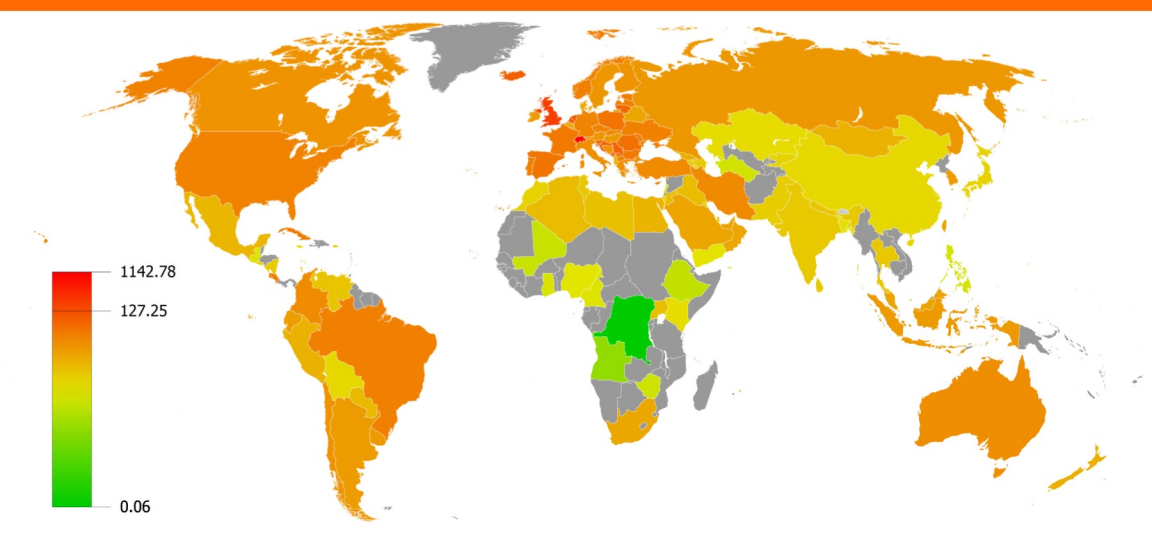


# Gold Open Access by Country 2013-2018



A Supplement to  
Gold Open Access 2013-2018:  
Articles in Journals (GOA4)

Walt Crawford

GOLD OPEN ACCESS  
BY COUNTRY  
2013-2018

Supplement to *Gold Open  
Access 2013-2018: Articles in  
Journals (GOA4)*

Walt Crawford

Cites & Insights Books  
Livermore, California, 2019

# Gold Open Access by Country 2013-2018

## Supplement to *Gold Open Access 2013-2018: Articles in Journals* (GOA4)

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# Preface

This book is a supplement to *Gold Open Access Journals 2013-2018: Articles in Journals (GOA4)*, 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If you love graphs, you'll hate this publication: the start-date graph has been replaced by a compact table covering broader ranges, and the articles-by-year graph is gone as redundant. As was true last year, a combined fees-and-revenue combines two GOA4 tables. A new line has been added to the "articles and journals by year" table to show incremental growth or decline in article count. Otherwise, tables follow GOA4, including the new "key facts" table, which replaces the textual introduction in most chapters.

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, and subject tables may be truncated. 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 10 OA journals (except for Pacific/English, which has no such countries).

Thanks again to SPARC for sponsoring this project.

The heatmap on the cover is based on 2018 articles per 100,000 people and was generated at [GunnMap 2](#). The appendix includes details.





# Overall

This partial profile includes the key facts table and tables that are new or revised for this publication. For other tables, see GOA4—noting that publisher category figures may be *slightly* different in this publication.

	Journals	Articles	Art%	\$/Art
All	12,180	711,670		\$913
Fee	3,506	413,826	58%	\$1,569
No-fee	8,674	297,844	42%	
Biomed	3,062	252,842	36%	\$1,296
Fee	1,519	177,287	70%	\$1,849
No-fee	1,543	75,555	30%	
STEM	3,181	289,522	41%	\$1,039
Fee	1,203	199,232	69%	\$1,510
No-fee	1,978	90,290	31%	
Hum&SS	5,937	169,306	24%	\$123
Fee	784	37,307	22%	\$558
No-fee	5,153	131,999	78%	

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### Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	11,465	11,769	11,383	10,696	9,771	8,703
%No-fee	70%	71%	71%	72%	72%	73%
Articles	711,670	651,384	595,707	541,700	490,277	416,451
%No-fee	42%	45%	47%	46%	47%	48%
Change	9.3%	9.3%	10.0%	10.5%	17.7%	

### Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,400+	1,083	259,521	\$571,382,195	\$2,202
\$600-\$1,399	678	56,678	\$55,603,885	\$981
\$200-\$599	641	48,598	\$18,621,866	\$383
\$0.01-\$199	1,104	49,029	\$3,807,139	\$78
No fee	8,674	297,844		

### Starting Date

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	141	336	950	1214	865
No-fee	779	1,011	2433	2785	1666
Total	920	1,347	3383	3999	2531

# Africa

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	158	7,117			\$224	-75%
Fee	72	4,237	60%	2%	\$376	-76%
No-fee	86	2,880	40%	-3%		
Biomed	37	2,426	34%	-4%	\$251	-81%
Fee	15	1,913	79%	12%	\$318	-83%
No-fee	22	513	21%	-29%		
STEM	54	2,446	34%	-16%	\$86	-92%
Fee	19	611	25%	-64%	\$346	-77%
No-fee	35	1,835	75%	141%		
H&SS	67	2,245	32%	33%	\$344	180%
Fee	38	1,713	76%	246%	\$451	-19%
No-fee	29	532	24%	-70%		

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	151	156	153	146	134	120
%No-fee	53%	54%	54%	53%	53%	52%
Articles	7,117	7,615	8,729	6,709	5,885	4,163
%No-fee	40%	42%	31%	32%	33%	35%
Change	-6.5%	-12.8%	30.1%	14.0%	41.4%	

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##### Fees and Revenues

	Journals	Articles	Revenue	\$/article
\$1,400+	1	8	\$12,000	\$1,500
\$600-\$1.399	20	865	\$734,312	\$849
\$200-\$599	23	1,640	\$572,031	\$349
\$0.01-\$199	28	1,724	\$273,195	\$158
No fee	86	2,880		

##### Starting Date

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	13	12	17	20	10
No-fee	6	12	26	28	14
Total	19	24	43	48	24

##### Comments

See GOA4 for other tables.

OA has a long history in Africa. Article count has been decreasing since 2016, primarily (apparently) in fee journals.

**Country of Publication**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Algeria	19	1,093	100%	\$0
Angola	1	18	100%	\$0
Cameroon	1	61	0%	\$171
Dem. Rep. Congo	1	50	100%	\$0
Ethiopia	4	99	100%	\$0
Ghana	5	67	51%	\$49
Kenya	5	260	14%	\$225
Libya	2	125	46%	\$54
Mali	1	23	0%	\$34
Mauritius	2	120	10%	\$270
Morocco	13	299	84%	\$29
Nigeria	8	613	18%	\$175
South Africa	87	3,295	30%	\$367
South Sudan	1	22	100%	\$0
Tunisia	6	165	45%	\$80
Uganda	1	786	0%	\$180
Zimbabwe	1	21	100%	\$0

# Algeria

Because none of the OA journals in Algeria have fees, radically different (and fewer) tables appear in this chapter.

	Journals	Articles	Art%	Rel%
All	19	1,093		
Biomed	2	7	1%	-98%
STEM	12	999	91%	125%
H&SS	5	87	8%	-67%

Almost no biomed, and very little H&SS: rich in STEM

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	15	18	18	17	15	11
Articles	1,093	1,232	1,005	514	383	211
Change	-11.3%	22.6%	95.5%	34.2%	81.5%	

Big growth in 2016, and modest drop in 2018.

## Article Volume

	Journals	Articles	Percent	Art/Jrn
Largest: 600+	1	800	73%	800
Med.: 60-149	2	55	5%	28
Small: 20-59	7	190	17%	27
Smallest: 0-19	9	48	4%	5

One very large journal, no large ones.

**Starting Date**

	1999-2004	2005-10	2011-14	2015-18
Journals	4	3	9	3

**Publisher Category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	16	1,072	98%	67
Miscellaneous	2	14	1%	7
Society/govt	1	7	1%	7

No OA or toll publishers.

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	1	5.3%	
Grew 25-49.9%	3	15.8%	21.1%
Grew 10-24.99%	3	15.8%	36.8%
Even, $\pm 9.99\%$	2	10.5%	47.4%
Shrank 10-24.99%	2	10.5%	57.9%
Shrank 25-49.99%	1	5.3%	63.2%
Shrank 50%+	7	36.8%	

Most journals are shrinking.

**Subject**

Subject	Journals	Articles	Art/Jrn
Other Sciences	2	807	404
Engineering	4	89	22
Agriculture	2	62	31
Sociology	1	59	59
Technology	2	35	18
Language & Literature	2	21	11
Medicine	2	7	4
Miscellany	1	7	7
Physics	1	5	5
Mathematics	1	1	1
Economics	1	0	0



# Morocco

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	13	299			\$29	-97%
Fee	1	48	16%	-72%	\$180	-89%
No-fee	12	251	84%	101%		
Biomed	3	37	12%	-65%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	3	37	100%	235%		
STEM	8	210	70%	73%	\$41	-96%
Fee	1	48	23%	-67%	\$180	-88%
No-fee	7	162	77%	147%		
H&SS	2	52	17%	-27%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	2	52	100%	28%		

The only fee journal is in STEM, and even it's quite inexpensive.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	12	13	12	11	7	7
%No-fee	92%	92%	92%	91%	86%	86%
Articles	299	342	248	186	154	135
%No-fee	84%	93%	83%	84%	74%	91%
Change	-12.6%	37.9%	33.3%	20.8%	14.1%	

Three years of solid growth—and some decline in 2018.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	2	107	100%	\$0
Small: 20-59	8	173	72%	\$50
Smallest: 0-19	3	19	100%	\$0

Mostly small journals, no large/largest journals.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$0.01-\$199	1	48	\$8,640	\$180
No fee	12	251		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	0	0	1	0
No-fee	1	2	3	3	3
Total	1	2	3	4	3

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	9	225	100%	\$0
Miscellaneous	2	62	23%	\$139
Society/govt	2	12	100%	\$0

Another case with mostly university, no traditional or OA publishers

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	1	7.7%	
Grew 10-24.99%	1	7.7%	15.4%
Even, $\pm$ 9.99%	2	15.4%	30.8%
Shrank 10-24.99%	2	15.4%	46.2%
Shrank 25-49.99%	4	30.8%	76.9%
Shrank 50%+	3	23.1%	

Most journals are shrinking.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Agriculture	2	78	100%	\$0
Ecology	3	77	100%	\$0
Chemistry	1	48	0%	\$180
Economics	1	41	100%	\$0
Medicine	2	37	100%	\$0
Education	1	11	100%	\$0
Earth Sciences	1	6	100%	\$0
Computer Science	1	1	100%	\$0
Biology	1	0		

Agriculture and ecology, both no-fee; one fee-based chemistry journal.

# South Africa

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	87	3,295			\$367	-60%
Fee	54	2,295	70%	20%	\$527	-66%
No-fee	33	1,000	30%	-27%		
Biomed	20	871	26%	-26%	\$397	-69%
Fee	9	565	65%	-7%	\$611	-67%
No-fee	11	306	35%	18%		
STEM	20	711	22%	-47%	\$201	-81%
Fee	11	285	40%	-42%	\$503	-67%
No-fee	9	426	60%	92%		
H&SS	47	1,713	52%	119%	\$420	242%
Fee	34	1,445	84%	283%	\$498	-11%
No-fee	13	268	16%	-80%		

Mostly H&SS—and *much* more heavily fee-based than most in H&SS. Other than H&SS, fees are relatively low.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	85	86	85	81	78	77
%No-fee	38%	37%	39%	38%	40%	38%
Articles	3,295	3,381	3,163	2,914	2,921	2,487
%No-fee	30%	31%	32%	32%	37%	33%
Change	-2.5%	6.9%	8.5%	-0.2%	17.5%	

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### Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	680	0%	\$472
Med.: 60-149	19	1,136	33%	\$381
Small: 20-59	50	1,311	41%	\$311
Smallest: 0-19	15	168	54%	\$280

### Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,400+	1	8	\$12,000	\$1,500
\$600-\$1,399	20	865	\$734,312	\$849
\$200-\$599	20	1,141	\$428,881	\$376
\$0.01-\$199	13	281	\$33,504	\$119
No fee	33	1,000		

### Starting Date

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	13	10	14	11	6
No-fee	5	6	11	8	3
Total	18	16	25	19	9

Strong early OA activity, fading in recent years.

### Publisher Category

Category	Journals	Articles	%No-fee	\$/article
Open Access	43	1,709	21%	\$533
Univ/college	24	726	39%	\$171
Society/govt	11	466	62%	\$149
Miscellaneous	6	311	6%	\$208
Traditional	3	83	49%	\$472

Half from open access publishers, predominantly fee-based.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	11	12.6%	
Grew 25-49.9%	12	13.8%	26.4%
Grew 10-24.99%	12	13.8%	40.2%
Even, $\pm 9.99\%$	17	19.5%	59.8%
Shrank 10-24.99%	16	18.4%	78.2%
Shrank 25-49.99%	13	14.9%	93.1%
Shrank 50%+	6	6.9%	

Perfectly balanced: 40.2% growth and shrinkage.

**Subject (partial, omitting three smallest subjects)**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	19	841	33%	\$411
Religion	8	433	0%	\$632
Sociology	4	325	6%	\$288
Education	8	251	23%	\$405
Language & Literature	6	169	0%	\$435
Engineering	4	151	9%	\$466
Law	5	151	60%	\$33
Economics	4	140	0%	\$690
Other Sciences	2	131	100%	\$0
Earth Sciences	1	128	100%	\$0
Ecology	3	122	87%	\$100
Political Science	4	93	75%	\$13
Zoology	3	52	38%	\$429
Miscellany	2	48	0%	\$778
Computer Science	3	41	20%	\$392
History	2	35	46%	\$82
Agriculture	1	31	0%	\$282
Biology	1	30	100%	\$0
Technology	1	23	0%	\$339
Media & Communications	1	22	0%	\$828
Psychology	1	20	0%	\$756
Chemistry	1	19	100%	\$0

## Other African Countries

Fourteen other countries, 39 journals in all.

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	39	2,430			\$154	-83%
Fee	17	1,894	78%	34%	\$198	-87%
No-fee	22	536	22%	-47%		
Biomed	12	1,511	62%	75%	\$174	-87%
Fee	6	1,348	89%	27%	\$195	-89%
No-fee	6	163	11%	-64%		
STEM	14	526	22%	-47%	\$113	-89%
Fee	7	278	53%	-23%	\$214	-86%
No-fee	7	248	47%	51%		
H&SS	13	393	16%	-32%	\$132	7%
Fee	4	268	68%	209%	\$193	-65%
No-fee	9	125	32%	-59%		

### Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	39	39	38	37	34	25
%No-fee	56%	56%	55%	54%	56%	64%
Articles	2,430	2,660	4,313	3,095	2,427	1,330
%No-fee	22%	21%	11%	17%	15%	24%
Change	-8.6%	-38.3%	39.4%	27.5%	82.5%	

After large growths followed by large drops, back to 2014 levels.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	855	0%	\$178
Large: 150-599	4	614	8%	\$227
Med.: 60-149	6	351	17%	\$170
Small: 20-59	20	544	68%	\$41
Smallest: 0-19	7	66	86%	\$14

Standard note: volume is based on *peak* for each journal 2013-2018.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	3	499	\$143,150	\$287
\$0.01-\$199	14	1,395	\$231,052	\$166
No fee	22	536		

All fee journals are relatively inexpensive.

**Starting Date**

	1999-2004	2005-10	2011-14	2015-18
Fee	2	3	8	4
No-fee	0	9	8	5
Total	2	12	16	9

No very early OA activity.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Society/govt	8	1,001	14%	\$171
Univ/college	20	922	39%	\$127
Miscellaneous	6	393	6%	\$184
Open Access	5	114	11%	\$120

Most articles in society journals; no traditional publishers.



**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	5	12.8%	
Grew 25-49.9%	7	17.9%	30.8%
Grew 10-24.99%	5	12.8%	43.6%
Even, $\pm 9.99\%$	7	17.9%	61.5%
Shrank 10-24.99%	5	12.8%	74.4%
Shrank 25-49.99%	4	10.3%	84.6%
Shrank 50%+	6	15.4%	

Slightly more growth than shrinkage.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	10	1,371	12%	\$175
Agriculture	4	152	27%	\$242
Biology	2	140	0%	\$164
Education	2	132	18%	\$245
Engineering	3	114	16%	\$125
Miscellany	2	92	25%	\$113
Language & Literature	2	74	9%	\$91
Other Sciences	2	61	100%	\$0
Zoology	1	58	100%	\$0
Sociology	3	56	57%	\$43
Chemistry	1	54	100%	\$0
Physics	1	50	0%	\$111
Ecology	2	37	43%	\$77
Economics	1	16	100%	\$0
Anthropology	1	11	100%	\$0
Law	1	8	100%	\$0
Library Science	1	4	100%	\$0

## **Country Summaries**

### **Angola**

One no-fee engineering journal with 18 articles in 2018.

