\$109
Language & Literature	1	28	100%	\$0
Computer Science	1	23	100%	\$0
Law	1	23	100%	\$0
Anthropology	1	20	100%	\$0
Arts & Architecture	1	20	100%	\$0
Mathematics	1	20	0%	\$100
Sociology	1	20	0%	\$150
Psychology	1	16	100%	\$0
Engineering	3	15	100%	\$0
Agriculture	1	8	100%	\$0

Two H&SS subjects are the most expensive.

**Country Summaries****Israel**

Two no-fee journals. 56 articles in 2019.

**Jordan**

Two fee and two no-fee (down one from GOA4); 198 articles in 2019.

**Kuwait**

One no-fee journal with articles in 2018 but not 2019.

**Lebanon**

One no-fee journal with 34 articles in 2019.

**Oman**

Seven no-fee journals with 272 articles in 2019.

**Palestine**

One no-fee journal with no articles since 2016.

**Qatar**

One fee and three no-fee journals; 48 articles in 2019.

**Yemen**

One fee and four no-fee journals; 86 articles in 2019.

# Pacific/English

Limited tables because of the nature of this “region.”

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	935	944	924	853	796	721
%No-fee	62%	64%	65%	67%	68%	70%
Articles	110,008	96,337	85,081	80,431	74,612	69,159
%No-fee	19%	23%	23%	22%	21%	21%
Change	14%	13%	6%	8%	8%	

## Fees and revenue

	Journals	Articles	Revenue	\$/article
\$1,400+	213	75,223	\$154,173,956	\$2,050
\$600-\$1,399	69	9,716	\$9,006,365	\$927
\$200-\$599	62	3,073	\$1,188,737	\$387
\$0.20-\$199	30	899	\$107,429	\$119
No fee	651	21,097		
Total	1,025	110,008	\$164,476,487	\$1,495

## Country of publication

Country	Journals	Articles	%no-fee	\$/article
Australia	106	5,242	38%	\$989
Canada	160	5,720	58%	\$828
New Zealand	18	278	100%	\$0
United States	741	98,768	16%	\$1,565

# Australia

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	106	5,242			\$989	-3%
Fee	30	3,244	62%	1%	\$1,598	-4%
No-fee	76	1,998	38%	-2%		
Biomed	35	3,430	65%	87%	\$1,433	0%
Fee	22	2,890	84%	15%	\$1,701	-13%
No-fee	13	540	16%	-41%		
STEM	10	652	12%	-70%	\$215	-82%
Fee	2	49	8%	-90%	\$2,860	75%
No-fee	8	603	92%	239%		
H&SS	61	1,160	22%	-8%	\$112	-18%
Fee	6	305	26%	13%	\$427	-27%
No-fee	55	855	74%	-4%		

Heavy on biomed, light on STEM. 15% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	89	96	90	82	79	72
%No-fee	66%	71%	77%	77%	78%	78%
Articles	5,242	4,774	4,255	3,500	3,212	2,819
%No-fee	38%	44%	48%	55%	60%	60%
Change	10%	12%	22%	9%	14%	

Healthy growth every year. Steady move toward fees.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	767	0%	\$1,946
Large: 150-599	9	1,968	30%	\$1,101
Med.: 60-149	17	1,207	42%	\$755
Small: 20-59	43	1,086	65%	\$560
Smallest: 0-19	36	214	88%	\$29

Common correlation: the bigger the journal, the higher the fees and lower the no-fee percentage.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	15	2,525	\$4,836,266	\$1,915
\$600-\$1,399	3	187	\$177,200	\$948
\$200-\$599	7	405	\$156,070	\$385
\$0.20-\$199	5	127	\$15,963	\$126
No fee	76	1,998		
Total	106	5,242	\$5,185,499	\$989

The priciest journal charges \$3,500; expensive journals account for 93% of revenues.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	2	3	11	14
No-fee	8	8	19	26	15
Total	8	10	22	37	29

Pace of new journals has slowed, but only slightly.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	29	3,008	26%	\$1,161
Traditional	18	1,213	18%	\$1,396
Univ/college	51	928	99%	\$0
Society/govt	8	93	100%	\$0

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	31	3,146	16%	\$1,436
Language & Literature	9	309	48%	\$105
Biology	4	284	9%	\$1,404
Mathematics	1	267	100%	\$0
Computer Science	3	258	100%	\$0
Education	9	212	67%	\$48
Anthropology	6	154	88%	\$14
Law	6	72	100%	\$0
Media & Communications	4	70	100%	\$0
Arts & Architecture	3	68	16%	\$1,257
Engineering	3	58	31%	\$2,414
Sociology	4	56	100%	\$0
Economics	6	55	100%	\$0
Religion	2	42	100%	\$0
Philosophy	3	38	100%	\$0
Ecology	1	37	100%	\$0
Earth Sciences	2	32	72%	\$4
History	5	31	100%	\$0
Political Science	2	27	100%	\$0
Miscellany	2	26	100%	\$0

Medicine biggest; engineering by far the priciest.

# Canada

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	160	5,720			\$828	-19%
Fee	31	2,381	42%	-32%	\$1,990	19%
No-fee	129	3,339	58%	50%		
Biomed	31	2,268	40%	13%	\$1,809	26%
Fee	14	1,871	82%	12%	\$2,193	12%
No-fee	17	397	18%	-34%		
STEM	26	753	13%	-68%	\$662	-44%
Fee	12	411	55%	-25%	\$1,214	-26%
No-fee	14	342	45%	67%		
H&SS	103	2,699	47%	97%	\$50	-63%
Fee	5	99	4%	-84%	\$1,369	133%
No-fee	98	2,600	96%	26%		

Strong in H&SS with almost no fees, light in STEM. Mostly no-fee overall. 7% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	147	152	148	138	130	120
%No-fee	80%	80%	81%	81%	82%	84%
Articles	5,720	5,142	4,784	4,415	3,899	3,595
%No-fee	58%	60%	64%	67%	71%	75%
Change	11%	7%	8%	13%	8%	

Growing every year—and moving toward fees every year.

**Article volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Largest: 600+	1	650	0%	\$2,500
Large: 150-599	5	1,282	21%	\$1,592
Med.: 60-149	24	1,588	77%	\$333
Small: 20-59	78	1,773	83%	\$288
Smallest: 0-19	52	427	89%	\$74

Almost an exaggerated version of the common correlation.

**Fees and revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	16	2,033	\$4,501,550	\$2,214
\$600-\$1,399	4	168	\$179,425	\$1,068
\$200-\$599	9	122	\$45,616	\$374
\$0.20-\$199	2	58	\$10,737	\$185
No fee	129	3,339		
Total	160	5,720	\$4,737,328	\$828

Expensive journals—with a very expensive average—make up 95% of revenue and 10% of journals. The priciest journal charges \$3,000.

**Starting date**

	<b>To 1999</b>	<b>2000-04</b>	<b>2005-09</b>	<b>2010-14</b>	<b>2015-19</b>
Fee	1	1	7	11	11
No-fee	15	16	31	44	23
Total	16	17	38	55	34

Some dropoff in new titles, but still fairly strong.

**Publisher category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Open Access	47	3,077	34%	\$1,434
Univ/college	84	1,584	99%	\$4
Society/govt	28	1,050	69%	\$291
Traditional	1	9	0%	\$1,350

OA publishers do the most and charge the highest fees.



**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Medicine	29	2,191	15%	\$1,873
Education	22	522	99%	\$9
Economics	8	504	100%	\$0
Sociology	10	302	100%	\$0
Ecology	5	275	15%	\$686
Arts & Architecture	4	222	100%	\$0
Anthropology	7	185	97%	\$13
Language & Literature	13	178	100%	\$0
Computer Science	4	177	12%	\$1,664
Philosophy	8	154	100%	\$0
Media & Communications	5	144	100%	\$0
Political Science	5	136	100%	\$0
Library Science	3	121	100%	\$0
Psychology	4	102	16%	\$1,261
Mathematics	2	94	100%	\$0
History	7	83	100%	\$0
Biology	2	77	100%	\$0
Chemistry	2	54	100%	\$0
Earth Sciences	2	41	100%	\$0
Engineering	3	39	87%	\$42
Technology	2	35	91%	\$21
Miscellany	3	25	100%	\$0
Other Sciences	3	22	59%	\$552
Law	3	16	100%	\$0
Agriculture	2	11	100%	\$0
Religion	1	5	100%	\$0
Zoology	1	5	0%	\$226

Quite a few extremes here in terms of percentages and average costs.

# New Zealand

No fee journals; simplified tables.

## Key facts

	Journals	Articles	Art%	Rel%
All	18	278		
Biomed	3	95	34%	-2%
STEM	5	48	17%	-58%
H&SS	10	135	49%	103%

Very strong in H&SS. High 38% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	16	17	14	14	14	14
Articles	278	266	234	203	213	223
Change	5%	14%	15%	-5%	-4%	

Up three years in a row—but these are small numbers.