### **Cameroon**

One fee-based medicine journal with 61 articles in 2018.

### **Dem. Rep. Congo**

One no-fee medicine journal with eight articles in 2018.

### **Ethiopia**

Four no-fee journals, one each in chemistry, law, medicine and other sciences. In all, 99 articles in 2018.

### **Ghana**

Five journals (three fee, two no-fee) in agriculture, engineering, miscellany and sociology (two). In all, 67 articles in 2018.

### **Kenya**

Five journals (three fee, two no-fee) in agriculture (two), biology, library science and medicine. In all, 260 articles in 2018.

### **Libya**

Two journals (one fee, one no-fee) in language & literature and zoology. In all, 225 articles in 2018.

### **Mali**

One fee biology journal with 23 articles in 2018.

### **Mauritius**

Two journals (one fee, one no-fee) in education and medicine. In all, 120 articles in 2018.

### **Nigeria**

Eight journals (four fee, four no-fee) in ecology, education, medicine (three), other sciences and physics. In all, 613 articles in 2018.

**South Sudan**

One no-fee medicine journal with 22 articles in 2018.

**Tunisia**

Six journals (five no-fee, one fee) in agriculture, anthropology, ecology, education, language & literature and miscellany. Total 165 articles in 2018.

**Uganda**

One fee-based medicine journal with 786 articles in 2018.

**Zimbabwe**

One no-fee sociology journal with 21 articles in 2018.

# Asia

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	2,063	71,078			\$161	-82%
Fee	664	30,567	43%	-26%	\$374	-76%
No-fee	1,399	40,511	57%	36%		
Biomed	512	32,477	46%	29%	\$238	-82%
Fee	168	14,712	45%	-35%	\$526	-72%
No-fee	344	17,765	55%	83%		
STEM	616	19,917	28%	-31%	\$157	-85%
Fee	242	10,183	51%	-26%	\$307	-80%
No-fee	374	9,734	49%	57%		
H&SS	935	18,684	26%	10%	\$31	-75%
Fee	254	5,672	30%	38%	\$102	-82%
No-fee	681	13,012	70%	-11%		

Rich in biomed, lean in STEM, mostly no-fee, inexpensive.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	1,957	2,016	1,861	1,671	1,464	1,254
%No-fee	68%	68%	67%	66%	66%	66%
Articles	71,078	72,226	69,408	61,385	53,492	46,035
%No-fee	57%	57%	58%	55%	57%	55%
Change	-1.6%	4.1%	13.1%	14.8%	16.2%	

Tiny drop after slowing from rapid gains 2014-2016.

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	17	2,807	\$4,998,090	\$1,781
\$600-\$1,399	26	2,458	\$2,285,257	\$930
\$200-\$599	100	10,020	\$3,112,471	\$311
\$0.01-\$199	521	15,282	\$1,043,104	\$68
No fee	1,399	40,511		

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	32	51	167	215	199
No-fee	47	71	288	513	480
Total	79	122	455	728	679

**Country of Publication**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Bangladesh	19	669	68%	\$30
China	87	8,589	45%	\$278
Hong Kong	20	1,086	60%	\$436
India	254	18,624	56%	\$257
Indonesia	1,340	27,425	60%	\$29
Japan	26	1,020	30%	\$984
Kyrgyzstan	3	51	100%	\$0
Malaysia	62	2,192	54%	\$119
Mongolia	4	118	64%	\$27
Nepal	15	452	100%	\$0
Pakistan	49	2,097	38%	\$178
Philippines	9	197	68%	\$22
Singapore	13	336	79%	\$301
South Korea	88	5,199	60%	\$194
Sri Lanka	13	301	98%	\$2
Taiwan	33	1,700	77%	\$83
Thailand	27	974	58%	\$81
Viet Nam	1	48	100%	\$0

# Bangladesh

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	19	669			\$30	-97%
Fee	6	216	32%	-44%	\$94	-94%
No-fee	13	453	68%	62%		
Biomed	7	325	49%	37%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	7	325	100%	235%		
STEM	10	321	48%	18%	\$58	-94%
Fee	5	197	61%	-11%	\$94	-94%
No-fee	5	124	39%	24%		
H&SS	2	23	3%	-86%	\$83	-33%
Fee	1	19	83%	275%	\$100	-82%
No-fee	1	4	17%	-78%		

Entirely no-fee biomed! Thin in H&SS, very low STEM fees.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	19	19	19	16	16	14
%No-fee	68%	68%	68%	69%	69%	79%
Articles	669	675	917	813	722	584
%No-fee	68%	68%	77%	76%	74%	78%
Change	-0.9%	-26.4%	12.8%	12.6%	23.6%	

Big drop in 2017, back to below 2014 levels, primarily due to one medical journal.

**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Large: 150-599	1	60	100%	\$0
Med.: 60-149	5	314	62%	\$42
Small: 20-59	10	265	63%	\$27
Smallest: 0-19	3	30	100%	\$0

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$0.01-\$199	6	216	\$20,360	\$94
No fee	13	453		

What fees there are, are fairly nominal.

**Starting Date**

	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	2	2	2
No-fee	8	3	2
Total	10	5	4

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Univ/college	8	276	71%	\$20
Society/govt	8	219	63%	\$50
Miscellaneous	3	174	69%	\$23

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	1	15.8%	
Grew 25-49.99%	2	5.3%	21.1%
Grew 10-24.99%	5	36.8%	57.9%
Even, $\pm$ 9.99%	7	26.3%	84.2%
Shrank 25-49.99%	3	10.5%	94.7%
Shrank 50%+	1	5.3%	

Much more growth than shrinkage for 2018.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	7	325	100%	\$0
Agriculture	5	152	33%	\$33
Zoology	2	86	23%	\$123
Other Sciences	2	73	60%	\$40
Anthropology	1	19	0%	\$100
Engineering	1	10	100%	\$0
Philosophy	1	4	100%	\$0

It's unusual to have a group of entirely no-fee medical journals.



# China

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	87	8,589			\$278	-70%
Fee	34	4,719	55%	-6%	\$506	-68%
No-fee	53	3,870	45%	8%		
Biomed	31	3,734	43%	22%	\$300	-77%
Fee	12	2,336	63%	-11%	\$479	-74%
No-fee	19	1,398	37%	25%		
STEM	51	4,649	54%	33%	\$273	-74%
Fee	22	2,383	51%	-26%	\$532	-65%
No-fee	29	2,266	49%	56%		
H&SS	5	206	2%	-90%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	5	206	100%	28%		

Mostly STEM, with very little H&SS. Low costs but mostly fee.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	87	86	81	70	56	46
%No-fee	61%	60%	60%	56%	50%	46%
Articles	8,589	8,618	7,798	6,353	5,454	4,516
%No-fee	45%	43%	44%	32%	30%	22%
Change	-0.3%	10.5%	22.7%	16.5%	20.8%	

Essentially flat 2018 after years of solid growth.

### Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	500	100%	\$0
Large: 150-599	16	3,963	15%	\$431
Med.: 60-149	34	2,895	62%	\$175
Small: 20-59	31	1,184	82%	\$144
Smallest: 0-19	5	47	68%	\$69

Unusual, with very few smallest journals and one no-fee largest.

### Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,400+	3	571	\$935,900	\$1,639
\$600-\$1,399	5	678	\$519,545	\$766
\$200-\$599	17	2,515	\$830,201	\$330
\$0.01-\$199	9	955	\$102,465	\$107
No fee	53	3,870		

### Starting Date

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	3	6	10	8	7
No-fee	1	3	11	15	23
Total	4	9	21	23	30

Continuing strong growth, especially in no-fee journals.

### Publisher Category

Category	Journals	Articles	%No-fee	\$/article
Traditional	39	2,863	78%	\$159
Univ/college	24	2,754	36%	\$215
Open Access	9	1,610	22%	\$509
Society/govt	7	965	16%	\$472
Miscellaneous	8	397	31%	\$160

Strong role for traditional publishers, with three-quarters of it no-fee.

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	12	13.8%	
Grew 25-49.9%	13	14.9%	28.7%
Grew 10-24.99%	10	11.5%	40.2%
Even, $\pm 9.99\%$	29	33.3%	73.6%
Shrank 10-24.99%	9	10.3%	83.9%
Shrank 25-49.99%	9	10.3%	94.3%
Shrank 50%+	5	5.7%	

Much more growth than shrinkage, 40.2% to 26.4%

**Subject**

Subject	Jour.	Art.	%No-fee	\$/article
Medicine	29	3,544	35%	\$287
Engineering	9	1,205	14%	\$535
Earth Sciences	9	1,062	76%	\$57
Technology	9	795	62%	\$110
Agriculture	5	500	48%	\$705
Zoology	4	294	35%	\$173
Physics	4	260	19%	\$171
Other Sciences	2	241	63%	\$6
Biology	2	190	75%	\$544
Ecology	5	165	79%	\$161
Computer Science	3	108	100%	\$0
Anthropology	1	98	100%	\$0
Arts & Architecture	1	45	100%	\$0
Library Science	1	35	100%	\$0
Mathematics	1	19	100%	\$0
Sociology	1	17	100%	\$0
Language & Literature	1	11	100%	\$0

Relatively low-cost medical journals.

# Hong Kong

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	20	1,086			\$436	-52%
Fee	11	433	40%	-31%	\$1,093	-30%
No-fee	9	653	60%	44%		
Biomed	8	595	55%	54%	\$739	-43%
Fee	5	383	64%	-8%	\$1,148	-38%
No-fee	3	212	36%	19%		
STEM	7	118	11%	-73%	\$71	-93%
Fee	4	25	21%	-69%	\$337	-78%
No-fee	3	93	79%	153%		
H&SS	5	373	34%	44%	\$67	-45%
Fee	2	25	7%	-70%	\$1,000	79%
No-fee	3	348	93%	20%		

Mostly no-fee, thin on STEM.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	18	20	19	17	16	13
%No-fee	50%	45%	42%	47%	44%	46%
Articles	1,086	1,265	1,610	1,471	897	750
%No-fee	60%	68%	66%	36%	56%	74%
Change	-14.2%	-21.4%	9.4%	64.0%	19.6%	

Two years of substantial reduction in article count.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	213	0%	\$1,350
Large: 150-599	4	552	90%	\$129
Med.: 60-149	1	93	0%	\$800
Small: 20-59	7	191	75%	\$171
Smallest: 0-19	7	37	41%	\$194

That largest journal was almost four times as large in 2015.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	4	388	\$458,200	\$1,181
\$200-\$599	7	45	\$14,925	\$332
No fee	9	653		

No very expensive and no very low-cost journals.

**Starting Date**

	To 1998	2005-10	2011-14	2015-18
Fee	0	1	6	4
No-fee	1	1	5	2
Total	1	2	11	6

More than half of journals started 2011-2014.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	5	450	14%	\$1,018
Miscellaneous	2	345	100%	\$0
Univ/college	2	150	100%	\$0
Open Access	8	94	52%	\$159
Society/govt	3	47	100%	\$0

Traditional publishers dominate in fee publishing.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	2	10.0%	
Grew 25-49.9%	3	15.0%	25.0%
Grew 10-24.99%	1	5.0%	30.0%
Even, $\pm 9.99\%$	5	25.0%	55.0%
Shrank 10-24.99%	2	10.0%	65.0%
Shrank 25-49.99%	2	10.0%	75.0%
Shrank 50%+	5	25.0%	

Considerably more journals shrank than grew.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	7	577	37%	\$752
Education	2	345	100%	\$0
Computer Science	2	46	76%	\$81
Mathematics	1	46	100%	\$0
Anthropology	1	25	0%	\$1,000
Biology	1	18	0%	\$337
Engineering	1	12	100%	\$0
Zoology	1	12	0%	\$337
Language & Literature	1	3	100%	\$0
Other Sciences	1	2	0%	\$337
Ecology	1	0		
Economics	1	0		

Medicine being the most common subject isn't unusual. Anthropology being the most expensive subject is.

# India

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	254	18,624			\$257	-72%
Fee	77	8,149	44%	-25%	\$587	-63%
No-fee	177	10,475	56%	34%		
Biomed	205	16,637	89%	151%	\$283	-78%
Fee	62	7,519	45%	-36%	\$627	-66%
No-fee	143	9,118	55%	83%		
STEM	28	1,446	8%	-81%	\$45	-96%
Fee	9	492	34%	-51%	\$131	-91%
No-fee	19	954	66%	112%		
H&SS	21	541	3%	-88%	\$10	-92%
Fee	6	138	26%	16%	\$38	-93%
No-fee	15	403	74%	-4%		

Mostly no-fee and predominantly biomed.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	243	245	244	223	203	168
%No-fee	69%	69%	68%	66%	65%	61%
Articles	18,624	19,444	21,278	18,991	17,037	14,894
%No-fee	56%	55%	56%	53%	56%	52%
Change	-4.2%	-8.6%	12.0%	11.5%	14.4%	

Slightly down for 2018, after a slightly larger 2017 drop.

**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Largest: 600+	4	2,891	7%	\$571
Large: 150-599	46	7,971	56%	\$342
Med.: 60-149	76	4,479	69%	\$52
Small: 20-59	119	3,222	82%	\$53
Smallest: 0-19	9	61	62%	\$38

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	7	1,887	\$3,247,999	\$1,721
\$600-\$1,399	3	398	\$384,407	\$966
\$200-\$599	22	3,239	\$907,775	\$280
\$0.01-\$199	45	2,625	\$243,777	\$93
No fee	177	10,475		

Mostly low fees, with a few major exceptions.

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	0	7	31	30	9
No-fee	1	13	49	73	41
Total	1	20	80	103	50

Few new fee journals, but no-fee journals continue to pop up.

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Open Access	191	15,014	58%	\$260
Miscellaneous	14	1,519	24%	\$242
Society/govt	16	798	63%	\$55
Traditional	7	668	59%	\$685
Univ/college	26	625	88%	\$5

Predominantly OA publishers, with mostly no-fee articles.



**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	25	9.8%	
Grew 25-49.9%	19	7.5%	17.3%
Grew 10-24.99%	34	13.4%	30.7%
Even, $\pm 9.99\%$	70	27.6%	58.3%
Shrank 10-24.99%	47	18.5%	76.8%
Shrank 25-49.99%	37	14.6%	91.3%
Shrank 50%+	22	8.7%	

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	198	16,274	55%	\$284
Zoology	4	639	46%	\$89
Biology	7	363	51%	\$238
Other Sciences	3	135	87%	\$8
Language & Literature	4	126	84%	\$24
Physics	3	126	100%	\$0
Computer Science	3	115	100%	\$0
Technology	5	109	84%	\$22
Earth Sciences	1	83	100%	\$0
Economics	3	77	100%	\$0
Agriculture	2	72	29%	\$7
Law	2	58	100%	\$0
Mathematics	2	57	65%	\$21
Sociology	3	54	100%	\$0
Chemistry	2	50	30%	\$42
Ecology	1	48	100%	\$0
Education	2	47	38%	\$27
Miscellany	3	47	0%	\$13
Philosophy	1	42	0%	\$10
Political Science	1	42	100%	\$0
Library Science	1	32	100%	\$0
Psychology	1	16	100%	\$0
Engineering	2	12	42%	\$29

# Indonesia

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	1,340	27,425			\$29	-97%
Fee	454	10,946	40%	-31%	\$73	-95%
No-fee	886	16,479	60%	44%		
Biomed	148	3,864	14%	-60%	\$43	-97%
Fee	57	1,704	44%	-37%	\$97	-95%
No-fee	91	2,160	56%	87%		
STEM	407	8,864	32%	-21%	\$40	-96%
Fee	170	4,450	50%	-27%	\$80	-95%
No-fee	237	4,414	50%	60%		
H&SS	785	14,697	54%	125%	\$19	-85%
Fee	227	4,792	33%	48%	\$58	-90%
No-fee	558	9,905	67%	-14%		

Very low cost throughout, and mostly no-fee. Very low on biomed, somewhat low on STEM, and twice as heavy on H&SS.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	1,257	1,311	1,189	1,054	907	774
%No-fee	66%	66%	66%	65%	65%	66%
Articles	27,425	28,391	25,396	22,773	19,475	16,178
%No-fee	60%	61%	62%	61%	63%	64%
Change	-3.4%	11.8%	11.5%	16.9%	20.4%	

Small decline in article count after four strong years of growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	10	1,685	59%	\$71
Med.: 60-149	80	3,880	49%	\$31
Small: 20-59	721	15,693	58%	\$31
Smallest: 0-19	529	6,167	73%	\$11

No very large journals, with most articles in small journals.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	0	\$0	
\$600-\$1,399	1	0	\$0	
\$200-\$599	18	1,026	\$256,244	\$250
\$0.01-\$199	434	9,920	\$541,618	\$55
No fee	886	16,479		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	13	27	100	149	165
No-fee	17	31	159	335	344
Total	30	58	259	484	509

Some early activity—but mostly rapid and accelerating growth in the last few years, especially among no-fee journals.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	1,272	25,797	60%	\$28
Society/govt	50	935	65%	\$26
Open Access	6	429	39%	\$95
Miscellaneous	9	147	27%	\$32
Traditional	3	117	100%	\$0

Almost all those journals (95%) and articles (94%) come from universities—and even for the handful of journals from OA publishers, average cost per article never reaches three digits.

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 50%+	130	9.7%	
Grew 25-49.9%	88	6.6%	16.3%
Grew 10-24.99%	134	10.0%	26.3%
Even, $\pm 9.99\%$	568	42.4%	68.7%
Shrank 10-24.99%	153	11.4%	80.1%
Shrank 25-49.99%	128	9.6%	89.6%
Shrank 50%+	139	10.4%	

Somewhat more shrinkage (31.3%) than growth (26.3%)—but mostly, a very large group of reasonably steady-state journals.

### Subject (next page)

Education and economics both outnumber medicine, followed by two more H&SS fields. Only ecology has a three-digit average cost per article. (This is one of few cases where the profile goes to a fourth page to accommodate subjects.)

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Education	191	4,041	61%	\$15
Economics	166	3,268	68%	\$24
Medicine	117	3,214	62%	\$42
Language & Literature	89	1,555	68%	\$14
Religion	94	1,358	83%	\$9
Agriculture	75	1,316	40%	\$41
Computer Science	62	1,310	61%	\$14
Engineering	63	1,177	62%	\$23
Zoology	41	1,051	34%	\$47
Law	54	934	71%	\$21
Technology	30	807	75%	\$12
Mathematics	38	763	58%	\$25
Ecology	20	756	19%	\$125
Sociology	35	671	66%	\$27
Biology	31	650	27%	\$47
Anthropology	34	634	74%	\$21
Chemistry	22	588	53%	\$60
Psychology	19	519	83%	\$9
Political Science	29	498	48%	\$37
Earth Sciences	22	439	55%	\$60
Other Sciences	20	417	44%	\$32
Miscellany	16	354	39%	\$34
Arts & Architecture	19	315	79%	\$19
Media & Communications	19	283	70%	\$22
Physics	14	240	37%	\$39
History	8	125	54%	\$24
Library Science	8	116	100%	\$0
Philosophy	4	26	100%	\$0

# Japan

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	26	1,020			\$984	8%
Fee	10	714	70%	20%	\$1,406	-10%
No-fee	16	306	30%	-28%		
Biomed	6	346	34%	-5%	\$991	-24%
Fee	4	286	83%	18%	\$1,199	-35%
No-fee	2	60	17%	-42%		
STEM	7	413	40%	0%	\$1,345	29%
Fee	5	362	88%	27%	\$1,534	2%
No-fee	2	51	12%	-60%		
H&SS	13	261	26%	8%	\$405	229%
Fee	1	66	25%	15%	\$1,600	187%
No-fee	12	195	75%	-4%		

Typical distribution but more heavily fee-based than most.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	25	25	25	22	18	16
%No-fee	64%	64%	60%	55%	50%	50%
Articles	1,020	1,008	759	778	637	461
%No-fee	30%	37%	38%	35%	33%	24%
Change	1.2%	32.8%	-2.4%	22.1%	38.2%	

Tiny growth after a strong-growth year—and shifting more to fees.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	340	0%	\$650
Med.: 60-149	5	379	12%	\$1,995
Small: 20-59	9	203	87%	\$98
Smallest: 0-19	10	98	85%	\$69

No largest journals, very little no-fee except in small and smallest.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	3	242	\$641,370	\$2,650
\$600-\$1,399	4	271	\$336,085	\$1,240
\$200-\$599	2	24	\$11,215	\$467
\$0.01-\$199	1	177	\$15,045	\$85
No fee	16	306		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	1	2	3	3
No-fee	2	1	2	8	3
Total	3	2	4	11	6

A surge of new, mostly fee, journals in 2011-2014.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Society/govt	9	440	15%	\$653
Traditional	4	385	12%	\$1,860
Univ/college	3	98	100%	\$0
Open Access	9	97	100%	\$0
Miscellaneous	1	0		

Traditional publishers the most expensive, society the most common.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	4	15.4%	
Grew 25-49.9%	3	11.5%	26.9%
Grew 10-24.99%	4	15.4%	42.3%
Even, $\pm 9.99\%$	4	15.4%	57.7%
Shrank 10-24.99%	2	7.7%	65.4%
Shrank 25-49.99%	2	7.7%	73.1%
Shrank 50%+	7	26.9%	

Even growth and shrinkage.

**Subject'**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	5	329	18%	\$995
Ecology	1	177	0%	\$85
Technology	2	156	29%	\$2,595
Education	3	117	44%	\$903
Earth Sciences	3	80	6%	\$1,693
Anthropology	2	69	100%	\$0
Arts & Architecture	1	17	100%	\$0
Biology	1	17	0%	\$902
Psychology	1	17	100%	\$0
Language & Literature	1	10	100%	\$0
Religion	1	10	100%	\$0
Library Science	1	7	100%	\$0
Media & Communications	1	6	100%	\$0
Political Science	1	5	100%	\$0
Philosophy	1	3	100%	\$0
Other Sciences	1	0		

Medicine most common, but technology by far the most expensive.



# Malaysia

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	62	2,192			\$119	-87%
Fee	12	1,011	46%	-21%	\$257	-84%
No-fee	50	1,181	54%	29%		
Biomed	9	500	23%	-36%	\$128	-90%
Fee	3	311	62%	-11%	\$206	-89%
No-fee	6	189	38%	26%		
STEM	30	1,074	49%	20%	\$112	-89%
Fee	4	449	42%	-39%	\$267	-82%
No-fee	26	625	58%	87%		
H&SS	23	618	28%	19%	\$123	0%
Fee	5	251	41%	84%	\$303	-46%
No-fee	18	367	59%	-24%		

Mostly no-fee and low fees; light in biomed, heavy in STEM.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	62	62	44	43	41	39
%No-fee	81%	81%	75%	77%	76%	74%
Articles	2,192	1,791	1,230	1,032	838	861
%No-fee	54%	58%	52%	60%	62%	61%
Change	22.4%	45.6%	19.2%	23.2%	-2.7%	

Rapid growth for four years running.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	533	0%	\$260
Med.: 60-149	11	723	53%	\$135
Small: 20-59	25	669	80%	\$37
Smallest: 0-19	24	267	100%	\$0

No very large journals; typical correlations but always low costs.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	10	927	\$249,749	\$269
\$0.01-\$199	2	84	\$10,530	\$125
No fee	50	1,181		

As expected: no high-cost, at the low end of the \$200-\$599 range.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	3	4	2	2
No-fee	3	2	12	13	20
Total	4	5	16	15	22

Accelerating recent growth.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	38	1,731	52%	\$128
Open Access	16	186	100%	\$0
Society/govt	6	169	54%	\$92
Miscellaneous	2	106	0%	\$226

Predominantly universities.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	13	21.0%	
Grew 25-49.9%	9	14.5%	35.5%
Grew 10-24.99%	7	11.3%	46.8%
Even, $\pm 9.99\%$	10	16.1%	62.9%
Shrank 10-24.99%	12	19.4%	82.3%
Shrank 25-49.99%	8	12.9%	95.2%
Shrank 50%+	3	4.8%	

More growth (46.8%) than shrinkage (37.1%).

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Engineering	9	683	46%	\$148
Medicine	7	429	37%	\$139
Language & Literature	4	178	31%	\$207
Religion	3	128	0%	\$307
Agriculture	2	91	13%	\$204
Miscellany	3	80	100%	\$0
Biology	2	71	42%	\$64
Technology	3	66	100%	\$0
Education	4	62	100%	\$0
Ecology	4	61	100%	\$0
Earth Sciences	5	55	100%	\$0
Anthropology	2	52	100%	\$0
History	2	45	100%	\$0
Physics	1	34	100%	\$0
Economics	2	31	100%	\$0
Sociology	2	30	100%	\$0
Zoology	2	30	100%	\$0
Other Sciences	2	23	100%	\$0
Computer Science	1	17	100%	\$0
Mathematics	1	14	100%	\$0
Library Science	1	12	100%	\$0

Broad distribution, with religion the most expensive.

# Nepal

No fees and mostly medicine.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>
All	15	452		
Biomed	9	398	88%	148%
STEM	4	39	9%	-79%
H&SS	2	15	3%	-86%

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	14	15	15	14	12	11
Articles	452	428	415	337	330	404
Change	5.6%	3.1%	23.1%	2.1%	-18.3%	

## Article Volume

	<b>Journals</b>	<b>Articles</b>	<b>Percent</b>	<b>Art/Jrn</b>
Med.: 60-149	2	140	15%	70
Small: 20-59	9	285	32%	32
Smallest: 0-19	4	27	3%	7

## Starting Dates

	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Journals	7	5	3

No early journals, growth continues.

**Publisher Category**

Category	Journals	Articles	Percent	Art/Jrn
Society/govt	8	276	61%	35
Univ/college	6	166	37%	28
Miscellaneous	1	10	2%	10

Mostly several medical societies and a government research council.

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	1	6.7%	
Grew 25-49.9%	6	40.0%	46.7%
Grew 10-24.99%	1	6.7%	53.3%
Even, $\pm 9.99\%$	2	13.3%	66.7%
Shrank 10-24.99%	1	6.7%	73.3%
Shrank 25-49.99%	1	6.7%	80.0%
Shrank 50%+	3	20.0%	

Almost twice as much growth as shrinkage.

**Subject**

Subject	Journals	Articles	Art/Jrn
Medicine	9	398	44
Other Sciences	1	17	17
Sociology	1	14	14
Mathematics	1	12	12
Ecology	1	10	10
Education	1	1	1
Agriculture	1	0	0

# Pakistan

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	49	2,097			\$178	-81%
Fee	12	1,306	62%	7%	\$285	-82%
No-fee	37	791	38%	-10%		
Biomed	15	1,202	57%	61%	\$267	-79%
Fee	7	1,018	85%	21%	\$316	-83%
No-fee	8	184	15%	-49%		
STEM	15	509	24%	-40%	\$100	-90%
Fee	4	281	55%	-20%	\$181	-88%
No-fee	11	228	45%	44%		
H&SS	19	386	18%	-23%	\$1	-99%
Fee	1	7	2%	-92%	\$40	-93%
No-fee	18	379	98%	26%		

Mostly biomed, mostly low-fee; H&SS almost entirely no-fee.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	46	49	44	40	32	29
%No-fee	74%	76%	73%	70%	63%	59%
Articles	2,097	2,030	1,792	1,496	1,259	1,294
%No-fee	38%	41%	37%	39%	37%	28%
Change	3.3%	13.3%	19.8%	18.8%	-2.7%	

Slow growth after three years of robust growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	771	0%	\$404
Med.: 60-149	8	521	23%	\$107
Small: 20-59	29	732	82%	\$7
Smallest: 0-19	9	73	100%	\$0

Extremes of size/fee/cost correlation: large are all fee and most expensive; smallest are all no-fee, small nearly so.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	1	311	\$248,800	\$800
\$200-\$599	2	251	\$79,950	\$319
\$0.01-\$199	9	744	\$43,870	\$59
No fee	37	791		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	2	5	4	0
No-fee	1	0	9	9	18
Total	2	2	14	13	18

Recent surge in no-fee journals.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	34	1,208	46%	\$241
Society/govt	11	753	25%	\$100
Open Access	4	136	39%	\$43

Mostly universities—and mostly with modest fees.

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 50%+	7	14.3%	
Grew 25-49.9%	5	10.2%	24.5%
Grew 10-24.99%	5	10.2%	34.7%
Even, $\pm 9.99\%$	12	24.5%	59.2%
Shrank 10-24.99%	8	16.3%	75.5%
Shrank 25-49.99%	1	2.0%	77.6%
Shrank 50%+	11	22.4%	

More shrinkage than growth, 40.8% to 34.7%.

### Subject

Subject	Jour.	Art.	%No-fee	\$/article
Medicine	12	1,005	14%	\$273
Biology	3	197	20%	\$241
Economics	8	155	100%	\$0
Zoology	1	93	0%	\$350
Education	4	91	100%	\$0
Mathematics	2	85	100%	\$0
Engineering	1	80	0%	\$71
Sociology	2	75	100%	\$0
Agriculture	2	73	0%	\$150
Ecology	2	47	100%	\$0
Computer Science	2	45	100%	\$0
Earth Sciences	2	35	0%	\$50
Religion	1	32	100%	\$0
Chemistry	1	21	100%	\$0
Other Sciences	1	18	100%	\$0
Psychology	1	14	100%	\$0
Technology	1	12	100%	\$0
Library Science	1	7	0%	\$40
Miscellany	1	7	100%	\$0
Political Science	1	5	100%	\$0



# Singapore

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	13	336			\$301	-67%
Fee	3	69	21%	-65%	\$1,467	-7%
No-fee	10	267	79%	90%		
Biomed	5	170	51%	42%	\$595	-54%
Fee	3	69	41%	-42%	\$1,467	-21%
No-fee	2	101	59%	99%		
STEM	3	88	26%	-36%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	3	88	100%	221%		
H&SS	5	78	23%	-2%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	5	78	100%	28%		

No fees except biomed, and a majority of biomed articles are no-fee.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	12	11	10	9	7	3
%No-fee	75%	73%	80%	78%	86%	67%
Articles	336	407	334	349	295	61
%No-fee	79%	62%	70%	73%	73%	25%
Change	-17.4%	21.9%	-4.3%	18.3%	383.6%	

A one-year jump in fee-based articles has largely subsided.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	3	149	57%	\$629
Small: 20-59	6	157	100%	\$0
Smallest: 0-19	4	30	83%	\$250

No large journals.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	2	63	\$94,500	\$1,500
\$600-\$1,399	1	6	\$6,720	\$1,120
No fee	10	267		

**Starting Date**

	To 1998	99-2004	2011-14	2015-18
Fee	0	0	1	2
No-fee	1	1	3	5
Total	1	1	4	7

Most growth is recent, as are all fee journals.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	7	242	71%	\$418
Univ/college	3	50	100%	\$0
Open Access	3	44	100%	\$0

Traditional publishers account for most articles and all fees.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	2	15.4%	
Grew 25-49.9%	1	7.7%	23.1%
Grew 10-24.99%	1	7.7%	30.8%
Even, $\pm 9.99\%$	4	30.8%	61.5%
Shrank 10-24.99%	1	7.7%	69.2%
Shrank 25-49.99%	1	7.7%	76.9%
Shrank 50%+	3	23.1%	

Nearly equal amounts of growth, shrinkage and stability.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	4	165	61%	\$568
Physics	1	56	100%	\$0
Education	2	52	100%	\$0
Computer Science	2	32	100%	\$0
Language & Literature	1	17	100%	\$0
Arts & Architecture	1	9	100%	\$0
Biology	1	5	0%	\$1,500
Library Science	1	0		

No additional comment required.

## South Korea

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	88	5,199			\$194	-79%
Fee	28	2,091	40%	-31%	\$483	-69%
No-fee	60	3,108	60%	43%		
Biomed	48	3,142	60%	70%	\$135	-90%
Fee	12	917	29%	-58%	\$464	-75%
No-fee	36	2,225	71%	137%		
STEM	19	1,253	24%	-41%	\$412	-60%
Fee	11	1,003	80%	16%	\$515	-66%
No-fee	8	250	20%	-36%		
H&SS	21	804	15%	-35%	\$85	-31%
Fee	5	171	21%	-3%	\$398	-29%
No-fee	16	633	79%	1%		

Rich in biomed, lean elsewhere, mostly no-fee except for STEM.

### Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	88	88	86	83	77	68
%No-fee	68%	68%	69%	67%	69%	66%
Articles	5,199	4,638	4,728	4,113	3,989	3,750
%No-fee	60%	57%	59%	60%	57%	51%
Change	12.1%	-1.9%	15.0%	3.1%	6.4%	

Good growth after a slightly slow 2017.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	7	1,242	43%	\$229
Med.: 60-149	31	2,446	60%	\$188
Small: 20-59	42	1,418	72%	\$174
Smallest: 0-19	8	93	84%	\$194

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	44	\$78,320	\$1,780
\$600-\$1,399	6	386	\$319,500	\$828
\$200-\$599	16	1,476	\$585,512	\$397
\$0.01-\$199	5	185	\$26,632	\$144
No fee	60	3,108		

The only expensive journal is small.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	10	4	5	6	3
No-fee	14	7	13	21	5
Total	24	11	18	27	8

Quite a few early OA journals, with strong growth 2005-2014.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Society/govt	50	2,909	60%	\$177
Traditional	10	1,103	61%	\$178
Miscellaneous	10	590	51%	\$269
Univ/college	13	488	66%	\$89
Open Access	5	109	46%	\$884

Another case where societies dominate OA publishing.

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 50%+	11	12.5%	
Grew 25-49.9%	8	9.1%	21.6%
Grew 10-24.99%	11	12.5%	34.1%
Even, $\pm 9.99\%$	35	39.8%	73.9%
Shrank 10-24.99%	19	21.6%	95.5%
Shrank 25-49.99%	1	1.1%	96.6%
Shrank 50%+	3	3.4%	

More growth than shrinkage; a big stable center.