## Article volume

	Journals	Articles	Percent	Art/Jrn
Small: 20-59	11	244	88%	22
Smallest: 0-19	7	34	12%	5

## Starting date

	To 1999	2000-04	2005-09	2010-14	2015-19
Journals	1	2	1	10	4

Down sharply from the big surge, but still the second strongest period.

**Publisher category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	9	111	40%	12
Society/govt	4	92	33%	23
Traditional	1	35	13%	35
Open Access	3	28	10%	9
Miscellaneous	1	12	4%	12

Remarkably diverse for such a small set of journals.

**Subject**

Subject	Journals	Articles	Art/Jrn
Biology	2	79	40
Education	2	51	26
Sociology	2	41	21
Mathematics	2	26	13
Psychology	1	23	23
Medicine	1	16	16
Ecology	1	12	12
Economics	3	11	4
Arts & Architecture	1	9	9
Other Sciences	1	8	8
Computer Science	1	2	2
Religion	1	0	0

The same comment as for publisher category could apply.

# United States

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	741	98,768			\$1,565	53%
Fee	313	83,286	84%	38%	\$1,856	11%
No-fee	428	15,482	16%	-60%		
Biomed	255	38,353	39%	11%	\$1,808	26%
Fee	187	32,845	86%	17%	\$2,111	8%
No-fee	68	5,508	14%	-46%		
STEM	149	51,691	52%	27%	\$1,620	37%
Fee	87	48,670	94%	29%	\$1,721	6%
No-fee	62	3,021	6%	-79%		
H&SS	337	8,724	9%	-63%	\$167	21%
Fee	39	1,771	20%	-13%	\$820	40%
No-fee	298	6,953	80%	4%		

Expensive, weak on H&SS, strong on STEM. Very low no-fee percentages. 12% more journals than in GOA4.

## Articles and journals by date

	2019	2018	2017	2016	2015	2014
Journals	683	679	672	619	573	515
%No-fee	57%	59%	59%	61%	63%	64%
Articles	98,768	86,155	75,808	72,313	67,288	62,522
%No-fee	16%	19%	19%	17%	16%	16%
Change	15%	14%	5%	7%	8%	

Growth every year, strong the past two years.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	25	62,082	5%	\$1,764
Large: 150-599	69	16,283	20%	\$1,614
Med.: 60-149	153	11,490	27%	\$1,267
Small: 20-59	294	7,509	61%	\$530
Smallest: 0-19	200	1,404	83%	\$177

The correlation holds, but here all but small journals are pricey.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	182	70,665	\$144,836,140	\$2,050
\$600-\$1,399	62	9,361	\$8,649,740	\$924
\$200-\$599	46	2,546	\$987,051	\$388
\$0.20-\$199	23	714	\$80,729	\$113
No fee	428	15,482		
Total	741	98,768	\$154,553,660	\$1,565

The expensive journals account for 94% of revenue. The priciest journal charges \$5,000.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	5	18	32	114	144
No-fee	45	46	78	166	93
Total	50	64	110	280	237

While 2015-19 is down from 2010-14, it's still very strong.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	149	35,220	14%	\$1,501
Society/govt	137	33,569	10%	\$1,682
Traditional	160	17,933	2%	\$1,823
Univ/college	293	12,026	55%	\$1,042
Miscellaneous	2	20	100%	\$0

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Medicine	214	30,365	17%	\$1,782
Other Sciences	12	19,944	2%	\$1,774
Engineering	10	15,906	1%	\$1,726
Biology	41	7,988	4%	\$1,908
Physics	18	6,485	6%	\$1,764
Computer Science	14	2,300	27%	\$700
Chemistry	6	2,083	13%	\$879
Ecology	29	1,800	22%	\$1,254
Education	66	1,763	76%	\$313
Sociology	42	1,225	84%	\$243
Language & Literature	50	1,029	87%	\$36
History	17	1,021	100%	\$0
Agriculture	16	905	8%	\$1,654
Mathematics	17	741	77%	\$175
Anthropology	21	591	71%	\$62
Zoology	6	584	13%	\$1,516
Library Science	29	551	100%	\$0
Miscellany	9	512	23%	\$616
Technology	9	492	22%	\$1,360
Earth Sciences	12	451	6%	\$1,362
Philosophy	17	387	86%	\$3
Arts & Architecture	19	383	74%	\$53
Political Science	13	305	100%	\$0
Economics	18	291	45%	\$93
Psychology	10	271	56%	\$520
Media & Communications	10	226	100%	\$0
Religion	8	89	100%	\$0
Law	8	80	71%	\$309

The oddities here are history, library science, political science and religion. The five most common subjects all average more than \$1,700.

# Western Europe

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	4,211	420,072			\$1,612	58%
Fee	1,942	332,262	79%	29%	\$2,038	22%
No-fee	2,269	87,810	21%	-46%		
Biomed	1,327	159,279	38%	8%	\$2,108	47%
Fee	1,038	146,576	92%	25%	\$2,291	17%
No-fee	289	12,703	8%	-70%		
STEM	1,007	206,634	49%	20%	\$1,548	31%
Fee	645	169,971	82%	13%	\$1,882	15%
No-fee	362	36,663	18%	-35%		
H&SS	1,877	54,159	13%	-46%	\$392	186%
Fee	259	15,715	29%	24%	\$1,352	130%
No-fee	1,618	38,444	71%	-7%		

See comments in GOA5. 10% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	3,953	3,964	3,868	3,677	3,440	3,162
%No-fee	52%	54%	54%	55%	55%	56%
Articles	420,072	352,425	293,033	248,041	218,565	193,784
%No-fee	21%	25%	27%	29%	28%	28%
Change	19%	20%	18%	13%	13%	

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	138	222,583	11%	\$1,947
Large: 150-599	378	84,424	11%	\$1,783
Med.: 60-149	764	54,944	31%	\$1,109
Small: 20-59	2,008	50,415	61%	\$574
Smallest: 0-19	923	7,706	72%	\$403

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1,052	269,475	\$621,241,260	\$2,305
\$600-\$1,399	672	52,493	\$52,318,590	\$997
\$200-\$599	157	8,166	\$3,236,625	\$396
\$0.20-\$199	61	2,128	\$194,414	\$91
No fee	2,269	87,810		
Total	4,211	420,072	\$676,990,890	\$1,612

Expensive journals are 25% of all journals, 92% of all revenue.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	53	166	373	762	588
No-fee	287	236	432	812	502
Total	340	402	805	1,574	1,090

While down from 2010-2014, last five years still *very* strong.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	1,526	238,821	7%	\$1,848
Traditional	794	110,234	21%	\$1,781
Univ/college	1,513	50,814	71%	\$567
Society/govt	323	19,055	48%	\$547
Miscellaneous	55	1,148	77%	\$181



**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	1,133	125,341	9%	\$2,057
Other Sciences	53	44,056	8%	\$2,198
Biology	194	33,938	3%	\$2,297
Ecology	112	30,524	22%	\$1,431
Chemistry	63	28,505	10%	\$1,491
Physics	85	25,546	28%	\$1,172
Engineering	109	16,799	9%	\$1,555
Earth Sciences	154	14,845	29%	\$1,169
Technology	69	14,173	36%	\$1,169
Agriculture	105	14,078	11%	\$1,742
Language & Literature	306	6,589	91%	\$43
Computer Science	106	6,440	34%	\$1,030
Mathematics	70	6,184	11%	\$1,419
Education	198	5,844	72%	\$233
Zoology	81	5,484	16%	\$1,275
Anthropology	197	5,192	70%	\$304
Sociology	174	5,065	71%	\$317
Psychology	67	4,715	21%	\$2,045
Arts & Architecture	164	3,896	72%	\$246
Economics	128	3,375	41%	\$761
History	151	3,354	97%	\$2
Media & Communications	95	2,924	83%	\$150
Miscellany	40	2,791	65%	\$401
Law	97	2,727	88%	\$144
Religion	43	2,486	48%	\$331
Political Science	96	2,198	90%	\$128
Philosophy	76	1,847	93%	\$54
Library Science	45	1,156	89%	\$82

**Country of publication**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%no-fee</b>	<b>\$/article</b>
Austria	53	1,117	67%	\$201
Belgium	41	644	95%	\$27
Denmark	29	462	94%	\$25
Finland	31	969	76%	\$206
France	229	18,294	96%	\$42
Germany	261	20,328	61%	\$581
Greece	34	1,623	66%	\$259
Iceland	6	162	100%	\$0
Ireland	16	568	46%	\$893
Italy	382	13,355	80%	\$132
Luxembourg	3	29	100%	\$0
Malta	3	40	100%	\$0
Netherlands	230	21,139	30%	\$1,283
Norway	99	1,734	86%	\$113
Portugal	105	2,860	79%	\$146
Spain	750	21,414	91%	\$50
Sweden	41	1,292	67%	\$579
Switzerland	316	142,156	2%	\$1,922
United Kingdom	1,582	171,886	6%	\$2,085