### Subject

Subject	Jour.	Art.	%No-fee	\$/article
Medicine	47	3,027	74%	\$120
Engineering	4	394	38%	\$247
Zoology	3	382	0%	\$569
Economics	8	326	86%	\$77
Agriculture	4	285	14%	\$556
Education	5	196	79%	\$84
Language & Literature	2	142	100%	\$0
Biology	1	115	0%	\$550
Earth Sciences	3	97	34%	\$157
Library Science	2	40	100%	\$0
Media & Communications	1	36	0%	\$70
Computer Science	2	35	0%	\$550
Physics	1	34	0%	\$264
Psychology	1	34	0%	\$176
Chemistry	1	20	100%	\$0
Anthropology	1	15	0%	\$1,200
History	1	15	100%	\$0
Ecology	1	6	100%	\$0

One anthropology journal stands out—but it's sports medicine. (It's not the highest fee: one medical journal charges \$1,780.)

# Sri Lanka

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	13	301			\$2	-100%
Fee	1	7	2%	-96%	\$100	-94%
No-fee	12	294	98%	133%		
Biomed	5	209	69%	95%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	5	209	100%	235%		
STEM	5	64	21%	-48%	\$11	-99%
Fee	1	7	11%	-84%	\$100	-93%
No-fee	4	57	89%	186%		
H&SS	3	28	9%	-61%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	3	28	100%	28%		

Since one \$100-fee computer science journal with seven articles (and the fee's voluntary) is the only fee case, the fees & revenue table is omitted as redundant. Mostly biomed.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	13	11	13	12	12	10
%No-fee	92%	91%	92%	92%	92%	90%
Articles	301	344	246	286	276	199
%No-fee	98%	99%	98%	99%	97%	97%
Change	-12.5%	39.8%	-14.0%	3.6%	38.7%	

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	3	161	100%	\$0
Small: 20-59	4	84	100%	\$0
Smallest: 0-19	6	56	88%	\$13

**Starting Date**

	1999-2004	2005-10	2011-14
Fee	0	1	0
No-fee	1	5	6
Total	1	6	6

Almost all journals started 2005-2014.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	10	266	97%	\$3
Society/govt	2	30	100%	\$0
Miscellaneous	1	5	100%	\$0

Universities dominate.

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	4	30.8%	
Grew 10-24.99%	1	7.7%	38.5%
Even, $\pm 9.99\%$	3	23.1%	61.5%
Shrank 10-24.99%	2	15.4%	76.9%
Shrank 25-49.99%	1	7.7%	84.6%
Shrank 50%+	2	15.4%	

Growth and shrinkage are equal, but more growing rapidly.



**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	5	209	100%	\$0
Agriculture	1	25	100%	\$0
Other Sciences	1	15	100%	\$0
Ecology	1	14	100%	\$0
Law	1	12	100%	\$0
Economics	1	11	100%	\$0
Computer Science	2	10	30%	\$70
Sociology	1	5	100%	\$0

# Taiwan

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	33	1,700			\$83	-91%
Fee	6	391	23%	-60%	\$360	-77%
No-fee	27	1,309	77%	84%		
Biomed	9	1,118	66%	85%	\$33	-97%
Fee	1	93	8%	-88%	\$400	-78%
No-fee	8	1,025	92%	207%		
STEM	8	367	22%	-47%	\$270	-74%
Fee	2	248	68%	-2%	\$400	-74%
No-fee	6	119	32%	4%		
H&SS	16	215	13%	-47%	\$19	-84%
Fee	3	50	23%	6%	\$83	-85%
No-fee	13	165	77%	-2%		

Mostly biomed, more than three-quarters no-fee, moderate fees.

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	31	32	33	32	32	29
%No-fee	81%	81%	82%	81%	81%	83%
Articles	1,700	1,681	1,559	1,411	1,231	1,131
%No-fee	77%	68%	76%	79%	83%	81%
Change	1.1%	7.8%	10.5%	14.6%	8.8%	

Flat in 2018 after four years of growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	5	998	80%	\$80
Med.: 60-149	4	281	50%	\$201
Small: 20-59	11	291	92%	\$7
Smallest: 0-19	13	130	78%	\$16

Medium journals stand out: by far the highest costs, and the only size with half of articles involving fees.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	3	341	\$136,400	\$400
\$0.01-\$199	3	50	\$4,175	\$83
No fee	27	1,309		

Even the most expensive journals aren't very expensive.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	0	3	2	0
No-fee	5	8	4	4	6
Total	6	8	7	6	6

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	9	1,101	92%	\$34
Univ/college	16	456	45%	\$185
Society/govt	6	123	61%	\$156
Miscellaneous	2	20	100%	\$0

Mostly traditional Elsevier, mostly no-fee.

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 50%+	3	9.1%	
Grew 25-49.9%	4	12.1%	21.2%
Grew 10-24.99%	4	12.1%	33.3%
Even, $\pm 9.99\%$	13	39.4%	72.7%
Shrank 10-24.99%	4	12.1%	84.8%
Shrank 25-49.99%	3	9.1%	93.9%
Shrank 50%+	2	6.1%	

More growth than shrinkage (33.3% to 27.3%).

### Subject

Subject	Jour.	Art.	%No-fee	\$/article
Medicine	8	1,067	91%	\$35
Other Sciences	2	230	13%	\$348
Education	6	68	43%	\$56
Technology	3	60	100%	\$0
Political Science	2	58	100%	\$0
Biology	1	51	100%	\$0
Earth Sciences	1	48	0%	\$400
Library Science	3	30	100%	\$0
Media & Communications	1	28	100%	\$0
Language & Literature	2	21	48%	\$18
Mathematics	1	18	100%	\$0
Engineering	1	11	100%	\$0
Law	2	10	100%	\$0

Predominantly medicine.

# Thailand

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	27	974			\$81	-91%
Fee	8	410	42%	-28%	\$192	-88%
No-fee	19	564	58%	38%		
Biomed	2	119	12%	-66%	\$29	-98%
Fee	1	34	29%	-59%	\$100	-95%
No-fee	1	85	71%	139%		
STEM	18	670	69%	69%	\$95	-91%
Fee	5	286	43%	-38%	\$223	-85%
No-fee	13	384	57%	84%		
H&SS	7	185	19%	-20%	\$63	-49%
Fee	2	90	49%	121%	\$130	-77%
No-fee	5	95	51%	-34%		

Strong in STEM, little biomed, mostly no-fee throughout.

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	25	25	23	22	22	20
%No-fee	68%	68%	65%	68%	68%	65%
Articles	974	937	890	726	724	696
%No-fee	58%	60%	58%	58%	65%	64%
Change	3.9%	5.3%	22.6%	0.3%	4.0%	

Still growing, if at a slower pace than in 2016.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	150	100%	\$0
Med.: 60-149	6	404	34%	\$101
Small: 20-59	12	339	61%	\$106
Smallest: 0-19	8	81	84%	\$25

Unusual, with the only large journal no-fee.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	20	\$12,000	\$600
\$200-\$599	3	176	\$40,500	\$230
\$0.01-\$199	4	214	\$26,373	\$123
No fee	19	564		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	2	1	3	1	1
No-fee	0	2	5	8	4
Total	2	3	8	9	5

Mostly no-fee journals since 2005.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	21	772	67%	\$56
Traditional	1	99	0%	\$200
Society/govt	4	81	35%	\$196
Miscellaneous	1	22	100%	\$0

Predominantly universities.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	4	14.8%	
Grew 25-49.9%	3	11.1%	25.9%
Grew 10-24.99%	4	14.8%	40.7%
Even, $\pm 9.99\%$	8	29.6%	70.4%
Shrank 10-24.99%	3	11.1%	81.5%
Shrank 25-49.99%	1	3.7%	85.2%
Shrank 50%+	4	14.8%	

More growth than shrinkage.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Other Sciences	8	316	64%	\$51
Agriculture	3	172	42%	\$115
Medicine	2	119	71%	\$29
Education	2	94	18%	\$103
Engineering	3	73	73%	\$164
Ecology	2	70	24%	\$227
Political Science	1	34	100%	\$0
Zoology	1	29	100%	\$0
Law	1	22	100%	\$0
Philosophy	1	13	0%	\$157
Anthropology	1	12	100%	\$0
Economics	1	10	100%	\$0
Physics	1	10	100%	\$0

“Other Sciences” are journals of science or science and technology.

## Other Asian Countries

Four countries with a total of seventeen OA journals.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	17	414			\$18	-98%
Fee	2	105	25%	-56%	\$72	-95%
No-fee	15	309	75%	78%		
Biomed	5	118	29%	-20%	\$27	-98%
Fee	1	42	36%	-49%	\$75	-96%
No-fee	4	76	64%	116%		
STEM	4	42	10%	-75%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	4	42	100%	221%		
H&SS	8	254	61%	158%	\$17	-86%
Fee	1	63	25%	13%	\$70	-87%
No-fee	7	191	75%	-4%		

Mostly H&SS and mostly no-fee or very low-fee.

### Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	17	17	16	14	13	14
%No-fee	88%	88%	88%	86%	92%	93%
Articles	414	569	456	456	328	256
%No-fee	75%	67%	72%	52%	56%	92%
Change	-27.2%	24.8%	0.0%	39.0%	28.1%	

Erratic growth and shrinkage.



**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Large: 150-599	1	63	0%	\$70
Med.: 60-149	2	75	100%	\$0
Small: 20-59	10	226	81%	\$14
Smallest: 0-19	4	50	100%	\$0

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$0.01-\$199	2	105	\$7,560	\$72
No fee	15	309		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	0	0	1	1
No-fee	1	2	3	5	4
Total	1	2	3	6	5

The fee journals are fairly recent.

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Univ/college	15	370	72%	\$20
Society/govt	2	44	100%	\$0

Predominantly universities.

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 25-49.99%	3	17.6%	
Grew 10-24.99%	1	5.9%	23.5%
Even, $\pm 9.99\%$	4	23.5%	47.1%
Shrank 10-24.99%	4	23.5%	70.6%
Shrank 25-49.99%	3	17.6%	88.2%
Shrank 50%+	2	11.8%	

Mostly shrinkage.

### Subject

Subject	Jour.	Art.	%No-fee	\$/article
Miscellany	4	185	66%	\$24
Medicine	4	110	62%	\$29
Philosophy	1	22	100%	\$0
Language & Literature	1	19	100%	\$0
Other Sciences	2	17	100%	\$0
Sociology	1	16	100%	\$0
Engineering	1	15	100%	\$0
Economics	1	12	100%	\$0
Chemistry	1	10	100%	\$0
Biology	1	8	100%	\$0

## Country Summaries

### Kyrgyzstan

Three no-fee journals (economics, engineering, medicine) with 51 articles in 2018.

### Mongolia

Four journals (one low-fee medical journal, no-fee journals in biology, chemistry and miscellany), 118 total articles in 2018.

### **Philippines**

Nine journals: one low-fee miscellany, the rest no-fee in various subjects. Total of 197 articles in 2018.

### **Viet Nam**

One no-fee journal.

## Eastern Europe

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	2,032	75,051			\$93	-90%
Fee	418	25,485	34%	-42%	\$273	-83%
No-fee	1,614	49,566	66%	58%		
Biomed	327	16,666	22%	-37%	\$99	-92%
Fee	81	6,269	38%	-46%	\$262	-86%
No-fee	246	10,397	62%	109%		
STEM	697	26,634	35%	-13%	\$148	-86%
Fee	168	9,938	37%	-46%	\$396	-74%
No-fee	529	16,696	63%	101%		
H&SS	1,008	31,751	42%	78%	\$44	-64%
Fee	169	9,278	29%	33%	\$150	-73%
No-fee	839	22,473	71%	-9%		

Strong in H&SS, thin in biomed, two-thirds no-fee, low fees.

### Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	1,872	1,952	1,926	1,844	1,703	1,515
%No-fee	79%	79%	80%	80%	80%	80%
Articles	75,051	80,245	80,172	80,351	74,918	66,841
%No-fee	66%	68%	70%	70%	71%	69%
Change	-6.5%	0.1%	-0.2%	7.3%	12.1%	

After up and down years, basically at 2014 levels.

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	4	198	\$333,491	\$1,684
\$600-\$1,399	34	3,110	\$2,761,771	\$888
\$200-\$599	113	7,371	\$2,847,560	\$386
\$0.01-\$199	267	14,806	\$1,025,095	\$69
No fee	1,614	49,566		

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	7	40	128	145	98
No-fee	82	174	531	566	261
Total	89	214	659	711	359

Growth has tapered off since 2014.

**Country of Publication**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Albania	4	94	65%	\$51
Armenia	2	35	100%	\$0
Belarus	9	573	83%	\$25
Bosnia and Herzegovina	20	475	77%	\$97
Bulgaria	52	2,361	29%	\$398
Croatia	109	3,132	77%	\$105
Cyprus	5	181	41%	\$220
Czech Republic	97	2,569	63%	\$129
Estonia	18	392	76%	\$133
Georgia	3	166	100%	\$0
Hungary	33	1,032	80%	\$174
Kazakhstan	2	95	85%	\$1
Latvia	11	510	39%	\$595
Lithuania	55	1,841	48%	\$263
Macedonia	8	553	14%	\$283
Moldova	28	1,033	60%	\$6
Montenegro	8	410	76%	\$26
Poland	526	16,251	60%	\$158
Romania	317	9,208	68%	\$37
Russia	290	16,422	85%	\$17
Serbia	155	4,635	76%	\$35
Slovakia	43	1,021	72%	\$49
Slovenia	51	1,365	85%	\$69
Turkmenistan	1	10	100%	\$0
Ukraine	185	10,687	46%	\$53

## Bosnia and Herzegovina

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	20	475			\$97	-89%
Fee	4	111	23%	-60%	\$417	-73%
No-fee	16	364	77%	83%		
Biomed	8	209	44%	24%	\$217	-83%
Fee	3	92	44%	-37%	\$494	-73%
No-fee	5	117	56%	87%		
STEM	5	79	17%	-59%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	5	79	100%	221%		
H&SS	7	187	39%	65%	\$5	-96%
Fee	1	19	10%	-54%	\$45	-92%
No-fee	6	168	90%	15%		

More H&SS and biomed, less STEM. More than three-quarters no-fee.

### Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	20	20	19	19	18	16
%No-fee	80%	80%	79%	79%	83%	88%
Articles	475	476	424	437	450	500
%No-fee	77%	78%	72%	73%	75%	76%
Change	-0.2%	12.3%	-3.0%	-2.9%	-10.0%	

Essentially stable after growing in 2017—but still below 2013.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	3	135	77%	\$64
Small: 20-59	13	301	73%	\$125
Smallest: 0-19	4	39	100%	\$0

Mostly small and no large journals.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	55	\$36,400	\$662
\$200-\$599	1	31	\$8,699	\$281
\$0.01-\$199	2	25	\$1,187	\$47
No fee	16	364		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	2	0	1	1
No-fee	1	0	5	7	3
Total	1	2	5	8	4

Most new journals emerged 2005-14.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	15	336	98%	\$1
Society/govt	4	120	28%	\$376
Open Access	1	19	0%	\$45

Universities dominate, except where fees are involved.



**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	3	15.0%	
Grew 25-49.9%	1	5.0%	20.0%
Grew 10-24.99%	3	15.0%	35.0%
Even, $\pm 9.99\%$	2	10.0%	45.0%
Shrank 10-24.99%	4	20.0%	65.0%
Shrank 25-49.99%	6	30.0%	95.0%
Shrank 50%+	1	5.0%	

Most journals are shrinking.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	7	188	51%	\$242
Language & Literature	2	93	100%	\$0
Engineering	3	59	100%	\$0
Economics	2	44	57%	\$19
Anthropology	1	24	100%	\$0
Biology	1	21	100%	\$0
Law	1	20	100%	\$0
Zoology	1	14	100%	\$0
Earth Sciences	1	6	100%	\$0
Miscellany	1	6	100%	\$0

Medicine is where the money is, such as it is—and even there, most articles don't involve fees.

# Bulgaria

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	52	2,361			\$398	-56%
Fee	27	1,675	71%	22%	\$561	-64%
No-fee	25	686	29%	-31%		
Biomed	14	515	22%	-39%	\$204	-84%
Fee	8	412	80%	14%	\$255	-86%
No-fee	6	103	20%	-33%		
STEM	28	1,568	66%	63%	\$532	-49%
Fee	17	1,230	78%	14%	\$678	-55%
No-fee	11	338	22%	-31%		
H&SS	10	278	12%	-51%	\$6	-95%
Fee	2	33	12%	-46%	\$47	-92%
No-fee	8	245	88%	13%		

Mostly STEM, and mostly with fees (except for H&SS).

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	52	51	43	38	31	26
%No-fee	48%	47%	47%	47%	45%	46%
Articles	2,361	2,430	2,517	1,983	1,932	1,680
%No-fee	29%	29%	26%	38%	27%	27%
Change	-2.8%	-3.5%	26.9%	2.6%	15.0%	

Very slow decline since a surge in 2016.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	809	8%	\$608
Med.: 60-149	11	701	24%	\$430
Small: 20-59	27	715	50%	\$190
Smallest: 0-19	11	136	69%	\$83

Typical size/price correlation, but with no very large journals.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	5	865	\$708,921	\$820
\$200-\$599	13	445	\$182,065	\$409
\$0.01-\$199	9	365	\$49,233	\$135
No fee	25	686		

No very expensive journals; most revenue and articles in the high-medium range.