# Austria

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	53	1,117			\$201	-80%
Fee	10	372	33%	-46%	\$602	-64%
No-fee	43	745	67%	72%		
Biomed	8	109	10%	-72%	\$1,179	-18%
Fee	3	109	100%	36%	\$1,179	-40%
No-fee	5	0	0%	-100%		
STEM	13	266	24%	-42%	\$270	-77%
Fee	5	197	74%	2%	\$365	-78%
No-fee	8	69	26%	-5%		
H&SS	32	742	66%	177%	\$32	-77%
Fee	2	66	9%	-62%	\$358	-39%
No-fee	30	676	91%	19%		

Mostly H&SS with almost no fees, but all fees for biomed and mostly fees for STEM. 8% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	40	45	52	47	43	36
%No-fee	75%	78%	81%	85%	86%	83%
Articles	1,117	1,082	1,186	1,220	1,035	995
%No-fee	67%	62%	68%	78%	71%	75%
Change	3%	-9%	-3%	18%	4%	

**Article volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	8	449	44%	\$306
Small: 20-59	31	600	80%	\$144
Smallest: 0-19	14	68	100%	\$0

For what it's worth, the common correlation applies here.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	3	109	\$128,547	\$1,179
\$200-\$599	7	263	\$95,544	\$363
No fee	43	745		
Total	53	1,117	\$224,091	\$201

The priciest journal charges \$1,333.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	0	2	4	4
No-fee	4	4	10	10	15
Total	4	4	12	14	19

Number of new journals continues to grow.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	27	601	70%	\$108
Society/govt	12	351	77%	\$87
Open Access	7	118	37%	\$836
Miscellaneous	3	47	26%	\$637
Traditional	4	0		

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Media & Communications	3	167	100%	\$0
Physics	1	102	0%	\$224
Education	2	98	100%	\$0
Political Science	6	89	100%	\$0
Earth Sciences	6	87	15%	\$456
Religion	3	76	100%	\$0
Biology	2	74	0%	\$1,333
History	4	68	100%	\$0
Library Science	1	59	100%	\$0
Law	2	51	14%	\$271
Philosophy	3	47	100%	\$0
Language & Literature	1	40	100%	\$0
Anthropology	2	39	44%	\$253
Medicine	6	35	0%	\$855
Ecology	2	24	100%	\$0
Agriculture	1	21	0%	\$448
Mathematics	1	20	100%	\$0
Engineering	2	12	100%	\$0
Arts & Architecture	3	8	100%	\$0
Sociology	2	0		

Distinctive, with the largest subject entirely no-fee and biology far more expensive than any other subject.

# Belgium

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	41	644			\$27	-97%
Fee	2	31	5%	-92%	\$560	-67%
No-fee	39	613	95%	145%		
Biomed	2	15	2%	-93%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	2	15	100%	275%		
STEM	20	306	48%	16%	\$57	-95%
Fee	2	31	10%	-86%	\$560	-66%
No-fee	18	275	90%	230%		
H&SS	19	323	50%	109%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	19	323	100%	30%		

The only fees are in STEM. Almost no biomed. Strong in H&SS. 17% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	34	36	39	39	37	32
%No-fee	97%	94%	95%	95%	97%	97%
Articles	644	770	690	811	775	576
%No-fee	95%	89%	93%	94%	95%	96%
Change	-16%	12%	-15%	5%	35%	

**Article volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	1	31	0%	\$560
Small: 20-59	34	578	100%	\$0
Smallest: 0-19	6	35	100%	\$0

The one formerly-medium journal is the only one with fees.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	0	\$0	\$0
\$200-\$599	1	31	\$17,357	\$560
No fee	39	613		
Total	41	644	\$17,357	\$27

There is a more expensive journal, but it didn't publish in 2019.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	0	0	0	1
No-fee	4	2	9	13	11
Total	5	2	9	13	12

Continued strong emergence of new titles.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	18	338	100%	\$0
Society/govt	18	233	87%	\$74
Open Access	3	48	100%	\$0
Miscellaneous	2	25	100%	\$0

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Language & Literature	7	178	100%	\$0
Agriculture	3	98	68%	\$177
Technology	6	80	100%	\$0
Computer Science	6	60	100%	\$0
Earth Sciences	2	48	100%	\$0
Media & Communications	1	27	100%	\$0
Library Science	1	25	100%	\$0
Economics	2	24	100%	\$0
Arts & Architecture	2	21	100%	\$0
Religion	1	16	100%	\$0
Medicine	2	15	100%	\$0
Zoology	1	14	100%	\$0
Education	2	11	100%	\$0
Sociology	1	8	100%	\$0
Political Science	1	7	100%	\$0
Other Sciences	1	6	100%	\$0
Psychology	1	6	100%	\$0
Ecology	1	0		

The only fees are in agriculture, and even that's mostly no-fee.



# Denmark

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	29	462			\$25	-98%
Fee	1	29	6%	-90%	\$392	-77%
No-fee	28	433	94%	141%		
Biomed	1	0	0%	-100%		
Fee	0	0				
No-fee	1	0				
STEM	3	76	16%	-60%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	3	76	100%	267%		
H&SS	25	386	84%	249%	\$29	-79%
Fee	1	29	8%	-68%	\$392	-33%
No-fee	24	357	92%	21%		

No biomed, very little STEM (and no fees), only one fee journal. 21% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	26	26	25	27	23	21
%No-fee	96%	96%	96%	96%	96%	95%
Articles	462	404	408	462	415	391
%No-fee	94%	93%	91%	95%	91%	92%
Change	14%	-1%	-12%	11%	6%	

Back to the 2016 peak.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Small: 20-59	17	366	92%	\$31
Smallest: 0-19	12	96	100%	\$0

All small.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	29	\$11,366	\$392
No fee	28	433		
Total	29	462	\$11,366	\$25

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	0	0	1	0
No-fee	2	2	4	11	9
Total	2	2	4	12	9

Another country where new journals continue to emerge.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	23	384	92%	\$30
Open Access	4	54	100%	\$0
Society/govt	2	24	100%	\$0

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Economics	2	73	100%	\$0
Education	4	65	100%	\$0
Ecology	1	54	100%	\$0
Philosophy	3	49	100%	\$0
Media & Communications	3	36	100%	\$0
Political Science	2	32	100%	\$0
Anthropology	3	30	100%	\$0
Sociology	2	29	0%	\$392
History	1	26	100%	\$0
Religion	1	23	100%	\$0
Earth Sciences	2	22	100%	\$0
Law	2	12	100%	\$0
Psychology	1	7	100%	\$0
Language & Literature	1	4	100%	\$0
Medicine	1	0		

Surprisingly diverse for so few journals.

# Finland

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	31	969			\$206	-80%
Fee	4	228	24%	-62%	\$877	-48%
No-fee	27	741	76%	97%		
Biomed	2	146	15%	-57%	\$846	-41%
Fee	2	146	100%	36%	\$846	-57%
No-fee	0	0	0%	-100%		
STEM	9	431	44%	8%	\$177	-85%
Fee	2	82	19%	-74%	\$932	-43%
No-fee	7	349	81%	197%		
H&SS	20	392	40%	69%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	20	392	100%	30%		

Three-quarters no-fee including all of H&SS, but biomed is all-fee. 29% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	29	30	29	30	28	25
%No-fee	86%	87%	86%	87%	86%	84%
Articles	969	934	908	890	760	671
%No-fee	76%	77%	77%	79%	75%	75%
Change	4%	3%	2%	17%	13%	

Growing every year, albeit slowly since 2016.

**Article volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Large: 150-599	1	195	100%	\$0
Med.: 60-149	4	258	46%	\$447
Small: 20-59	19	466	81%	\$181
Smallest: 0-19	7	50	100%	\$0

No very large, and the large journal is no-fee.

**Fees and revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1,399	4	228	\$199,931	\$877
No fee	27	741		
Total	31	969	\$199,931	\$206

Either moderately expensive or free. Priciest journal: \$960.

**Starting date**

	<b>To 1999</b>	<b>2000-04</b>	<b>2005-09</b>	<b>2010-14</b>	<b>2015-19</b>
Fee	1	0	1	2	0
No-fee	5	3	4	10	5
Total	6	3	5	12	5

Recent years dropped back to 2005-09 levels.

**Publisher category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Univ/college	15	584	67%	\$287
Society/govt	14	316	89%	\$102
Open Access	2	69	100%	\$0

Mostly universities (true for many countries).