**Starting Date**

	1999-2004	2005-10	2011-14	2015-18
Fee	1	6	10	10
No-fee	2	4	10	9
Total	3	10	20	19

Most journals began in this decade.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	24	1,471	6%	\$594
Univ/college	17	598	90%	\$35
Society/govt	7	243	20%	\$147
Miscellaneous	4	49	24%	\$207

Pensoft publishes most of the articles.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	6	11.5%	
Grew 25-49.9%	5	9.6%	21.2%
Grew 10-24.99%	7	13.5%	34.6%
Even, $\pm 9.99\%$	13	25.0%	59.6%
Shrank 10-24.99%	9	17.3%	76.9%
Shrank 25-49.99%	8	15.4%	92.3%
Shrank 50%+	4	7.7%	

Somewhat more shrinkage than growth (40.4% to 34.6%).

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Zoology	11	919	8%	\$624
Biology	10	355	23%	\$205
Agriculture	4	293	28%	\$631
Medicine	4	160	14%	\$202
Ecology	5	142	22%	\$377
Other Sciences	2	98	63%	\$122
Miscellany	3	88	90%	\$2
Philosophy	2	82	100%	\$0
Technology	2	68	100%	\$0
Education	2	58	100%	\$0
Anthropology	1	24	0%	\$56
Mathematics	1	23	0%	\$419
Computer Science	2	17	71%	\$17
Economics	1	16	100%	\$0
Language & Literature	1	10	100%	\$0
Physics	1	8	100%	\$0

Strongest in zoology (especially entomology).

# Croatia

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	109	3,132			\$105	-89%
Fee	7	714	23%	-61%	\$459	-71%
No-fee	102	2,418	77%	84%		
Biomed	12	381	12%	-66%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	12	381	100%	235%		
STEM	31	1,419	45%	11%	\$213	-79%
Fee	6	649	46%	-34%	\$466	-69%
No-fee	25	770	54%	74%		
H&SS	66	1,332	43%	79%	\$19	-85%
Fee	1	65	5%	-78%	\$389	-30%
No-fee	65	1,267	95%	22%		

Mostly STEM and HSS, more than three-quarters no-fee.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	100	104	105	101	97	92
%No-fee	93%	93%	93%	93%	93%	93%
Articles	3,132	3,298	3,587	3,406	3,154	3,007
%No-fee	77%	79%	79%	80%	81%	84%
Change	-5.0%	-8.1%	5.3%	8.0%	4.9%	

Slight shrinkage since 2016 peak; back to 2014 levels.

**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Large: 150-599	3	484	14%	\$514
Med.: 60-149	20	929	73%	\$70
Small: 20-59	59	1,461	97%	\$10
Smallest: 0-19	27	258	100%	\$0

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1.399	1	93	\$67,237	\$723
\$200-\$599	4	508	\$248,144	\$488
\$0.01-\$199	2	113	\$12,371	\$109
No fee	102	2,418		

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	0	2	2	3	0
No-fee	20	22	34	15	11
Total	20	24	36	18	11

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Univ/college	76	2,191	75%	\$114
Society/govt	25	752	79%	\$104
Miscellaneous	6	130	100%	\$0
Open Access	2	59	100%	\$0

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	10	9.2%	
Grew 25-49.9%	12	11.0%	20.2%
Grew 10-24.99%	20	18.3%	38.5%
Even, $\pm 9.99\%$	25	22.9%	61.5%
Shrank 10-24.99%	11	10.1%	71.6%
Shrank 25-49.99%	18	16.5%	88.1%
Shrank 50%+	13	11.9%	

**Subject (omits Library Science, Mathematics: both no-fee)**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Engineering	6	607	9%	\$473
Medicine	11	321	100%	\$0
Earth Sciences	8	231	80%	\$5
Law	6	197	100%	\$0
Economics	13	195	100%	\$0
Chemistry	4	191	100%	\$0
Agriculture	4	154	100%	\$0
Language & Literature	7	139	100%	\$0
Philosophy	3	122	100%	\$0
Anthropology	7	114	100%	\$0
Ecology	2	104	52%	\$135
Education	3	102	36%	\$248
History	4	95	100%	\$0
Political Science	4	78	100%	\$0
Arts & Architecture	7	67	100%	\$0
Sociology	3	65	100%	\$0
Computer Science	2	61	100%	\$0
Biology	1	60	100%	\$0
Media & Communications	3	52	100%	\$0
Religion	1	41	100%	\$0
Technology	2	37	100%	\$0
Psychology	1	30	100%	\$0
Zoology	2	29	100%	\$0
Miscellany	2	21	100%	\$0

# Czech Republic

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	97	2,569			\$129	-86%
Fee	18	943	37%	-37%	\$352	-78%
No-fee	79	1,626	63%	51%		
Biomed	5	84	3%	-91%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	5	84	100%	235%		
STEM	37	1,504	59%	44%	\$208	-80%
Fee	15	856	57%	-17%	\$365	-76%
No-fee	22	648	43%	38%		
H&SS	55	981	38%	61%	\$20	-84%
Fee	3	87	9%	-60%	\$225	-60%
No-fee	52	894	91%	17%		

Another country with mostly H&SS, mostly no-fee, very little biomed.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	92	95	95	93	83	76
%No-fee	80%	81%	81%	81%	78%	76%
Articles	2,569	2,998	2,745	2,894	2,629	2,755
%No-fee	63%	68%	67%	68%	64%	64%
Change	-14.3%	9.2%	-5.1%	10.1%	-4.6%	

Up and down, currently back to 2014 levels.



**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Large: 150-599	3	363	60%	\$181
Med.: 60-149	10	607	32%	\$240
Small: 20-59	63	1,380	72%	\$88
Smallest: 0-19	21	219	100%	\$0

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	15	844	\$319,185	\$378
\$0.01-\$199	3	99	\$12,936	\$131
No fee	79	1,626		

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	2	8	7	1	0
No-fee	2	6	27	27	17
Total	4	14	34	28	17

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Univ/college	77	2,123	64%	\$124
Miscellaneous	3	154	5%	\$426
Open Access	11	149	73%	\$28
Society/govt	6	143	100%	\$0

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	3	3.1%	
Grew 25-49.9%	7	7.2%	10.3%
Grew 10-24.99%	8	8.2%	18.6%
Even, $\pm$ 9.99%	35	36.1%	54.6%
Shrank 10-24.99%	13	13.4%	68.0%
Shrank 25-49.99%	19	19.6%	87.6%
Shrank 50%+	12	12.4%	

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Agriculture	10	609	27%	\$242
Engineering	7	409	64%	\$160
Language & Literature	9	192	100%	\$0
Zoology	3	187	0%	\$354
Economics	9	186	63%	\$95
Political Science	8	158	100%	\$0
Education	8	154	88%	\$13
Anthropology	9	85	100%	\$0
Medicine	4	70	100%	\$0
Mathematics	3	69	100%	\$0
Sociology	3	69	100%	\$0
Earth Sciences	4	65	54%	\$164
History	3	55	100%	\$0
Chemistry	1	50	0%	\$449
Computer Science	3	41	100%	\$0
Ecology	2	37	100%	\$0
Technology	3	37	100%	\$0
Psychology	3	29	100%	\$0
Media & Communications	1	23	100%	\$0
Philosophy	1	15	100%	\$0
Religion	1	15	100%	\$0
Biology	1	14	100%	\$0
Physics	1	0		

Oddities: Chemistry is the most expensive subject, zoology second.

# Estonia

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	18	392			\$133	-85%
Fee	3	93	24%	-59%	\$561	-64%
No-fee	15	299	76%	82%		
STEM	4	99	25%	-38%	\$527	-49%
Fee	3	93	94%	37%	\$561	-63%
No-fee	1	6	6%	-81%		
H&SS	14	293	75%	214%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	14	293	100%	28%		

No biomed, mostly H&SS, and the only fees are in STEM.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	17	18	18	16	17	17
%No-fee	82%	83%	83%	88%	88%	88%
Articles	392	418	354	364	376	327
%No-fee	76%	77%	77%	70%	72%	85%
Change	-6.2%	18.1%	-2.7%	-3.2%	15.0%	

## Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	1	42	0%	\$561
Small: 20-59	12	304	83%	\$94
Smallest: 0-19	5	46	100%	\$0

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	3	93	\$52,207	\$561
No fee	15	299		

**Starting Date**

	To 1998	2005-10	2011-14
Fee	0	3	0
No-fee	1	9	5
Total	1	12	5

No new journals since 2014.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	12	286	67%	\$183
Miscellaneous	1	50	100%	\$0
Society/govt	3	35	100%	\$0
Open Access	2	21	100%	\$0

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	1	5.6%	
Grew 25-49.9%	3	16.7%	22.2%
Grew 10-24.99%	2	11.1%	33.3%
Even, $\pm$ 9.99%	4	22.2%	55.6%
Shrank 10-24.99%	2	11.1%	66.7%
Shrank 25-49.99%	5	27.8%	94.4%
Shrank 50%+	1	5.6%	

More shrinkage than growth, 44.4% to 33.3%.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Language & Literature	4	108	100%	\$0
Earth Sciences	2	51	0%	\$561
Economics	1	50	100%	\$0
Other Sciences	1	42	0%	\$561
Education	2	38	100%	\$0
Law	1	21	100%	\$0
History	2	20	100%	\$0
Political Science	1	18	100%	\$0
Anthropology	1	17	100%	\$0
Miscellany	1	13	100%	\$0
Philosophy	1	8	100%	\$0
Agriculture	1	6	100%	\$0

All three fee journals are from the same publisher.

# Hungary

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	33	1,032			\$174	-81%
Fee	3	202	20%	-66%	\$890	-43%
No-fee	30	830	80%	92%		
Biomed	4	222	22%	-39%	\$809	-38%
Fee	3	202	91%	30%	\$890	-52%
No-fee	1	20	9%	-70%		
STEM	17	591	57%	41%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	17	591	100%	221%		
H&SS	12	219	21%	-11%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	12	219	100%	28%		

The only fees are in biomed, and most articles are in STEM.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	31	31	33	31	28	26
%No-fee	90%	90%	91%	90%	89%	92%
Articles	1,032	1,034	1,106	937	857	878
%No-fee	80%	85%	87%	87%	90%	92%
Change	-0.2%	-6.5%	18.0%	9.3%	-2.4%	

Basically flat after a small drop in 2017.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	43	100%	\$0
Med.: 60-149	5	481	72%	\$270
Small: 20-59	18	415	84%	\$120
Smallest: 0-19	9	93	100%	\$0

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	3	202	\$179,704	\$890
No fee	30	830		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	0	1	2	0
No-fee	4	4	10	8	4
Total	4	4	11	10	4

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	18	602	100%	\$0
Open Access	8	252	20%	\$713
Miscellaneous	2	90	100%	\$0
Society/govt	5	88	100%	\$0

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	6	18.2%	
Grew 25-49.9%	1	3.0%	21.2%
Grew 10-24.99%	2	6.1%	27.3%
Even, $\pm$ 9.99%	10	30.3%	57.6%
Shrank 10-24.99%	4	12.1%	69.7%
Shrank 25-49.99%	6	18.2%	87.9%
Shrank 50%+	4	12.1%	

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	3	197	10%	\$834
Engineering	3	141	100%	\$0
History	2	127	100%	\$0
Mathematics	1	104	100%	\$0
Technology	2	104	100%	\$0
Chemistry	2	68	100%	\$0
Earth Sciences	2	62	100%	\$0
Ecology	4	48	100%	\$0
Agriculture	2	43	100%	\$0
Biology	1	25	0%	\$617
Sociology	1	25	100%	\$0
Language & Literature	4	24	100%	\$0
Zoology	1	21	100%	\$0
Anthropology	2	19	100%	\$0
Media & Communications	1	13	100%	\$0
Economics	1	11	100%	\$0
Education	1	0		

One biomed OA publisher has the only fee journals in Hungary. Considerably more shrinkage than growth (43.4% to 27.3%). As is frequently the case, most articles are from university publishers.



# Latvia

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	11	510			\$595	-35%
Fee	2	312	61%	5%	\$972	-38%
No-fee	9	198	39%	-7%		
Biomed	2	23	5%	-87%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	2	23	100%	235%		
STEM	5	155	30%	-25%	\$66	-94%
Fee	1	51	33%	-52%	\$202	-87%
No-fee	4	104	67%	115%		
H&SS	4	332	65%	174%	\$883	618%
Fee	1	261	79%	257%	\$1,123	101%
No-fee	3	71	21%	-73%		

Mostly H&SS—but also mostly fee. No biomed fees.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	10	10	11	10	7	6
%No-fee	80%	80%	82%	80%	86%	83%
Articles	510	387	416	241	123	132
%No-fee	39%	53%	66%	68%	93%	86%
Change	31.8%	-7.0%	72.6%	95.9%	-6.8%	

Generally strong growth.

**Article Volumes**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Large: 150-599	1	261	0%	\$1,123
Med.: 60-149	2	81	37%	\$127
Small: 20-59	7	161	100%	\$0
Smallest: 0-19	1	7	100%	\$0

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1.399	1	261	\$293,059	\$1,123
\$200-\$599	1	51	\$10,300	\$202
No fee	9	198		

**Starting Date**

	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	1	0	1
No-fee	4	2	3
Total	5	2	4

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Miscellaneous	1	261	0%	\$1,123
Open Access	6	173	71%	\$60
Univ/college	4	76	100%	\$0

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	1	9.1%	
Grew 10-24.99%	1	9.1%	18.2%
Even, $\pm 9.99\%$	6	54.5%	72.7%
Shrank 10-24.99%	2	18.2%	90.9%
Shrank 25-49.99%	1	9.1%	

**Subjects**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Economics	2	281	7%	\$1,043
Computer Science	2	53	100%	\$0
Other Sciences	1	51	0%	\$202
Physics	1	44	100%	\$0
Sociology	1	31	100%	\$0
Biology	1	23	100%	\$0
Education	1	20	100%	\$0
Engineering	1	7	100%	\$0
Medicine	1	0		

In case you hadn't guessed, the repeated \$1,123 fee for one economics journal is really €1000. Most journals are on a steady keel; the one that's rapidly growing is that same journal. Yes, that's also the recently-introduced fee journal.

# Lithuania

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	55	1,841			\$263	-71%
Fee	17	966	52%	-10%	\$501	-68%
No-fee	38	875	48%	14%		
Biomed	4	147	8%	-78%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	4	147	100%	235%		
STEM	17	841	46%	12%	\$427	-59%
Fee	7	607	72%	5%	\$592	-61%
No-fee	10	234	28%	-11%		
H&SS	34	853	46%	95%	\$145	18%
Fee	10	359	42%	91%	\$345	-38%
No-fee	24	494	58%	-26%		

Essentially same amount of STEM and H&SS, very little biomed.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	49	54	53	53	49	39
%No-fee	65%	69%	70%	72%	71%	72%
Articles	1,841	2,028	1,743	1,757	1,820	1,520
%No-fee	48%	48%	68%	65%	62%	65%
Change	-9.2%	16.4%	-0.8%	-3.5%	19.7%	

Varied ups and down yielding 2014 levels—but with more fees.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	220	0%	\$561
Med.: 60-149	15	1,006	33%	\$343
Small: 20-59	29	583	89%	\$23
Smallest: 0-19	10	32	69%	\$35

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	2	168	\$123,277	\$734
\$200-\$599	6	630	\$333,058	\$529
\$0.01-\$199	9	168	\$27,172	\$162
No fee	38	875		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	0	2	8	7
No-fee	1	7	10	9	11
Total	1	7	12	17	18

Fee journals are fairly recent.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	41	1,146	60%	\$189
Miscellaneous	5	388	14%	\$541
Traditional	4	170	0%	\$333
Open Access	3	119	92%	\$9
Society/govt	1	0		

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 50%+	7	12.7%	
Grew 25-49.9%	5	9.1%	21.8%
Grew 10-24.99%	5	9.1%	30.9%
Even, $\pm 9.99\%$	10	18.2%	49.1%
Shrank 10-24.99%	5	9.1%	58.2%
Shrank 25-49.99%	10	18.2%	76.4%
Shrank 50%+	13	23.6%	

Much more shrinkage than growth, 50.9% to 30.9%.

### Subject

Subject	Jour.	Art.	%No-fee	\$/article
Engineering	5	468	2%	\$563
Economics	6	272	35%	\$247
Education	5	222	29%	\$244
Ecology	3	152	3%	\$632
Medicine	4	147	100%	\$0
Language & Literature	6	124	100%	\$0
Sociology	8	109	88%	\$7
Mathematics	3	72	100%	\$0
Other Sciences	1	54	100%	\$0
Agriculture	1	48	100%	\$0
Earth Sciences	3	46	100%	\$0
Law	2	39	100%	\$0
Library Science	1	33	100%	\$0
Arts & Architecture	1	20	100%	\$0
Political Science	1	16	100%	\$0
Psychology	2	10	0%	\$168
Religion	1	8	100%	\$0
Computer Science	1	1	0%	\$168
Media & Communications	1	0		

Purely coincidental that the four biggest subjects, with the four highest average costs, all begin with E.