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Technology	1	195	100%	\$0
Biology	2	146	0%	\$846
Anthropology	5	133	100%	\$0
Earth Sciences	3	84	45%	\$526
Mathematics	1	69	100%	\$0
Language & Literature	3	62	100%	\$0
Agriculture	2	59	39%	\$547
Religion	5	52	100%	\$0
Arts & Architecture	1	29	100%	\$0
Political Science	1	26	100%	\$0
Engineering	1	24	100%	\$0
Education	1	23	100%	\$0
History	1	22	100%	\$0
Philosophy	1	21	100%	\$0
Library Science	1	20	100%	\$0
Sociology	1	4	100%	\$0
Computer Science	1	0		

Fees only for biology, earth sciences and agriculture.

# France

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	229	18,294			\$42	-96%
Fee	25	709	4%	-94%	\$1,079	-36%
No-fee	204	17,585	96%	147%		
Biomed	11	744	4%	-88%	\$540	-62%
Fee	5	249	33%	-54%	\$1,614	-18%
No-fee	6	495	67%	150%		
STEM	51	13,919	76%	85%	\$23	-98%
Fee	16	350	3%	-97%	\$928	-43%
No-fee	35	13,569	97%	257%		
H&SS	167	3,631	20%	-17%	\$11	-92%
Fee	4	110	3%	-87%	\$347	-41%
No-fee	163	3,521	97%	27%		

Almost all no-fee and three-quarters STEM. 8% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	205	213	209	207	206	201
%No-fee	88%	89%	89%	89%	91%	92%
Articles	18,294	23,517	15,423	12,835	8,033	7,522
%No-fee	96%	97%	95%	95%	93%	93%
Change	-22%	52%	20%	60%	7%	

Drop in 2019 after three very strong years.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	4	11,882	100%	\$0
Large: 150-599	3	904	100%	\$0
Med.: 60-149	36	2,222	84%	\$201
Small: 20-59	124	2,829	89%	\$90
Smallest: 0-19	62	457	92%	\$140

Unusual, with all large and very large journals entirely no-fee.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	15	405	\$663,833	\$1,639
\$200-\$599	6	188	\$89,138	\$474
\$0.20-\$199	4	116	\$11,971	\$103
No fee	204	17,585		
Total	229	18,294	\$764,942	\$42

No medium-priced journals, and all but one of the expensive journals charge \$1,680 (all from the same publisher).

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	0	3	12	10
No-fee	16	39	66	68	15
Total	16	39	69	80	25

Recent years dropped below any five-year period this millennium.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	33	13,466	97%	\$40
Univ/college	120	2,841	92%	\$67
Society/govt	38	1,136	97%	\$2
Open Access	36	760	94%	\$7
Miscellaneous	2	91	41%	\$332

Traditional publishers dominate, which is unusual.



**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Ecology	8	5,691	100%	\$5
Technology	3	3,785	99%	\$12
Physics	5	2,293	97%	\$8
Other Sciences	2	962	100%	\$0
Language & Literature	52	894	100%	\$0
Anthropology	29	756	100%	\$0
Sociology	20	597	97%	\$12
Earth Sciences	10	436	87%	\$185
Biology	3	409	100%	\$0
Medicine	8	335	26%	\$1,199
History	16	291	100%	\$0
Arts & Architecture	9	221	100%	\$0
Education	7	210	73%	\$105
Chemistry	4	200	100%	\$0
Media & Communications	8	192	93%	\$3
Agriculture	4	149	64%	\$203
Philosophy	7	131	100%	\$0
Zoology	3	127	100%	\$0
Engineering	6	122	0%	\$896
Political Science	6	113	100%	\$0
Computer Science	3	104	100%	\$0
Economics	4	89	76%	\$92
Law	3	65	100%	\$0
Miscellany	4	51	100%	\$0
Mathematics	3	50	86%	\$235
Religion	2	21	100%	\$0

Ecology by far the largest (with 17 fee articles, much less than 0.5%).

# Germany

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	261	20,328			\$581	-43%
Fee	86	8,013	39%	-36%	\$1,474	-12%
No-fee	175	12,315	61%	56%		
Biomed	36	1,648	8%	-77%	\$1,591	11%
Fee	16	1,054	64%	-13%	\$2,487	27%
No-fee	20	594	36%	35%		
STEM	120	15,015	74%	80%	\$586	-51%
Fee	57	5,771	38%	-47%	\$1,526	-6%
No-fee	63	9,244	62%	126%		
H&SS	105	3,665	18%	-25%	\$104	-24%
Fee	13	1,188	32%	39%	\$322	-45%
No-fee	92	2,477	68%	-12%		

Mostly STEM, mostly no-fee. 2% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	246	253	250	239	234	207
%No-fee	67%	68%	67%	67%	66%	65%
Articles	20,328	20,445	17,363	17,074	15,104	12,482
%No-fee	61%	56%	60%	62%	58%	59%
Change	-1%	18%	2%	13%	21%	

Essentially flat after a strong 2018.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	7	7,906	78%	\$598
Large: 150-599	24	5,470	33%	\$706
Med.: 60-149	47	3,391	49%	\$710
Small: 20-59	122	3,083	74%	\$243
Smallest: 0-19	61	478	83%	\$131

Unusual pattern, with largest mostly no-fee, medium highest cost.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	23	2,313	\$7,515,509	\$3,249
\$600-\$1,399	35	3,474	\$3,573,919	\$1,029
\$200-\$599	19	1,597	\$680,619	\$426
\$0.20-\$199	9	629	\$37,984	\$60
No fee	175	12,315		
Total	261	20,328	\$11,808,032	\$581

The expensive journals are *very* expensive. The priciest one has a \$5,000 fee.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	6	6	19	43	12
No-fee	14	22	33	71	35
Total	20	28	52	114	47

Another case where new journals dropped sharply from 2010-2014.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	135	13,496	61%	\$357
Univ/college	82	4,136	82%	\$69
Traditional	24	2,057	7%	\$3,212
Society/govt	16	456	79%	\$92
Miscellaneous	4	183	81%	\$285

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Physics	10	3,792	96%	\$103
Earth Sciences	32	3,526	68%	\$319
Ecology	14	2,441	15%	\$877
Computer Science	15	1,871	78%	\$163
Medicine	26	1,132	30%	\$1,792
Chemistry	5	989	34%	\$678
Education	18	914	39%	\$269
Religion	5	813	37%	\$35
Other Sciences	7	784	2%	\$4,596
Technology	7	653	82%	\$205
Biology	10	516	49%	\$1,149
Engineering	11	435	54%	\$249
Language & Literature	15	351	100%	\$0
Sociology	11	268	100%	\$0
Anthropology	9	260	74%	\$295
Zoology	6	257	19%	\$1,173
Psychology	8	216	91%	\$15
Mathematics	7	145	92%	\$8
Library Science	4	143	100%	\$0
Media & Communications	5	135	81%	\$151
Law	4	130	100%	\$0
Economics	5	125	100%	\$0
Agriculture	6	122	57%	\$191
Political Science	7	110	100%	\$0
History	6	81	100%	\$0
Miscellany	3	64	100%	\$0
Arts & Architecture	3	34	74%	\$209
Philosophy	2	21	100%	\$0

The largest STEM subjects are mostly no-fee. Then there's other sciences...

# Greece

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	34	1,623			\$259	-75%
Fee	12	555	34%	-44%	\$757	-55%
No-fee	22	1,068	66%	69%		
Biomed	12	716	44%	26%	\$479	-67%
Fee	5	243	34%	-54%	\$1,410	-28%
No-fee	7	473	66%	148%		
STEM	4	470	29%	-29%	\$154	-87%
Fee	1	258	55%	-25%	\$280	-83%
No-fee	3	212	45%	65%		
H&SS	18	437	27%	12%	\$12	-91%
Fee	6	54	12%	-47%	\$100	-83%
No-fee	12	383	88%	14%		

Two-thirds no-fee, slightly heavy on biomed, generally low-cost. 6% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	30	33	33	31	28	25
%No-fee	70%	67%	64%	68%	68%	68%
Articles	1,623	1,594	1,295	1,074	740	747
%No-fee	66%	68%	73%	75%	72%	72%
Change	2%	23%	21%	45%	-1%	

Flat after three strong years, more than doubling since 2015.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	5	961	56%	\$416
Med.: 60-149	3	230	87%	\$30
Small: 20-59	18	372	74%	\$27
Smallest: 0-19	8	60	92%	\$65

Only large journals have significant fees.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	167	\$327,269	\$1,960
\$600-\$1,399	1	5	\$3,919	\$784
\$200-\$599	2	288	\$79,129	\$275
\$0.20-\$199	8	95	\$10,000	\$105
No fee	22	1,068		
Total	34	1,623	\$420,317	\$259

One pricey journal accounts for 78% of all revenue.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	1	3	4	4
No-fee	1	2	10	4	5
Total	1	3	13	8	9

Unusual, with peak new titles in 2005-2009, but also strong since.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	10	737	36%	\$554
Univ/college	20	695	92%	\$8
Traditional	1	133	100%	\$0
Miscellaneous	2	38	21%	\$182
Society/govt	1	20	100%	\$0

OA publishers do a bit more than universities, charge much more.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	11	711	67%	\$476
Engineering	2	383	33%	\$189
Sociology	2	201	100%	\$0
Earth Sciences	2	87	100%	\$0
Economics	6	67	19%	\$81
History	3	60	100%	\$0
Education	3	44	100%	\$0
Language & Literature	2	33	100%	\$0
Arts & Architecture	1	29	100%	\$0
Biology	1	5	0%	\$784
Anthropology	1	3	100%	\$0

A set of extremes, with biology more expensive than medicine.