# Moldova

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	28	1,033			\$6	-99%
Fee	9	414	40%	-31%	\$16	-99%
No-fee	19	619	60%	43%		
Biomed	1	40	4%	-89%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	1	40	100%	235%		
STEM	5	249	24%	-41%	\$3	-100%
Fee	1	49	20%	-71%	\$14	-99%
No-fee	4	200	80%	158%		
H&SS	22	744	72%	203%	\$8	-94%
Fee	8	365	49%	123%	\$16	-97%
No-fee	14	379	51%	-35%		

Mostly H&SS, mostly no-fee.

## Articles and Journals by Yr

	2018	2017	2016	2015	2014	2013
Journals	26	27	26	25	23	21
%No-fee	69%	67%	69%	68%	70%	71%
Articles	1,033	1,054	1,057	1,142	1,057	1,043
%No-fee	60%	62%	62%	61%	62%	64%
Change	-2.0%	-0.3%	-7.4%	8.0%	1.3%	

Slow drops since 2015.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	12	651	52%	\$7
Small: 20-59	15	374	73%	\$5
Smallest: 0-19	1	8	100%	\$0

No large journals...

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$0.01-\$199	9	414	\$6,496	\$16
No fee	19	619		

...or moderate-to-large fees. (The highest is \$56.11, i.e. €50.)

**Starting Date**

	To 1998	2005-10	2011-14	2015-18
Fee	0	6	1	2
No-fee	1	10	3	5
Total	1	16	4	7

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	20	772	46%	\$8
Society/govt	7	261	100%	\$0
Miscellaneous	1	0		

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	4	14.3%	
Grew 25-49.9%	3	10.7%	25.0%
Grew 10-24.99%	4	14.3%	39.3%
Even, $\pm 9.99\%$	6	21.4%	60.7%
Shrank 10-24.99%	1	3.6%	64.3%
Shrank 25-49.99%	5	17.9%	82.1%
Shrank 50%+	5	17.9%	



**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Education	1	141	0%	\$14
Economics	5	132	15%	\$16
Zoology	1	104	100%	\$0
History	3	99	64%	\$5
Sociology	2	84	10%	\$13
Arts & Architecture	3	82	100%	\$0
Chemistry	2	75	35%	\$9
Anthropology	3	74	100%	\$0
Psychology	2	58	100%	\$0
Technology	1	49	100%	\$0
Medicine	1	40	100%	\$0
Law	1	38	100%	\$0
Political Science	1	36	100%	\$0
Computer Science	1	21	100%	\$0
Language & Literature	1	0		

# Poland

Poland is one of the three largest OA publishing countries in Eastern Europe, with the most journals and just 170 articles short of tying for most articles. As with the other two—Romania and Russia—it may need a bit more discussion and space.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	526	16,251			\$158	-83%
Fee	119	6,443	40%	-32%	\$400	-75%
No-fee	407	9,808	60%	44%		
Biomed	98	3,792	23%	-34%	\$244	-81%
Fee	35	1,844	49%	-31%	\$502	-73%
No-fee	63	1,948	51%	72%		
STEM	207	5,787	36%	-12%	\$222	-79%
Fee	55	2,522	44%	-37%	\$508	-66%
No-fee	152	3,265	56%	81%		
H&SS	221	6,672	41%	73%	\$55	-55%
Fee	29	2,077	31%	41%	\$177	-68%
No-fee	192	4,595	69%	-12%		

Mostly no-fee, and fees are consistently on the low side. Strong in H&SS, lean in biomed.

**Articles and Journals by Year**

	2018	2017	2016	2015	2014	2013
Journals	450	499	488	467	432	383
%No-fee	76%	77%	76%	76%	76%	76%
Articles	16,251	18,786	18,043	17,021	15,480	13,959
%No-fee	60%	62%	63%	60%	61%	59%
Change	-13.5%	4.1%	6.0%	10.0%	10.9%	

An off year in 2018, after four straight years of growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	815	0%	\$52
Large: 150-599	20	2,258	41%	\$375
Med.: 60-149	96	5,545	49%	\$217
Small: 20-59	289	6,825	79%	\$68
Smallest: 0-19	120	808	93%	\$26

One very large, very low-cost journal throws off the usual size-to-cost correlation—and, somewhat unusually, smaller journals account for most of the articles.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	4	198	\$333,491	\$1,684
\$600-\$1,399	17	1,214	\$1,173,336	\$967
\$200-\$599	45	2,372	\$823,146	\$347
\$0.01-\$199	53	2,659	\$244,433	\$92
No fee	407	9,808		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	4	12	37	42	24
No-fee	9	20	128	178	72
Total	13	32	165	220	96

A number of early OA journals, with very fast growth in 2005-2014.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	331	8,061	56%	\$233
Univ/college	145	5,719	67%	\$65
Society/govt	20	1,165	51%	\$94
Traditional	20	1,088	62%	\$186
Miscellaneous	10	218	75%	\$54

Open Access—mostly De Gruyter/Sciendo—offers the most journals and articles by far.

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	37	7.0%	
Grew 25-49.9%	34	6.5%	13.5%
Grew 10-24.99%	60	11.4%	24.9%
Even, $\pm$ 9.99%	172	32.7%	57.6%
Shrank 10-24.99%	66	12.5%	70.2%
Shrank 25-49.99%	64	12.2%	82.3%
Shrank 50%+	93	17.7%	

Considerably more shrinkage than growth: 42.4% to 24.9%.

**Subject (next page)**

Medicine a strong first, but second-place anthropology stands out for its low percentage of no-fee articles: the next four all have more no-fee than fee articles.

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	79	3,412	52%	\$220
Anthropology	21	1,360	25%	\$76
Economics	48	1,273	64%	\$63
Engineering	33	991	57%	\$214
Sociology	19	900	74%	\$86
Agriculture	32	896	51%	\$248
Ecology	23	797	46%	\$98
Mathematics	26	661	52%	\$399
Language & Literature	31	631	91%	\$34
Earth Sciences	25	530	78%	\$199
Technology	18	471	57%	\$74
Political Science	18	465	100%	\$0
Computer Science	13	458	95%	\$6
Biology	19	380	44%	\$460
Zoology	14	360	65%	\$71
Chemistry	11	330	23%	\$560
Philosophy	12	318	100%	\$0
Law	13	310	89%	\$16
Physics	10	293	37%	\$521
Religion	11	279	81%	\$105
Miscellany	6	266	54%	\$83
Library Science	9	218	81%	\$94
Arts & Architecture	9	169	79%	\$12
Education	7	147	100%	\$0
History	6	124	100%	\$0
Psychology	5	108	82%	\$59
Media & Communications	6	104	100%	\$0
Other Sciences	2	0		

# Romania

The second most journals and third most articles in Eastern Europe.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	317	9,208			\$37	-96%
Fee	62	2,901	32%	-46%	\$118	-92%
No-fee	255	6,307	68%	64%		
Biomed	28	1,113	12%	-66%	\$72	-94%
Fee	7	513	46%	-34%	\$157	-92%
No-fee	21	600	54%	80%		
STEM	90	2,932	32%	-22%	\$38	-96%
Fee	16	640	22%	-68%	\$175	-88%
No-fee	74	2,292	78%	151%		
H&SS	199	5,163	56%	136%	\$29	-76%
Fee	39	1,748	34%	54%	\$86	-85%
No-fee	160	3,415	66%	-15%		

Consistently very low cost, two-thirds no-fee, more than half H&SS.

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	289	297	308	298	283	267
%No-fee	80%	80%	80%	81%	80%	80%
Articles	9,208	9,891	10,686	11,246	10,468	9,891
%No-fee	68%	68%	66%	66%	68%	71%
Change	-6.9%	-7.4%	-5.0%	7.4%	5.8%	

Slow decline since 2015.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	16	1,988	43%	\$45
Large: 150-599	66	3,330	60%	\$63
Med.: 60-149	169	3,363	89%	\$11
Small: 20-59	66	527	88%	\$13
Smallest: 0-19	317	9,208	68%	\$37

Only the largest journals are mostly fee—and no volume level, including the largest, reaches three-digit average costs.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	60	\$40,405	\$673
\$200-\$599	4	311	\$90,531	\$291
\$0.01-\$199	57	2,530	\$210,759	\$83
No fee	255	6,307		

No very expensive journals, and most revenue comes from inexpensive journals.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	3	33	18	8
No-fee	8	33	118	71	25
Total	8	36	151	89	33

The perfect example of what I call the “gold rush” for fees, especially from 2005-2010.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	245	7,480	70%	\$32
Society/govt	27	842	50%	\$69
Open Access	28	516	73%	\$35
Miscellaneous	12	256	63%	\$98
Traditional	5	114	89%	\$4

Universities dominate, and—oddly—societies have the highest percentage of fees

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 50%+	33	10.4%	
Grew 25-49.9%	27	8.5%	18.9%
Grew 10-24.99%	32	10.1%	29.0%
Even, $\pm 9.99\%$	93	29.3%	58.4%
Shrank 10-24.99%	55	17.4%	75.7%
Shrank 25-49.99%	41	12.9%	88.6%
Shrank 50%+	36	11.4%	

Considerably more shrinkage than growth (41.6% to 29.0%).



**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Economics	61	1,586	62%	\$25
Medicine	23	955	46%	\$84
Agriculture	17	842	72%	\$32
Political Science	28	732	85%	\$4
Engineering	14	701	83%	\$6
Anthropology	19	700	32%	\$73
Language & Literature	22	621	69%	\$33
Sociology	12	375	38%	\$56
Computer Science	13	360	61%	\$186
Miscellany	8	283	74%	\$29
Technology	5	257	84%	\$16
Law	7	192	94%	\$11
Zoology	4	164	55%	\$51
Philosophy	9	163	86%	\$14
Education	9	160	84%	\$9
Biology	5	158	100%	\$0
Mathematics	9	154	100%	\$0
Earth Sciences	15	141	100%	\$0
Arts & Architecture	5	113	100%	\$0
Other Sciences	4	112	100%	\$0
History	9	108	100%	\$0
Media & Communications	6	103	100%	\$0
Physics	4	98	100%	\$0
Ecology	4	63	48%	\$31
Chemistry	1	40	100%	\$0
Psychology	2	18	100%	\$0
Library Science	2	9	100%	\$0

# Russia

The third most journals in Eastern Europe but the most 2018 articles.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	290	16,422			\$17	-98%
Fee	31	2,495	15%	-74%	\$114	-93%
No-fee	259	13,927	85%	103%		
Biomed	76	4,682	29%	-20%	\$6	-100%
Fee	3	232	5%	-93%	\$125	-93%
No-fee	73	4,450	95%	218%		
STEM	85	4,520	28%	-32%	\$19	-98%
Fee	9	679	15%	-78%	\$125	-92%
No-fee	76	3,841	85%	172%		
H&SS	129	7,220	44%	85%	\$24	-81%
Fee	19	1,584	22%	0%	\$108	-81%
No-fee	110	5,636	78%	0%		

Always relatively low costs. Unusually, H&SS (relatively strong) has the highest percentage of fee articles, still only 22%.

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	280	284	280	262	229	190
%No-fee	89%	90%	90%	90%	90%	89%
Articles	16,422	17,403	18,070	18,474	17,181	13,524
%No-fee	85%	87%	86%	89%	88%	83%
Change	-5.6%	-3.7%	-2.2%	7.5%	27.0%	

Slow decline for three years running, down to lower than 2014.

**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Largest: 600+	3	671	100%	\$0
Large: 150-599	32	3,623	67%	\$36
Med.: 60-149	132	8,178	87%	\$13
Small: 20-59	117	3,910	94%	\$11
Smallest: 0-19	6	40	85%	\$14

About the three no-fee “largest” journals: a medical journal ran 729 articles in 2015, 141 in 2018; a political science journal, 705 in 2017 and 288 in 2018; and an engineering journal, 738 in 2015, 242 in 2018.

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	6	399	\$122,650	\$307
\$0.01-\$199	25	2,096	\$161,414	\$77
No fee	259	13,927		

Almost all fees are nominal.

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	1	2	9	9	10
No-fee	10	11	83	100	55
Total	11	13	92	109	65

Some early activity, but most journals began in 2005-2014, with significant continuing growth. Given the low fees involved and the fact that more fee journals began in 2011-14 than in 2005-10, the term “gold rush” is probably inappropriate in Russia’s case.

### Publisher Category

Category	Journals	Articles	%No-fee	\$/article
Univ/college	198	11,072	87%	\$13
Miscellaneous	39	2,793	91%	\$23
Open Access	32	1,283	51%	\$41
Society/govt	16	905	100%	\$0
Traditional	5	369	47%	\$70

As is frequently the case, universities do the most OA publishing.

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 50%+	19	6.6%	
Grew 25-49.9%	18	6.2%	12.8%
Grew 10-24.99%	26	9.0%	21.7%
Even, $\pm$ 9.99%	111	38.3%	60.0%
Shrank 10-24.99%	45	15.5%	75.5%
Shrank 25-49.99%	44	15.2%	90.7%
Shrank 50%+	27	9.3%	

Almost twice as many journals shrank as grew (40% to 21.7%), but many have remained steady.

### Subject (next page)

Medicine is by far the most active area, which isn't unusual for countries with large OA programs. Only 5% of medical articles having fees, and even those fees only averaging \$123, is unusual. Only history has a three-digit average cost per article, and that just barely.

Then there's media & communications, where every article may have involved a fee—all six of them.

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	69	4,331	95%	\$6
Language & Literature	20	1,294	68%	\$26
Sociology	13	940	56%	\$6
Political Science	12	914	100%	\$0
Engineering	12	912	77%	\$17
Earth Sciences	15	746	96%	\$4
Economics	18	737	87%	\$20
Agriculture	9	668	75%	\$29
Arts & Architecture	9	603	63%	\$54
Computer Science	10	586	100%	\$0
History	8	512	67%	\$101
Education	8	472	78%	\$27
Technology	10	452	89%	\$43
Other Sciences	8	442	64%	\$14
Law	13	425	100%	\$0
Psychology	9	421	88%	\$26
Miscellany	8	403	73%	\$17
Biology	7	351	92%	\$7
Ecology	7	307	78%	\$68
Anthropology	4	277	100%	\$0
Mathematics	7	264	100%	\$0
Philosophy	4	158	100%	\$0
Chemistry	2	64	100%	\$0
Religion	2	58	100%	\$0
Physics	3	50	100%	\$0
Zoology	2	29	100%	\$0
Media & Communications	1	6	0%	\$92

# Serbia

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	155	4,635			\$35	-96%
Fee	16	1,130	24%	-58%	\$145	-91%
No-fee	139	3,505	76%	81%		
Biomed	21	810	17%	-51%	\$9	-99%
Fee	4	185	23%	-67%	\$39	-98%
No-fee	17	625	77%	158%		
STEM	54	1,969	42%	4%	\$68	-93%
Fee	6	711	36%	-48%	\$189	-87%
No-fee	48	1,258	64%	105%		
H&SS	80	1,856	40%	68%	\$12	-90%
Fee	6	234	13%	-43%	\$94	-83%
No-fee	74	1,622	87%	12%		

Mostly H&SS, three-quarters no-fee, very low costs.

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	150	152	149	143	141	122
%No-fee	89%	90%	90%	90%	89%	90%
Articles	4,635	4,766	4,886	4,837	5,031	4,464
%No-fee	76%	77%	77%	78%	82%	82%
Change	-2.7%	-2.5%	1.0%	-3.9%	12.7%	

Mostly slow declines since peak of 2014.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	4	809	45%	\$93
Med.: 60-149	28	1,554	63%	\$52
Small: 20-59	87	1,981	95%	\$3
Smallest: 0-19	36	291	93%	\$6

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	125	\$42,083	\$337
\$0.01-\$199	15	1,005	\$121,786	\$121
No fee	139	3,505		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	4	1	8	3
No-fee	9	43	22	48	17
Total	9	47	23	56	20

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	112	3,288	81%	\$28
Society/govt	36	1,179	68%	\$52
Miscellaneous	5	118	33%	\$50
Open Access	2	50	20%	\$108

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	8	5.2%	
Grew 25-49.9%	18	11.6%	16.8%
Grew 10-24.99%	18	11.6%	28.4%
Even, $\pm$ 9.99%	45	29.0%	57.4%
Shrank 10-24.99%	29	18.7%	76.1%
Shrank 25-49.99%	21	13.5%	89.7%
Shrank 50%+	16	10.3%	

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Engineering	11	739	40%	\$101
Medicine	18	577	78%	\$10
Economics	22	524	64%	\$35
Biology	3	233	74%	\$6
Chemistry	5	233	66%	\$42
Technology	6	219	100%	\$0
Law	6	218	100%	\$0
Other Sciences	5	208	29%	\$214
Anthropology	10	200	91%	\$11
Education	7	193	100%	\$0
Earth Sciences	9	166	100%	\$0
Arts & Architecture	9	161	100%	\$0
Language & Literature	4	144	100%	\$0
Agriculture	6	130	100%	\$0
Philosophy	2	106	100%	\$0
Mathematics	4	97	100%	\$0
Miscellany	2	91	100%	\$0
Sociology	6	82	66%	\$16
Zoology	3	76	47%	\$71
Computer Science	2	61	100%	\$0
History	4	57	100%	\$0
Ecology	3	40	100%	\$0
Psychology	3	39	100%	\$0
Media & Communications	2	26	100%	\$0
Political Science	2	9	100%	\$0
Religion	1	6	100%	\$0

No high fees, and most revenue from near-nominal fees. Early journals, with growth spurt 2011-2014. Mostly universities—and only the few OA-publisher articles average three digits. Mostly shrinkage (42.6% to 28.4%).