# Ireland

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	16	568			\$893	-13%
Fee	3	308	54%	-11%	\$1,647	-2%
No-fee	13	260	46%	18%		
Biomed	4	305	54%	54%	\$1,382	-4%
Fee	2	251	82%	12%	\$1,680	-14%
No-fee	2	54	18%	-34%		
STEM	2	63	11%	-73%	\$1,357	14%
Fee	1	57	90%	24%	\$1,500	-8%
No-fee	1	6	10%	-65%		
H&SS	10	200	35%	47%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	10	200	100%	30%		

No fees in H&SS, mostly fees elsewhere. Same journal count as in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	15	15	15	13	10	7
%No-fee	80%	80%	80%	85%	90%	86%
Articles	568	494	373	348	274	193
%No-fee	46%	46%	55%	67%	38%	34%
Change	15%	32%	7%	27%	42%	

Growth every year, strong most year, nearly tripled since 2014.



**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	162	0%	\$1,680
Med.: 60-149	3	184	21%	\$1,277
Small: 20-59	4	153	100%	\$0
Smallest: 0-19	8	69	100%	\$0

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	3	308	\$507,157	\$1,647
No fee	13	260		
Total	16	568	\$507,157	\$893

Two journals charge \$1,680, a third \$1,500. The rest are no-fee.

**Starting date**

	To 1999	2005-09	2010-14	2015-19
Fee	0	0	1	2
No-fee	1	1	6	5
Total	1	1	7	7

Note the missing column: no new journals 2000-2004.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	3	308	0%	\$1,647
Univ/college	8	185	100%	\$0
Miscellaneous	1	38	100%	\$0
Open Access	2	22	100%	\$0
Society/govt	2	15	100%	\$0

No additional comment required.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	4	305	18%	\$1,382
Media & Communications	2	83	100%	\$0
Religion	1	58	100%	\$0
Physics	1	57	0%	\$1,500
Language & Literature	2	22	100%	\$0
Arts & Architecture	1	12	100%	\$0
Economics	1	10	100%	\$0
Anthropology	1	9	100%	\$0
Ecology	1	6	100%	\$0
Education	2	6	100%	\$0

Only medicine and physics have fees, and high ones.

# Italy

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	382	13,355			\$132	-87%
Fee	67	2,656	20%	-67%	\$666	-60%
No-fee	315	10,699	80%	106%		
Biomed	61	2,218	17%	-53%	\$619	-57%
Fee	31	1,525	69%	-6%	\$900	-54%
No-fee	30	693	31%	17%		
STEM	58	4,329	32%	-21%	\$73	-94%
Fee	15	562	13%	-82%	\$565	-65%
No-fee	43	3,767	87%	219%		
H&SS	263	6,808	51%	113%	\$11	-92%
Fee	21	569	8%	-64%	\$136	-77%
No-fee	242	6,239	92%	20%		

Four out of five articles are no-fee, but two-thirds of biomed articles have fees. Strong on H&SS. 14% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	352	365	361	344	318	289
%No-fee	82%	82%	82%	82%	81%	81%
Articles	13,355	11,288	11,147	10,470	9,763	8,784
%No-fee	80%	77%	78%	78%	79%	76%
Change	18%	1%	6%	7%	11%	

Growing every year, strongly in 2019—and tending *toward* no-fee.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	2,285	100%	\$0
Large: 150-599	9	1,654	60%	\$574
Med.: 60-149	45	3,062	70%	\$136
Small: 20-59	233	5,584	81%	\$69
Smallest: 0-19	94	770	93%	\$19

No traditional pattern, since the one very large journal is no-fee.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	3	503	\$926,891	\$1,843
\$600-\$1,399	17	563	\$449,211	\$798
\$200-\$599	26	1,031	\$346,483	\$336
\$0.20-\$199	21	559	\$45,840	\$82
No fee	315	10,699		
Total	382	13,355	\$1,768,425	\$132

The priciest journal charges \$1,870.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	2	4	18	34	9
No-fee	24	31	61	126	73
Total	26	35	79	160	82

Substantial drop in 2015-2019, but still healthy rate of new journals.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	230	8,235	92%	\$17
Open Access	80	2,402	47%	\$286
Society/govt	39	1,486	56%	\$611
Traditional	19	925	93%	\$29
Miscellaneous	14	307	95%	\$13

Mostly universities, but societies charge the most.

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Other Sciences	4	2,329	99%	\$2
Medicine	53	2,070	28%	\$657
Language & Literature	58	1,860	87%	\$15
Arts & Architecture	34	898	80%	\$41
Agriculture	14	779	77%	\$124
History	28	568	84%	\$9
Anthropology	25	566	100%	\$0
Philosophy	22	514	94%	\$5
Education	13	502	100%	\$0
Law	17	419	100%	\$0
Sociology	11	283	100%	\$0
Earth Sciences	9	273	85%	\$126
Psychology	13	265	100%	\$0
Engineering	2	263	100%	\$0
Economics	14	230	84%	\$22
Political Science	11	208	100%	\$0
Zoology	11	172	93%	\$20
Religion	3	169	100%	\$0
Technology	3	162	4%	\$690
Ecology	4	151	30%	\$182
Biology	8	148	77%	\$83
Media & Communications	6	133	100%	\$0
Mathematics	8	131	89%	\$8
Library Science	4	123	100%	\$0
Miscellany	4	70	100%	\$0
Chemistry	1	37	0%	\$1,064
Computer Science	2	32	100%	\$0

Chemistry stands out as the most expensive, but with few articles.

# Netherlands

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	230	21,139			\$1,283	25%
Fee	130	14,862	70%	15%	\$1,825	9%
No-fee	100	6,277	30%	-24%		
Biomed	90	10,225	48%	38%	\$1,869	30%
Fee	69	8,518	83%	14%	\$2,243	15%
No-fee	21	1,707	17%	-37%		
STEM	72	8,394	40%	-3%	\$855	-28%
Fee	43	5,561	66%	-9%	\$1,291	-21%
No-fee	29	2,833	34%	24%		
H&SS	68	2,520	12%	-50%	\$333	142%
Fee	18	783	31%	33%	\$1,071	82%
No-fee	50	1,737	69%	-10%		

Expensive; heavy and low on no-fee for biomed. 8% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	218	202	201	196	173	147
%No-fee	42%	47%	48%	48%	50%	55%
Articles	21,139	16,366	15,393	13,356	11,641	9,220
%No-fee	30%	35%	36%	42%	44%	52%
Change	29%	6%	15%	15%	26%	

Up every year, strongly in most; more than doubled since 2014.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	7	5,563	21%	\$2,004
Large: 150-599	37	7,583	17%	\$1,237
Med.: 60-149	61	4,759	47%	\$811
Small: 20-59	91	2,946	51%	\$776
Smallest: 0-19	34	288	20%	\$1,564

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	69	7,245	\$20,894,161	\$2,884
\$600-\$1,399	40	5,915	\$5,480,172	\$926
\$200-\$599	19	1,576	\$736,382	\$467
\$0.20-\$199	2	126	\$13,650	\$108
No fee	100	6,277		
Total	230	21,139	\$27,124,365	\$1,283

The expensive journals are *very* expensive and there are lots of them. Priciest journal charges \$5,200.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	2	9	51	67
No-fee	7	4	16	50	23
Total	8	6	25	101	90

New journals continue to emerge frequently.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	182	19,755	26%	\$1,360
Univ/college	34	816	83%	\$163
Open Access	7	337	84%	\$149
Society/govt	6	212	57%	\$333
Miscellaneous	1	19	100%	\$0

One traditional publisher accounts for most of that.

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Medicine	78	8,126	21%	\$1,387
Physics	7	2,436	55%	\$478
Biology	12	2,099	1%	\$3,735
Engineering	9	1,473	16%	\$857
Chemistry	6	817	20%	\$1,079
Computer Science	6	785	21%	\$1,909
Other Sciences	4	653	3%	\$414
Ecology	7	544	23%	\$1,352
Technology	9	543	29%	\$1,004
Earth Sciences	9	421	76%	\$417
Arts & Architecture	10	361	46%	\$642
Political Science	5	352	81%	\$180
Agriculture	8	336	52%	\$830
Sociology	7	309	66%	\$34
Zoology	5	303	21%	\$1,209
History	7	268	100%	\$0
Law	6	242	22%	\$1,121
Media & Communications	4	166	51%	\$1,037
Library Science	3	153	100%	\$0
Anthropology	4	146	42%	\$458
Religion	2	133	100%	\$0
Education	3	127	92%	\$55
Economics	7	126	71%	\$69
Mathematics	2	83	100%	\$0
Language & Literature	8	75	81%	\$90
Miscellany	1	62	100%	\$0
Philosophy	1	0		

Medicine may have the most articles, but biology has a staggeringly high average cost per article.