# Slovakia

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	43	1,021			\$49	-95%
Fee	9	289	28%	-51%	\$174	-89%
No-fee	34	732	72%	71%		
Biomed	6	214	21%	-41%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	6	214	100%	235%		
STEM	20	470	46%	13%	\$87	-92%
Fee	6	239	51%	-26%	\$172	-89%
No-fee	14	231	49%	58%		
H&SS	17	337	33%	39%	\$27	-78%
Fee	3	50	15%	-33%	\$182	-67%
No-fee	14	287	85%	9%		

Light on biomed; mostly no-fee except for STEM.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	42	43	42	39	34	30
%No-fee	81%	79%	79%	79%	85%	90%
Articles	1,021	1,110	1,184	1,029	906	866
%No-fee	72%	70%	67%	76%	83%	92%
Change	-8.0%	-6.3%	15.1%	13.6%	4.6%	

Two years of slow decline bring articles back to 2015 level.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	118	100%	\$0
Med.: 60-149	4	265	27%	\$121
Small: 20-59	21	459	85%	\$29
Smallest: 0-19	17	179	86%	\$27

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	4	144	\$38,124	\$265
\$0.01-\$199	5	145	\$12,023	\$83
No fee	34	732		

Essentially equal inexpensive and nominal fees; no higher.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	1	1	3	4
No-fee	2	2	8	13	9
Total	2	3	9	16	13

Mostly recent journals, with a few dating to early OA.

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	5	11.6%	
Grew 25-49.9%	3	7.0%	18.6%
Grew 10-24.99%	4	9.3%	27.9%
Even, $\pm$ 9.99%	13	30.2%	58.1%
Shrank 10-24.99%	7	16.3%	74.4%
Shrank 25-49.99%	6	14.0%	88.4%
Shrank 50%+	5	11.6%	

Considerably more shrinkage than growth, 41.9% to 27.9%.

**Publisher Categories**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	21	567	81%	\$9
Open Access	19	315	76%	\$47
Miscellaneous	1	108	0%	\$281
Traditional	1	20	100%	\$0
Society/govt	1	11	100%	\$0

**Subject**

Subject	Jour.	Art.	%No-fee	\$/article
Agriculture	4	177	39%	\$171
Biology	2	155	100%	\$0
Other Sciences	1	86	0%	\$20
Miscellany	2	67	55%	\$85
Sociology	3	65	100%	\$0
Engineering	4	61	52%	\$89
Earth Sciences	4	60	100%	\$0
Medicine	4	59	100%	\$0
Ecology	3	46	100%	\$0
Anthropology	2	45	100%	\$0
Library Science	1	34	100%	\$0
Economics	2	31	35%	\$109
Computer Science	2	23	78%	\$49
Education	1	20	100%	\$0
Psychology	1	20	100%	\$0
Philosophy	1	18	100%	\$0
Law	1	17	100%	\$0
Religion	1	11	100%	\$0
Technology	1	11	0%	\$224
Language & Literature	2	9	100%	\$0
Zoology	1	6	100%	\$0

# Slovenia

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	51	1,365			\$69	-92%
Fee	3	209	15%	-74%	\$452	-71%
No-fee	48	1,156	85%	102%		
Biomed	3	153	11%	-68%	\$303	-77%
Fee	1	59	39%	-45%	\$786	-58%
No-fee	2	94	61%	106%		
STEM	10	454	33%	-18%	\$106	-90%
Fee	2	150	33%	-52%	\$320	-79%
No-fee	8	304	67%	115%		
H&SS	38	758	56%	133%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	38	758	100%	28%		

Mostly H&SS (all no-fee), and mostly no-fee in biomed and STEM.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	48	49	51	50	49	48
%No-fee	94%	94%	94%	94%	94%	94%
Articles	1,365	1,400	1,364	1,396	1,341	1,487
%No-fee	85%	83%	89%	87%	88%	89%
Change	-2.5%	2.6%	-2.3%	4.1%	-9.8%	

Essentially level since 2014.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	128	0%	\$337
Med.: 60-149	7	382	85%	\$121
Small: 20-59	28	676	97%	\$7
Smallest: 0-19	15	179	100%	\$0

Fairly typical fee/size correlation.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	59	\$46,347	\$786
\$200-\$599	2	150	\$48,030	\$320
No fee	48	1,156	\$0	\$0

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	2	1	0	0
No-fee	6	12	15	12	3
Total	6	14	16	12	3

Some early journals, very few very recent introductions.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	37	903	86%	\$48
Society/govt	7	308	93%	\$16
Open Access	5	133	56%	\$348
Miscellaneous	2	21	100%	\$0

Typical: universities dominate, with OA publishers charging the most.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	6	11.8%	
Grew 25-49.9%	6	11.8%	23.5%
Grew 10-24.99%	6	11.8%	35.3%
Even, $\pm 9.99\%$	15	29.4%	64.7%
Shrank 10-24.99%	14	27.5%	92.2%
Shrank 25-49.99%	3	5.9%	98.0%
Shrank 50%+	1	2.0%	

Equal growth and shrinkage (but more fast growth than fast shrinkage).

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Language & Literature	10	212	100%	\$0
Education	5	153	100%	\$0
Medicine	3	153	61%	\$303
Engineering	1	128	0%	\$337
Chemistry	1	117	100%	\$0
Economics	7	117	100%	\$0
Agriculture	2	84	100%	\$0
Earth Sciences	3	63	100%	\$0
Sociology	3	62	100%	\$0
Anthropology	4	55	100%	\$0
Miscellany	2	55	100%	\$0
Arts & Architecture	3	40	100%	\$0
Technology	2	40	100%	\$0
Library Science	1	28	100%	\$0
Physics	1	22	0%	\$224
Psychology	1	16	100%	\$0
Political Science	1	14	100%	\$0
Law	1	6	100%	\$0

Distinctive, with two no-fee H&SS subjects at the top—and only three subjects with any fees.

# Ukraine

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	185	10,687			\$53	-94%
Fee	78	5,762	54%	-7%	\$97	-94%
No-fee	107	4,925	46%	10%		
Biomed	40	3,593	34%	-5%	\$20	-98%
Fee	16	2,268	63%	-10%	\$31	-98%
No-fee	24	1,325	37%	23%		
STEM	67	3,328	31%	-23%	\$108	-90%
Fee	22	1,400	42%	-39%	\$257	-83%
No-fee	45	1,928	58%	86%		
H&SS	78	3,766	35%	48%	\$35	-72%
Fee	40	2,094	56%	152%	\$63	-89%
No-fee	38	1,672	44%	-43%		

Unusual: most H&SS articles have fees; most STEM don't.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	176	177	168	163	148	124
%No-fee	59%	58%	60%	62%	63%	61%
Articles	10,687	11,059	10,432	11,621	10,565	9,380
%No-fee	46%	50%	55%	58%	57%	55%
Change	-3.4%	6.0%	-10.2%	10.0%	12.6%	

Moving in a narrow range since 2014.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	751	15%	\$16
Large: 150-599	29	3,908	30%	\$94
Med.: 60-149	72	4,053	56%	\$40
Small: 20-59	66	1,877	69%	\$9
Smallest: 0-19	16	98	65%	\$28

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	2	133	\$93,084	\$700
\$200-\$599	3	649	\$323,378	\$498
\$0.01-\$199	73	4,980	\$145,031	\$29
No fee	107	4,925		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	2	16	35	25
No-fee	6	9	33	49	10
Total	6	11	49	84	35

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	18	9.7%	
Grew 25-49.9%	14	7.6%	17.3%
Grew 10-24.99%	19	10.3%	27.6%
Even, $\pm$ 9.99%	57	30.8%	58.4%
Shrank 10-24.99%	31	16.8%	75.1%
Shrank 25-49.99%	21	11.4%	86.5%
Shrank 50%+	25	13.5%	

More shrinkage than growth, 41.6% to 27.6%.

**Publisher Category**



Category	Journals	Articles	%No-fee	\$/article
Univ/college	161	9,259	48%	\$35
Miscellaneous	15	1,188	34%	\$131
Traditional	5	138	0%	\$606
Society/govt	3	101	100%	\$0
Open Access	1	1	100%	\$0

### Subject

Subject	Jour.	Art.	%No-fee	\$/article
Medicine	29	2,021	54%	\$18
Biology	11	1,572	15%	\$22
Economics	25	1,430	40%	\$68
Ecology	5	816	8%	\$401
Engineering	13	553	54%	\$18
Education	13	482	42%	\$19
Computer Science	11	480	73%	\$7
Political Science	6	346	6%	\$21
Mathematics	9	315	84%	\$2
Physics	6	302	100%	\$0
Agriculture	8	301	64%	\$45
Sociology	2	273	0%	\$23
Anthropology	7	255	91%	\$3
Technology	5	185	89%	\$15
Miscellany	3	184	100%	\$0
Philosophy	4	150	100%	\$0
Earth Sciences	4	145	51%	\$11
Language & Literature	6	143	0%	\$40
History	3	142	100%	\$0
Law	2	128	38%	\$8
Other Sciences	2	118	100%	\$0
Psychology	2	112	0%	\$28
Chemistry	3	77	84%	\$1
Arts & Architecture	2	58	100%	\$0
Library Science	2	47	100%	\$0
Zoology	1	36	100%	\$0
Media & Communications	1	16	100%	\$0

## Other Eastern European Countries

Nine countries with 42 OA journals in all.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	42	2,117			\$107	-88%
Fee	10	826	39%	-33%	\$274	-83%
No-fee	32	1,291	61%	46%		
Biomed	5	688	32%	-9%	\$226	-83%
Fee	1	462	67%	-4%	\$337	-82%
No-fee	4	226	33%	10%		
STEM	15	669	32%	-22%	\$0	-100%
Fee	2	62	9%	-87%	\$4	-100%
No-fee	13	607	91%	191%		
H&SS	22	760	36%	51%	\$93	-25%
Fee	7	302	40%	80%	\$233	-58%
No-fee	15	458	60%	-23%		

Mostly no-fee, except for biomed.

### Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	40	41	37	36	34	32
%No-fee	75%	76%	78%	78%	79%	78%
Articles	2,117	1,707	1,558	1,566	1,548	1,428
%No-fee	61%	73%	77%	74%	75%	71%
Change	24.0%	9.6%	-0.5%	1.2%	8.4%	

Growth most years, significant growth in 2018.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	462	0%	\$337
Med.: 60-149	17	1,110	76%	\$45
Small: 20-59	18	495	81%	\$43
Smallest: 0-19	6	50	100%	\$0

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article	2015-18
\$200-\$599	5	619	\$205,960	\$333	3
\$0.01-\$199	5	207	\$20,256	\$98	7
No fee	32	1,291			10

**Starting Date**

	To 1998	99-2004	2005-10	2011-14
Fee	0	1	2	4
No-fee	2	3	11	9
Total	2	4	13	13

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	32	1,418	78%	\$43
Miscellaneous	4	500	4%	\$320
Society/govt	3	95	65%	\$50
Traditional	1	86	100%	\$0
Open Access	2	18	100%	\$0

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	8	19.0%	
Grew 25-49.9%	2	4.8%	23.8%
Grew 10-24.99%	2	4.8%	28.6%
Even, $\pm$ 9.99%	19	45.2%	73.8%
Shrank 10-24.99%	4	9.5%	83.3%
Shrank 25-49.99%	3	7.1%	90.5%
Shrank 50%+	4	9.5%	

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	5	688	33%	\$226
Economics	5	239	60%	\$60
Anthropology	4	216	77%	\$49
Engineering	3	187	100%	\$0
Agriculture	2	171	100%	\$0
Education	4	147	27%	\$270
Computer Science	4	138	100%	\$0
Other Sciences	2	78	100%	\$0
Sociology	3	54	39%	\$88
Ecology	1	48	0%	\$3
Psychology	1	42	100%	\$0
Philosophy	1	24	100%	\$0
Language & Literature	2	22	100%	\$0
Zoology	1	22	100%	\$0
Political Science	2	16	0%	\$54
Chemistry	1	14	0%	\$5
Mathematics	1	11	100%	\$0

**Country Summaries****Albania**

Four journals (one with fees), all H&SS, 94 articles.

**Armenia**

Two no-fee journals, 35 articles.

**Belarus**

Nine journals (one with fees), 573 articles.

**Cyprus**

Five journals, three (all education) with fees. All H&SS. 181 articles.

**Georgia**

Three no-fee journals, 166 articles.

**Kazakhstan**

Two journals (one with fees), 125 articles.

**Macedonia**

Seven journals (two with fees), 553 articles.

**Montenegro**

Eight journals (two with fees), 410 articles.

**Turkmenistan**

One no-fee economics journal, ten articles.

# Latin America

Includes Mexico and the Caribbean.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	2,291	84,491			\$45	-95%
Fee	148	11,739	14%	-76%	\$326	-79%
No-fee	2,143	72,752	86%	106%		
Biomed	305	18,125	21%	-40%	\$117	-91%
Fee	43	4,071	22%	-68%	\$521	-72%
No-fee	262	14,054	78%	159%		
STEM	479	19,989	24%	-42%	\$76	-93%
Fee	77	6,284	31%	-54%	\$242	-84%
No-fee	402	13,705	69%	120%		
H&SS	1,507	46,377	55%	131%	\$4	-97%
Fee	28	1,384	3%	-86%	\$132	-76%
No-fee	1,479	44,993	97%	24%		

Seven out of eight articles are no-fee.

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	2,168	2,245	2,242	2,169	2,023	1,912
%No-fee	94%	94%	94%	94%	93%	93%
Articles	84,491	85,168	80,664	75,145	69,783	64,079
%No-fee	86%	86%	86%	86%	84%	83%
Change	-0.8%	5.6%	7.3%	7.7%	8.9%	

Essentially flat in 2018 after four years of steady growth.

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	2	345	\$536,700	\$1,556
\$600-\$1,399	12	1,069	\$891,144	\$834
\$200-\$599	53	5,441	\$1,970,271	\$362
\$0.01-\$199	81	4,884	\$428,365	\$88
No fee	2,143	72,752		

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	32	30	55	19	12
No-fee	303	353	700	539	248
Total	335	383	755	558	260

Lots of early OA, strongest growth 2005-2014, still growing.

**Country of Publication**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Argentina	201	4,295	93%	\$31
Bahamas	1	7	100%	\$0
Barbados	1	43	100%	\$0
Bolivia	5	71	100%	\$0
Brazil	1,244	56,512	82%	\$59
Chile	107	2,594	89%	\$62
Colombia	318	7,936	98%	\$2
Costa Rica	53	1,367	100%	\$0
Cuba	79	3,682	97%	\$2
Ecuador	43	1,437	100%	\$0
El Salvador	3	49	100%	\$0
Guam	1	8	0%	\$350
Guatemala	3	43	44%	\$27
Jamaica	1	13	0%	\$1,000
Mexico	120	4,049	82%	\$30
Nicaragua	6	77	100%	\$0
Paraguay	8	184	100%	\$0
Peru	46	1,225	95%	\$13
Puerto Rico	4	30	100%	\$0
Uruguay	18	361	100%	\$0
Venezuela	29	508	67%	\$68



# Argentina

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	201	4,295			\$31	-97%
Fee	11	309	7%	-88%	\$430	-73%
No-fee	190	3,986	93%	122%		
Biomed	11	496	12%	-67%	\$214	-84%
Fee	1	106	21%	-70%	\$1,000	-46%
No-fee	10	390	79%	163%		
STEM	34	599	14%	-66%	\$44	-96%
Fee	9	185	31%	-55%	\$142	-91%
No-fee	25	414	69%	122%		
H&SS	156	3,200	75%	213%	\$0	-100%
Fee	1	18	1%	-97%	\$33	-94%
No-fee	155	3,182	99%	28%		

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	184	197	199	192	172	165
%No-fee	95%	95%	94%	94%	94%	93%
Articles	4,295	4,455	4,406	4,128	3,549	3,406
%No-fee	93%	92%	94%	93%	89%	89%
Change	-3.6%	1.1%	6.7%	16.3%	4.2%	

Down slightly after four up years. Nearly all no-fee, mostly H&SS.