# Norway

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	99	1,734			\$113	-89%
Fee	12	239	14%	-77%	\$819	-51%
No-fee	87	1,495	86%	122%		
Biomed	7	102	6%	-83%	\$88	-94%
Fee	1	20	20%	-73%	\$448	-77%
No-fee	6	82	80%	202%		
STEM	7	103	6%	-86%	\$477	-60%
Fee	2	58	56%	-23%	\$848	-48%
No-fee	5	45	44%	60%		
H&SS	85	1,529	88%	268%	\$90	-34%
Fee	9	161	11%	-55%	\$855	45%
No-fee	76	1,368	89%	17%		

Six of seven articles no-fee; predominantly H&SS. 11% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	93	95	91	70	65	61
%No-fee	88%	88%	88%	86%	88%	90%
Articles	1,734	1,699	1,449	1,136	1,003	1,136
%No-fee	86%	86%	87%	86%	88%	91%
Change	2%	17%	28%	13%	-12%	

Nearly flat after three good years.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	2	21	100%	\$0
Small: 20-59	54	1,302	84%	\$132
Smallest: 0-19	43	411	91%	\$59

No large journals (and no *currently* medium ones).

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	13	\$18,464	\$1,420
\$600-\$1,399	8	163	\$154,789	\$950
\$200-\$599	3	63	\$22,480	\$357
No fee	87	1,495		
Total	99	1,734	\$195,733	\$113

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	0	1	3	8
No-fee	3	4	15	28	37
Total	3	4	16	31	45

A rare case where the pace of new journals increased for 2015-2019.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	71	1,273	86%	\$87
Open Access	10	207	68%	\$408
Society/govt	8	137	100%	\$0
Traditional	7	102	100%	\$0
Miscellaneous	3	15	100%	\$0

Mostly universities, but only OA publishers charge fees.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Education	16	305	88%	\$140
Sociology	10	213	85%	\$34
Language & Literature	14	206	100%	\$0
Anthropology	9	201	100%	\$0
Arts & Architecture	7	107	74%	\$275
Medicine	7	102	80%	\$88
History	4	98	100%	\$0
Religion	4	86	58%	\$333
Political Science	4	80	100%	\$0
Law	5	67	81%	\$276
Other Sciences	2	58	0%	\$848
Miscellany	2	52	100%	\$0
Media & Communications	3	42	100%	\$0
Philosophy	2	36	58%	\$308
Zoology	4	29	100%	\$0
Library Science	3	19	100%	\$0
Computer Science	1	16	100%	\$0
Economics	1	12	100%	\$0
Psychology	1	5	100%	\$0

# Portugal

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	105	2,860			\$146	-86%
Fee	10	589	21%	-66%	\$710	-58%
No-fee	95	2,271	79%	104%		
Biomed	14	589	21%	-41%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	14	589	100%	275%		
STEM	12	335	12%	-71%	\$45	-96%
Fee	1	90	27%	-63%	\$168	-90%
No-fee	11	245	73%	168%		
H&SS	79	1,936	68%	183%	\$208	52%
Fee	9	499	26%	10%	\$808	37%
No-fee	70	1,437	74%	-3%		

Predominantly no-fee (including all biomed), mostly H&SS. 21% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	94	102	104	102	97	86
%No-fee	91%	90%	90%	90%	91%	91%
Articles	2,860	3,270	3,166	2,749	2,534	2,142
%No-fee	79%	79%	81%	84%	84%	86%
Change	-13%	3%	15%	8%	18%	

A down year after four successive growth years.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	183	100%	\$0
Med.: 60-149	18	1,034	47%	\$400
Small: 20-59	62	1,468	97%	\$3
Smallest: 0-19	24	175	100%	\$0

Distinctive, with almost all fees in medium-sized journals.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	4	390	\$393,059	\$1,008
\$200-\$599	2	0		
\$0.20-\$199	4	199	\$25,420	\$128
No fee	95	2,271		
Total	105	2,860	\$418,479	\$146

Four journals all charge \$1,008 (same publisher).

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	0	1	2	5	2
No-fee	12	8	24	35	16
Total	12	9	26	40	18

Sharp drop from 2010-14, which is fairly common.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	74	1,652	99%	\$2
Society/govt	18	601	74%	\$34
Open Access	11	558	26%	\$707
Miscellaneous	2	49	100%	\$0

Not unusual: universities publish the most, OA publisher charge the most.

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Medicine	14	589	100%	\$0
Media & Communications	11	392	75%	\$252
Sociology	10	385	50%	\$503
History	7	165	100%	\$0
Education	9	161	100%	\$0
Language & Literature	8	126	100%	\$0
Arts & Architecture	10	124	82%	\$10
Earth Sciences	4	121	100%	\$0
Anthropology	6	120	83%	\$29
Political Science	3	119	16%	\$847
Psychology	3	91	27%	\$61
Agriculture	1	90	0%	\$168
Economics	3	77	100%	\$0
Library Science	4	75	100%	\$0
Computer Science	4	73	100%	\$0
Miscellany	2	56	100%	\$0
Law	2	33	100%	\$0
Technology	1	26	100%	\$0
Ecology	1	13	100%	\$0
Engineering	1	12	100%	\$0
Religion	1	12	100%	\$0

Truly unusual, with the most expensive subjects in H&SS.

# Spain

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	750	21,414			\$50	-95%
Fee	30	1,873	9%	-86%	\$568	-66%
No-fee	720	19,541	91%	135%		
Biomed	64	4,066	19%	-46%	\$122	-92%
Fee	6	624	15%	-79%	\$792	-60%
No-fee	58	3,442	85%	218%		
STEM	75	2,217	10%	-75%	\$123	-90%
Fee	8	466	21%	-71%	\$588	-64%
No-fee	67	1,751	79%	190%		
H&SS	611	15,131	71%	195%	\$20	-86%
Fee	16	783	5%	-78%	\$377	-36%
No-fee	595	14,348	95%	24%		

More than 90% no-fee, and almost three-quarters H&SS. 11% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	697	722	717	701	673	653
%No-fee	96%	96%	96%	96%	96%	96%
Articles	21,414	20,813	21,249	19,503	17,768	16,278
%No-fee	91%	91%	91%	91%	91%	90%
Change	3%	-2%	9%	10%	9%	

Relatively flat since 2017, after three years of healthy growth.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	15	2,390	70%	\$166
Med.: 60-149	91	5,699	88%	\$58
Small: 20-59	448	11,384	96%	\$29
Smallest: 0-19	196	1,941	99%	\$1

The common correlation, but at very high no-fee percentages and very low per-article costs (and with no very large journals).

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	3	156	\$254,774	\$1,633
\$600-\$1,399	5	512	\$445,497	\$870
\$200-\$599	14	901	\$325,036	\$361
\$0.20-\$199	8	304	\$37,992	\$125
No fee	720	19,541		
Total	750	21,414	\$1,063,299	\$50

The priciest journal charges \$1,960.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	4	5	7	9	5
No-fee	173	90	118	242	97
Total	177	95	125	251	102

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	565	14,395	96%	\$9
Traditional	29	2,852	80%	\$191
Society/govt	93	2,708	84%	\$102
Open Access	49	1,259	76%	\$84
Miscellaneous	14	200	100%	\$0

Predominantly universities.



**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	61	4,050	85%	\$122
Language & Literature	98	1,957	100%	\$0
Education	76	1,949	98%	\$7
Anthropology	71	1,790	81%	\$52
History	63	1,554	100%	\$0
Sociology	54	1,223	94%	\$5
Media & Communications	36	1,185	94%	\$9
Arts & Architecture	56	1,146	98%	\$8
Law	31	1,130	100%	\$0
Philosophy	27	862	100%	\$0
Political Science	25	740	100%	\$0
Psychology	22	612	63%	\$259
Earth Sciences	23	552	88%	\$162
Economics	29	456	97%	\$10
Zoology	8	303	84%	\$16
Agriculture	9	283	100%	\$0
Ecology	8	276	72%	\$131
Religion	6	244	100%	\$0
Technology	4	233	13%	\$379
Other Sciences	5	185	100%	\$0
Library Science	10	151	100%	\$0
Computer Science	7	136	100%	\$0
Engineering	5	133	43%	\$415
Miscellany	7	132	100%	\$0
Mathematics	6	116	100%	\$0
Biology	3	16	100%	\$0

# Sweden

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	41	1,292			\$579	-43%
Fee	5	424	33%	-46%	\$1,765	5%
No-fee	36	868	67%	73%		
Biomed	5	652	50%	44%	\$899	-37%
Fee	2	327	50%	-32%	\$1,792	-9%
No-fee	3	325	50%	87%		
STEM	5	106	8%	-80%	\$1,531	29%
Fee	3	97	92%	26%	\$1,673	3%
No-fee	2	9	8%	-69%		
H&SS	31	534	41%	73%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	31	534	100%	30%		

No fees in H&SS. 8% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	39	39	38	39	37	35
%No-fee	87%	87%	87%	87%	86%	86%
Articles	1,292	1,265	1,290	1,326	1,377	1,097
%No-fee	67%	67%	68%	63%	67%	81%
Change	2%	-2%	-3%	-4%	26%	

Flat to slightly declining since 2015.

**Article volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	528	54%	\$828
Med.: 60-149	6	250	47%	\$1,099
Small: 20-59	15	400	89%	\$88
Smallest: 0-19	18	114	98%	\$9

Atypical, with highest fees and lowest no-fee% in medium-sized.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	3	377	\$711,873	\$1,888
\$600-\$1,399	1	45	\$35,275	\$784
\$200-\$599	1	2	\$1,072	\$536
No fee	36	868		
Total	41	1,292	\$748,220	\$579

Priciest journal \$2,520.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	1	1	1	2	0
No-fee	7	2	7	14	6
Total	8	3	8	16	6

Fairly typical pattern.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Society/govt	7	688	52%	\$852
Univ/college	29	477	90%	\$76
Open Access	4	115	57%	\$1,095
Miscellaneous	1	12	100%	\$0

Societies publish more than universities.

**Subject**

<b>Subject</b>	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	5	652	50%	\$899
Sociology	5	91	100%	\$0
Education	4	72	100%	\$0
Library Science	1	68	100%	\$0
Language & Literature	5	62	100%	\$0
Agriculture	2	55	9%	\$2,291
Zoology	1	45	0%	\$784
Anthropology	2	44	100%	\$0
Media & Communications	1	40	100%	\$0
Arts & Architecture	2	39	100%	\$0
Philosophy	1	37	100%	\$0
Economics	3	25	100%	\$0
History	2	20	100%	\$0
Political Science	2	15	100%	\$0
Psychology	1	12	100%	\$0
Religion	1	8	100%	\$0
Other Sciences	1	4	100%	\$0
Earth Sciences	1	2	0%	\$536
Miscellany	1	1	100%	\$0

Agriculture stands out.

# Switzerland

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	316	142,156			\$1,922	88%
Fee	278	139,543	98%	61%	\$1,958	17%
No-fee	38	2,613	2%	-95%		
Biomed	116	42,965	30%	-14%	\$2,285	59%
Fee	100	41,915	98%	33%	\$2,342	20%
No-fee	16	1,050	2%	-91%		
STEM	148	90,450	64%	55%	\$1,790	51%
Fee	146	90,421	100%	37%	\$1,791	10%
No-fee	2	29	0%	-100%		
H&SS	52	8,741	6%	-74%	\$1,509	998%
Fee	32	7,207	82%	253%	\$1,830	211%
No-fee	20	1,534	18%	-77%		

Very expensive, high on STEM, low on H&SS—and even H&SS has high fees. Almost no no-fee. 9% more journals than in GOA4.

## Articles and journals by year

	2019	2018	2017	2016	2015	2014
Journals	308	303	286	264	239	220
%No-fee	11%	12%	12%	12%	11%	11%
Articles	142,156	96,842	59,746	41,375	32,566	26,336
%No-fee	2%	3%	5%	4%	5%	7%
Change	47%	62%	44%	27%	24%	

Very fast growth in recent years—more than quintupled in five years!

**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	60	113,834	1%	\$2,039
Large: 150-599	65	17,344	2%	\$1,723
Med.: 60-149	98	8,496	5%	\$1,069
Small: 20-59	71	2,305	10%	\$931
Smallest: 0-19	22	177	68%	\$248

An extreme case of the common correlation, but with very low no-fee%.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	104	120,309	\$253,806,758	\$2,110
\$600-\$1,399	162	18,854	\$19,347,982	\$1,026
\$200-\$599	12	380	\$138,548	\$365
No fee	38	2,613	\$0	\$0
Total	316	142,156	\$273,293,288	\$1,922

Some 22 Frontiers journals tied for priciest at \$2,950 each.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	3	6	38	149	82
No-fee	2	7	4	15	10
Total	5	13	42	164	92

Big dropoff from 2010-2014, but still strong new-journal rate.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	270	140,641	1%	\$1,934
Traditional	24	1,139	25%	\$1,050
Univ/college	16	256	89%	\$90
Society/govt	5	110	56%	\$328
Miscellaneous	1	10	100%	\$0

Dominated by expensive OA publishers.

**Subject**

Subject	Journ	Articles	%No-fee	\$/article
Medicine	88	28,447	4%	\$2,306
Chemistry	23	17,755	0%	\$1,902
Ecology	13	16,677	0%	\$1,868
Biology	28	14,518	0%	\$2,244
Physics	24	13,034	0%	\$1,573
Agriculture	14	8,978	0%	\$1,999
Engineering	12	7,480	0%	\$1,901
Earth Sciences	16	7,305	0%	\$1,742
Other Sciences	8	7,120	0%	\$1,691
Technology	13	6,801	0%	\$1,917
Psychology	1	3,062	0%	\$2,950
Zoology	5	2,285	0%	\$1,413
Mathematics	9	1,933	1%	\$1,134
Miscellany	6	1,812	65%	\$364
Computer Science	11	1,082	0%	\$1,039
Economics	8	705	8%	\$925
Religion	3	697	4%	\$967
Anthropology	5	651	0%	\$1,006
Education	3	504	9%	\$902
Arts & Architecture	2	412	0%	\$1,006
Sociology	7	343	14%	\$836
Language & Literature	5	190	50%	\$503
Library Science	3	113	4%	\$784
Law	5	86	59%	\$410
Media & Communications	1	84	0%	\$950
Philosophy	1	59	0%	\$1,006
Political Science	1	23	100%	\$0
History	1	0		

Three subjects average more than \$2,000 each—eight more above \$1,500.

# United Kingdom

## Key facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	1,582	171,886			\$2,085	104%
Fee	1,267	161,831	94%	54%	\$2,215	32%
No-fee	315	10,055	6%	-85%		
Biomed	891	94,680	55%	58%	\$2,239	56%
Fee	796	91,595	97%	32%	\$2,315	18%
No-fee	95	3,085	3%	-88%		
STEM	407	70,145	41%	-1%	\$2,004	69%
Fee	343	65,970	94%	29%	\$2,131	31%
No-fee	64	4,175	6%	-78%		
H&SS	284	7,061	4%	-83%	\$828	502%
Fee	128	4,266	60%	159%	\$1,370	133%
No-fee	156	2,795	40%	-48%		

By far the largest and most expensive; strong in biomed, very weak in H&SS, and even H&SS articles cost six times as much as average. 10% more journals than in GOA4.

## Articles by journal and year

	2019	2018	2017	2016	2015	2014
Journals	1,515	1,473	1,406	1,317	1,219	1,107
%No-fee	19%	19%	18%	18%	17%	17%
Articles	171,886	151,244	141,578	122,892	114,348	104,694
%No-fee	6%	6%	5%	6%	5%	5%
Change	14%	7%	15%	7%	9%	

Growing every year.



**Article volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	59	81,113	2%	\$2,286
Large: 150-599	214	46,998	2%	\$2,234
Med.: 60-149	338	24,776	11%	\$1,744
Small: 20-59	661	16,528	23%	\$1,355
Smallest: 0-19	310	2,471	35%	\$986

Sort of fits the correlation, flattened toward high fees and low no-fee.

**Fees and revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	827	137,679	\$335,614,571	\$2,438
\$600-\$1,399	391	22,235	\$22,106,289	\$994
\$200-\$599	44	1,817	\$693,471	\$382
\$0.20-\$199	5	100	\$11,556	\$116
No fee	315	10,055		
Total	1,582	171,886	\$358,425,887	\$2,085

63% of *all* expensive journals are in the UK, at very high fees. Two journals charge \$6,000.

**Starting date**

	To 1999	2000-04	2005-09	2010-14	2015-19
Fee	34	140	269	442	382
No-fee	12	15	45	105	138
Total	46	155	314	547	520

Almost no reduction in new-journal activity in 2015-2019.

**Publisher category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	895	77,984	5%	\$2,083
Traditional	468	69,497	2%	\$2,303
Univ/college	173	13,827	17%	\$1,987
Society/govt	41	10,464	24%	\$803
Miscellaneous	5	114	12%	\$741

**Subject**

	<b>Journ</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	766	78,673	4%	\$2,229
Other Sciences	19	31,955	1%	\$2,531
Biology	125	16,007	0%	\$2,292
Chemistry	24	8,707	25%	\$820
Engineering	58	6,462	7%	\$1,594
Ecology	52	4,647	7%	\$2,059
Physics	37	3,832	2%	\$2,027
Mathematics	33	3,637	3%	\$1,806
Agriculture	41	3,108	7%	\$1,914
Computer Science	50	2,281	5%	\$1,624
Zoology	37	1,949	10%	\$1,565
Earth Sciences	34	1,872	4%	\$1,619
Technology	22	1,695	14%	\$1,534
Economics	43	1,356	14%	\$1,389
Sociology	29	1,083	31%	\$999
Education	34	837	42%	\$688
Language & Literature	27	529	53%	\$286
Law	20	492	91%	\$108
Miscellany	10	491	30%	\$939
Arts & Architecture	23	455	55%	\$497
Anthropology	24	430	15%	\$1,560
Psychology	15	423	14%	\$1,045
Media & Communications	11	242	48%	\$229
Political Science	20	241	76%	\$490
Library Science	10	207	91%	\$30
History	7	127	95%	\$18
Religion	5	78	18%	\$1,157
Philosophy	6	70	70%	\$378

Five subjects over \$2,000, with another eleven over \$1,500.

# Other Western European Countries

Three countries, twelve journals, no fees.

## Key facts

	Journals	Articles	Art%	Rel%
All	12	231		
Biomed	3	99	43%	23%
STEM	1	9	4%	-91%
H&SS	8	123	53%	122%

Strong in H&SS, weak in STEM. Same journal count as in GOA4.

## Articles by journal and year

	2019	2018	2017	2016	2015	2014
Journals	12	12	12	11	10	10
Articles	231	398	369	520	429	520
Change	-42%	8%	-29%	21%	-18%	

Declining in two of three recent years.

## Article volume

	Journals	Articles	Percent	Art/Jrn
Large: 150-599	1	52	23%	52
Med.: 60-149	3	82	35%	27
Small: 20-59	4	51	22%	13
Smallest: 0-19	4	46	20%	12

**Starting date**

	2000-04	2005-09	2010-14	2015-19
Journals	1	5	4	2

**Publisher category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	8	119	52%	15
Society/govt	3	98	42%	33
Open Access	1	14	6%	14

**Subject**

Subject	Journals	Articles	Art/Jrn
Medicine	3	99	33
Political Science	2	43	22
Sociology	2	28	14
Education	1	16	16
Psychology	1	16	16
Anthropology	1	14	14
Earth Sciences	1	9	9
History	1	6	6

**Country Profiles****Iceland**

Six journals. 162 articles in 2019. One journal dropped from 200+ in most years to 52 in 2019: it was a large journal.

**Luxembourg**

Three journals. 29 articles in 2019.

**Malta**

Three journals. 40 articles in 2019.

## Appendix: The Heatmap

The world map on the front cover is a heatmap generated at [GunnMap 2](#) (thanks!). The number in the legend is 2019 articles per million people. The table below shows the data used to generate the heatmap. Country names were normalized to those used in [the list of countries and dependencies by population at Wikipedia](#), the source of the population figures (sourced from current official estimates as noted in the article). Some countries may not appear on the map: I did not attempt to verify each country on the heatmap.

Country	Articles	Population	Art/million
Albania	96	2,845,955	33.73
Algeria	514	43,000,000	11.95
Angola	65	31,127,674	2.09
Argentina	5,761	45,376,763	126.96
Armenia	37	2,956,900	12.51
Australia	5,242	25,770,252	203.41
Austria	1,117	8,910,696	125.35
Azerbaijan	64	10,067,108	6.36
Bahamas	6	389,410	15.41
Bangladesh	795	168,945,772	4.71
Barbados	50	287,025	174.20
Belarus	656	9,397,800	69.80
Belgium	644	11,528,375	55.86
Bolivia	72	11,633,371	6.19
Bosnia and Herzegovina	778	3,281,000	237.12
Brazil	64,714	211,786,839	305.56
Bulgaria	2,719	6,951,482	391.14
Cameroon	173	26,545,864	6.52

Country	Articles	Population	Art/million
Canada	5,720	38,098,403	150.14
Chile	3,409	19,458,310	175.20
China	10,167	1,403,511,200	7.24
Colombia	8,745	50,372,424	173.61
Costa Rica	1,780	5,111,238	348.25
Croatia	3,388	4,076,246	831.16
Cuba	4,347	11,193,470	388.35
Cyprus	163	875,900	186.09
Czech Republic	2,988	10,694,364	279.40
Dem. Rep. Congo	50	89,561,404	0.56
Denmark	462	5,824,857	79.32
Dominican Republic	151	10,448,499	14.45
Ecuador	1,799	17,525,676	102.65
Egypt	1,635	100,612,452	16.25
El Salvador	65	6,486,201	10.02
Estonia	694	1,328,976	522.21
Ethiopia	178	98,665,000	1.80
Finland	969	5,498,027	176.25
France	18,294	67,081,000	272.72
Georgia	65	3,716,858	17.49
Germany	20,328	83,166,711	244.42
Ghana	84	30,280,811	2.77
Greece	1,623	10,724,599	151.33
Guam	5	172,400	29.00
Guatemala	16	16,858,333	0.95
Hong Kong	845	7,500,700	112.66
Hungary	1,050	9,769,526	107.48
Iceland	162	366,130	442.47
India	19,124	1,364,643,426	14.01
Indonesia	31,870	269,603,400	118.21
Iran	18,850	83,609,340	225.45
Iraq	2,017	40,150,200	50.24

Country	Articles	Population	Art/million
Ireland	568	4,921,500	115.41
Israel	56	9,222,180	6.07
Italy	13,355	60,238,522	221.70
Jamaica	1	2,726,667	0.37
Japan	1,401	125,930,000	11.13
Jordan	198	10,723,244	18.46
Kazakhstan	150	18,737,304	8.01
Kenya	273	47,564,296	5.74
Kuwait	0	4,420,110	0.00
Kyrgyzstan	94	6,533,500	14.39
Latvia	458	1,902,000	240.80
Lebanon	34	6,825,442	4.98
Libya	125	6,871,287	18.19
Lithuania	2,101	2,794,207	751.91
Luxembourg	29	626,108	46.32
Malawi	45	19,129,952	2.35
Malaysia	2,244	32,839,760	68.33
Mali	20	20,250,833	0.99
Malta	40	493,559	81.04
Mexico	5,221	127,792,286	40.86
Moldova	1,099	2,640,400	416.22
Mongolia	74	3,327,308	22.24
Montenegro	442	621,873	710.76
Morocco	555	35,955,061	15.44
Nepal	552	29,996,478	18.40
Netherlands	21,139	17,486,731	1,208.86
New Zealand	278	5,009,260	55.50
Nicaragua	157	6,460,411	24.30
Nigeria	716	206,139,587	3.47
North Macedonia	904	2,077,132	435.22
Norway	1,734	5,372,355	322.76
Oman	272	4,645,249	58.55

Country	Articles	Population	Art/million
Pakistan	2,371	220,892,331	10.73
Palestine	0	4,976,684	0.00
Paraguay	364	7,252,672	50.19
Peru	1,928	32,824,358	58.74
Philippines	315	108,886,338	2.89
Poland	18,903	38,379,000	492.53
Portugal	2,860	10,295,909	277.78
Puerto Rico	12	3,193,694	3.76
Qatar	48	2,795,484	17.17
Romania	10,059	19,405,156	518.37
Russia	22,906	146,748,590	156.09
Rwanda	29	12,374,397	2.34
Saudi Arabia	2,165	34,218,169	63.27
Serbia	5,055	6,926,705	729.78
Singapore	480	5,703,600	84.16
Slovakia	1,173	5,457,873	214.92
Slovenia	1,441	2,095,861	687.55
South Africa	4,039	59,622,350	67.74
South Korea	6,821	51,780,579	131.73
South Sudan	40	13,249,924	3.02
Spain	21,414	47,329,981	452.44
Sri Lanka	345	21,803,000	15.82
Sweden	1,292	10,348,730	124.85
Switzerland	142,156	8,619,259	16,492.83
Taiwan	1,290	23,586,562	54.69
Thailand	815	66,528,130	12.25
Tunisia	37	11,722,038	3.16
Turkey	18,269	83,154,997	219.70
Turkmenistan	9	6,031,187	1.49
Uganda	765	41,590,300	18.39
Ukraine	14,836	41,806,221	354.88
United Arab Emirates	567	9,890,400	57.33



<b>Country</b>	<b>Articles</b>	<b>Population</b>	<b>Art/million</b>
United Kingdom	171,886	66,796,807	2,573.27
United States	98,768	329,946,152	299.35
Uruguay	530	3,530,912	150.10
Venezuela	986	28,435,943	34.67
Vietnam	52	96,208,984	0.54
Yemen	86	29,825,968	2.88
Zimbabwe	25	15,473,818	1.62