**Article Volumes**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Large: 150-599	2	213	50%	\$498
Med.: 60-149	7	465	87%	\$10
Small: 20-59	127	2,931	96%	\$6
Smallest: 0-19	65	686	96%	\$6

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1,399	1	106	\$106,000	\$1,000
\$200-\$599	1	48	\$14,400	\$300
\$0.01-\$199	9	155	\$12,460	\$80
No fee	190	3,986		

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	2	1	8	0	0
No-fee	12	16	69	61	32
Total	14	17	77	61	32

Fair amount of early OA, strong growth 2005-14, fading somewhat.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	22	10.9%	
Grew 25-49.9%	15	7.5%	18.4%
Grew 10-24.99%	30	14.9%	33.3%
Even, $\pm$ 9.99%	59	29.4%	62.7%
Shrank 10-24.99%	32	15.9%	78.6%
Shrank 25-49.99%	21	10.4%	89.1%
Shrank 50%+	22	10.9%	

Slightly more shrinkage than growth, 37.3% to 33.3%.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	158	3,240	95%	\$38
Society/govt	32	872	85%	\$10
Miscellaneous	9	153	100%	\$0
Open Access	2	30	73%	\$51

**Subject**

Subject	Jour.	Art.	%No-fee	\$/article
History	26	573	100%	\$0
Medicine	11	496	79%	\$214
Anthropology	22	427	96%	\$1
Sociology	20	416	100%	\$0
Language & Literature	12	336	100%	\$0
Arts & Architecture	13	288	100%	\$0
Agriculture	11	221	35%	\$101
Education	12	214	100%	\$0
Media & Communications	8	196	100%	\$0
Economics	11	163	100%	\$0
Psychology	7	160	100%	\$0
Miscellany	2	114	100%	\$0
Political Science	8	108	100%	\$0
Philosophy	8	97	100%	\$0
Earth Sciences	7	92	91%	\$7
Other Sciences	3	73	100%	\$0
Zoology	4	67	100%	\$0
Law	4	55	100%	\$0
Technology	2	53	100%	\$0
Library Science	2	39	100%	\$0
Physics	2	34	0%	\$98
Computer Science	2	30	100%	\$0
Ecology	2	19	100%	\$0
Religion	1	14	100%	\$0
Engineering	1	10	100%	\$0

# Brazil

Two-thirds of all Latin American OA articles, four out of five articles without fees, very strong in H&SS—and strong from the early days.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	1,244	56,512			\$59	-94%
Fee	100	9,900	18%	-70%	\$335	-79%
No-fee	1,144	46,612	82%	97%		
Biomed	172	12,818	23%	-36%	\$146	-89%
Fee	37	3,675	29%	-59%	\$510	-72%
No-fee	135	9,143	71%	139%		
STEM	238	13,705	24%	-40%	\$96	-91%
Fee	50	5,210	38%	-45%	\$252	-83%
No-fee	188	8,495	62%	99%		
H&SS	834	29,989	53%	123%	\$4	-96%
Fee	13	1,015	3%	-85%	\$129	-77%
No-fee	821	28,974	97%	24%		

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	1,186	1,223	1,222	1,174	1,084	1,027
%No-fee	92%	92%	92%	92%	92%	91%
Articles	56,512	56,422	53,143	49,026	46,282	42,028
%No-fee	82%	83%	82%	81%	79%	79%
Change	0.2%	6.2%	8.4%	5.9%	10.1%	

Growth every year, albeit nearly flat for 2018.

**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Large: 150-599	62	10,690	48%	\$209
Med.: 60-149	342	22,869	82%	\$46
Small: 20-59	754	22,035	98%	\$1
Smallest: 0-19	86	918	96%	\$2

No very large journals, and roughly the typical cost/volume correlation, but with low costs for medium and an absurd \$1 for small journals.

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	2	345	\$536,700	\$1,556
\$600-\$1,399	7	773	\$647,844	\$838
\$200-\$599	39	4,774	\$1,776,171	\$372
\$0.01-\$199	52	4,008	\$357,534	\$89
No fee	1,144	46,612		

Low-priced journals account for most of what revenue there is. Note that nominally-priced cases are, on average, in the lower half of that already-low region.

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	27	23	29	12	9
No-fee	149	198	375	273	149
Total	176	221	404	285	158

Brazil had dozens of OA journals even before 1980; notably, fee journal introductions began early and faded before no-fee.

### Category of Publisher

Category	Journals	Articles	%No-fee	\$/article
Univ/college	1,036	43,054	87%	\$38
Society/govt	172	11,844	66%	\$137
Miscellaneous	23	1,022	91%	\$9
Open Access	11	444	39%	\$89
Traditional	2	148	100%	\$0

University journals dominate—and, not surprisingly, OA publishers are the only category that's mostly fee-based.

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 50%+	150	12.1%	
Grew 25-49.9%	124	10.0%	22.0%
Grew 10-24.99%	145	11.7%	33.7%
Even, $\pm$ 9.99%	403	32.4%	66.1%
Shrank 10-24.99%	149	12.0%	78.1%
Shrank 25-49.99%	151	12.1%	90.2%
Shrank 50%+	122	9.8%	

Barely more shrinkage than growth (33.9% to 33.7%), and a large group of stable journals.

### Subject (next page)

Medicine is foremost, which is typical for countries with large OA fields. The average cost is just barely three digits: that's not quite so typical. The most expensive subjects are biology, chemistry, zoology and physics.

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	156	11,454	75%	\$109
Education	125	5,912	96%	\$6
Agriculture	56	4,115	42%	\$128
Language & Literature	104	4,069	99%	\$1
Law	98	2,664	100%	\$0
Sociology	71	2,578	90%	\$15
Economics	92	2,399	100%	\$0
Earth Sciences	48	2,010	85%	\$47
Anthropology	51	1,998	97%	\$6
Miscellany	44	1,989	83%	\$2
Zoology	23	1,633	40%	\$190
History	45	1,509	100%	\$0
Ecology	34	1,399	71%	\$26
Media & Communications	41	1,382	100%	\$0
Biology	16	1,364	43%	\$463
Engineering	20	1,297	94%	\$9
Political Science	40	1,225	100%	\$0
Psychology	28	1,112	100%	\$0
Arts & Architecture	30	1,087	100%	\$0
Technology	14	961	68%	\$66
Other Sciences	20	878	88%	\$5
Philosophy	26	837	92%	\$37
Library Science	20	648	100%	\$0
Chemistry	4	580	11%	\$349
Religion	19	580	95%	\$11
Mathematics	9	381	100%	\$0
Physics	5	352	62%	\$171
Computer Science	5	99	100%	\$0

# Chile

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	107	2,594			\$62	-93%
Fee	5	295	11%	-80%	\$541	-66%
No-fee	102	2,299	89%	112%		
Biomed	13	550	21%	-40%	\$222	-83%
Fee	3	237	43%	-39%	\$515	-72%
No-fee	10	313	57%	90%		
STEM	19	488	19%	-54%	\$77	-93%
Fee	1	58	12%	-83%	\$650	-57%
No-fee	18	430	88%	183%		
H&SS	75	1,556	60%	152%	\$0	-100%
Fee	1	0	0%	-100%		
No-fee	74	1,556	100%	28%		

Mostly H&SS (100% no-fee) and nearly 90% no-fee overall.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	98	104	102	98	92	87
%No-fee	96%	95%	95%	95%	95%	95%
Articles	2,594	2,632	2,671	2,375	2,117	1,887
%No-fee	89%	85%	83%	82%	84%	85%
Change	-1.4%	-1.5%	12.5%	12.2%	12.2%	

Tiny decline in 2017 and 2018.



**Article Volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	11	697	63%	\$175
Small: 20-59	66	1,584	98%	\$24
Smallest: 0-19	30	313	100%	\$0

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	3	177	\$124,300	\$702
\$200-\$599	1	118	\$35,400	\$300
\$0.01-\$199	1	0	\$0	
No fee	102	2,299		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	2	2	1	0
No-fee	19	15	32	26	10
Total	19	17	34	27	10

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	9	8.4%	
Grew 25-49.9%	13	12.1%	20.6%
Grew 10-24.99%	18	16.8%	37.4%
Even, $\pm$ 9.99%	33	30.8%	68.2%
Shrank 10-24.99%	13	12.1%	80.4%
Shrank 25-49.99%	10	9.3%	89.7%
Shrank 50%+	11	10.3%	

Slightly more growth than shrinkage (37.4% to 31.8%).

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Univ/college	96	2,263	91%	\$49
Miscellaneous	7	176	54%	\$276
Society/govt	4	155	100%	\$0

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	11	429	72%	\$202
Sociology	10	189	100%	\$0
Political Science	6	158	100%	\$0
History	9	148	100%	\$0
Language & Literature	6	143	100%	\$0
Arts & Architecture	7	138	100%	\$0
Miscellany	5	126	100%	\$0
Biology	2	121	2%	\$293
Law	5	117	100%	\$0
Engineering	4	114	100%	\$0
Media & Communications	4	111	100%	\$0
Agriculture	2	96	40%	\$393
Philosophy	5	94	100%	\$0
Psychology	3	94	100%	\$0
Earth Sciences	5	89	100%	\$0
Anthropology	4	82	100%	\$0
Education	5	76	100%	\$0
Ecology	4	66	100%	\$0
Zoology	1	62	100%	\$0
Religion	2	50	100%	\$0
Technology	1	41	100%	\$0
Economics	3	27	100%	\$0
Computer Science	1	19	100%	\$0
Library Science	1	3	100%	\$0
Chemistry	1	1	100%	\$0

Only biomed and agriculture have any fees at all.

# Colombia

The second-largest OA producer in Latin America and 98% no-fee.

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	318	7,936			\$2	-100%
Fee	4	142	2%	-97%	\$136	-91%
No-fee	314	7,794	98%	135%		
Biomed	40	1,441	18%	-49%	\$3	-100%
Fee	1	40	3%	-96%	\$100	-95%
No-fee	39	1,401	97%	225%		
STEM	78	2,031	26%	-37%	\$8	-99%
Fee	3	102	5%	-93%	\$150	-90%
No-fee	75	1,929	95%	205%		
H&SS	200	4,464	56%	136%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	200	4,464	100%	28%		

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	302	313	312	311	301	286
%No-fee	99%	99%	99%	99%	99%	99%
Articles	7,936	8,928	8,407	8,399	7,760	7,132
%No-fee	98%	98%	99%	99%	99%	98%
Change	-11.1%	6.2%	0.1%	8.2%	8.8%	

Down somewhat in 2018.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	5	627	100%	\$0
Med.: 60-149	27	1,384	94%	\$10
Small: 20-59	227	5,250	99%	\$1
Smallest: 0-19	59	675	100%	\$0

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	61	\$12,601	\$207
\$0.01-\$199	3	81	\$6,735	\$83
No fee	314	7,794		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	1	1	1	0
No-fee	52	68	111	68	15
Total	53	69	112	69	15

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	17	5.3%	
Grew 25-49.9%	27	8.5%	13.8%
Grew 10-24.99%	36	11.3%	25.2%
Even, $\pm$ 9.99%	118	37.1%	62.3%
Shrank 10-24.99%	54	17.0%	79.2%
Shrank 25-49.99%	27	8.5%	87.7%
Shrank 50%+	39	12.3%	

More shrinkage than growth (37.7% to 25.2%).

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	303	7,253	99%	\$2
Miscellaneous	8	360	100%	\$0
Society/govt	6	302	87%	\$13
Traditional	1	21	100%	\$0

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	35	1,291	97%	\$3
Education	23	652	100%	\$0
Engineering	29	649	100%	\$0
Sociology	24	594	100%	\$0
Economics	26	497	100%	\$0
Law	25	386	100%	\$0
Agriculture	11	348	95%	\$3
Anthropology	14	308	100%	\$0
History	13	286	100%	\$0
Political Science	12	277	100%	\$0
Language & Literature	13	270	100%	\$0
Philosophy	10	269	100%	\$0
Psychology	12	264	100%	\$0
Miscellany	13	253	100%	\$0
Arts & Architecture	7	240	100%	\$0
Technology	4	207	100%	\$0
Other Sciences	8	194	100%	\$0
Ecology	6	158	100%	\$0
Earth Sciences	7	153	100%	\$0
Biology	5	150	100%	\$0
Zoology	4	125	82%	\$15
Media & Communications	6	116	100%	\$0
Mathematics	4	100	39%	\$126
Chemistry	2	48	100%	\$0
Computer Science	2	35	100%	\$0
Religion	1	27	100%	\$0
Library Science	1	25	100%	\$0
Physics	1	14	100%	\$0

Only four subjects with any costs and only two above \$3!

# Costa Rica

No fees at all—and a simplified set of tables as a result.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>
All	53	1,367		
Biomed	6	163	12%	-66%
STEM	13	445	33%	-20%
H&SS	34	759	56%	133%

Mostly H&SS, with very little biomed.

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	53	53	53	53	50	50
Articles	1,367	1,319	1,409	1,181	1,067	1,049
Change	3.6%	-6.4%	19.3%	10.7%	1.7%	

Small growth after small decline in 2017.

## Article Volume

	<b>Journals</b>	<b>Articles</b>	<b>Percent</b>	<b>Art/Jrn</b>
Large: 150-599	1	156	6%	156
Med.: 60-149	7	412	15%	59
Small: 20-59	27	604	22%	22
Smallest: 0-19	18	195	7%	11

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Journals	12	11	15	14	1

A dozen early OA journals, good growth through 2014.

**Publisher Category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	51	1,340	123%	26
Society/govt	2	27	2%	14

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	12	22.6%	
Grew 25-49.9%	7	13.2%	35.8%
Grew 10-24.99%	5	9.4%	45.3%
Even, $\pm$ 9.99%	10	18.9%	64.2%
Shrank 10-24.99%	9	17.0%	81.1%
Shrank 25-49.99%	8	15.1%	96.2%
Shrank 50%+	2	3.8%	

Somewhat more growth than shrinkage. 45.3% to 35.8%

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>Art/Jrn</b>
Education	5	207	41
Ecology	3	187	62
Medicine	6	163	27
Miscellany	3	115	38
Agriculture	3	84	28
Other Sciences	2	81	41
Sociology	5	80	16
Engineering	2	60	30
Anthropology	3	49	16
Law	2	45	23
Psychology	3	41	14
Economics	3	38	13
Arts & Architecture	2	37	19
Religion	1	34	34
Library Science	2	29	15
Language & Literature	2	28	14
History	1	25	25
Philosophy	1	22	22
Mathematics	1	15	15
Earth Sciences	1	11	11
Political Science	1	9	9
Zoology	1	7	7



# Cuba

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	79	3,682			\$2	-100%
Fee	3	95	3%	-96%	\$78	-95%
No-fee	76	3,587	97%	133%		
Biomed	29	1,609	44%	23%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	29	1,609	100%	235%		
STEM	21	677	18%	-55%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	21	677	100%	221%		
H&SS	29	1,396	38%	59%	\$5	-96%
Fee	3	95	7%	-69%	\$78	-86%
No-fee	26	1,301	93%	20%		

Mostly H&SS—and the three (low) fee-charging journals are all H&SS.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	74	76	76	77	74	71
%No-fee	96%	96%	96%	96%	96%	96%
Articles	3,682	3,391	3,361	3,506	3,297	2,956
%No-fee	97%	97%	98%	98%	98%	98%
Change	8.6%	0.9%	-4.1%	6.3%	11.5%	

Growing most years.

**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Large: 150-599	6	880	100%	\$0
Med.: 60-149	19	1,291	100%	\$0
Small: 20-59	49	1,458	94%	\$5
Smallest: 0-19	5	53	74%	\$13

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$0.01-\$199	3	95	\$7,399	\$78
No fee	76	3,587		

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	0	0	3	0	0
No-fee	11	18	23	23	1
Total	11	18	26	23	1

Strong early on and through 2014.

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Univ/college	59	2,882	97%	\$3
Society/govt	18	785	100%	\$0
Miscellaneous	2	15	100%	\$0

Predominantly university, including all fee journals.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	4	5.1%	
Grew 25-49.9%	13	16.5%	21.5%
Grew 10-24.99%	5	6.3%	27.8%
Even, $\pm 9.99\%$	39	49.4%	77.2%
Shrank 10-24.99%	9	11.4%	88.6%
Shrank 25-49.99%	5	6.3%	94.9%
Shrank 50%+	4	5.1%	

With a large stable core (nearly 50%), more growth than shrinkage.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	28	1,603	100%	\$0
Education	15	1,076	91%	\$7
Agriculture	7	211	100%	\$0
Anthropology	5	121	100%	\$0
Engineering	4	95	100%	\$0
Sociology	3	91	100%	\$0
Earth Sciences	3	83	100%	\$0
Ecology	2	77	100%	\$0
Computer Science	1	70	100%	\$0
Library Science	3	61	100%	\$0
Other Sciences	1	56	100%	\$0
Technology	2	54	100%	\$0
Economics	2	47	100%	\$0
Physics	1	31	100%	\$0
Biology	1	6	100%	\$0
Political Science	1	0		

Not unusual: medicine has the most articles. Quite unusual: the only fees are in education.

# Ecuador

No fees, primarily H&SS, almost entirely from universities.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>
All	43	1,437		
Biomed	5	85	6%	-83%
STEM	12	258	18%	-56%
H&SS	26	1,094	76%	220%

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	42	41	40	34	33	27
Articles	1,437	1,500	1,348	868	554	552
Change	-4.2%	11.3%	55.3%	56.7%	0.4%	

Down just a bit after three years of solid growth.

## Article Volume

	<b>Journals</b>	<b>Articles</b>	<b>Percent</b>	<b>Art/Jrn</b>
Large: 150-599	3	402	14%	134
Med.: 60-149	4	262	9%	66
Small: 20-59	29	684	24%	24
Smallest: 0-19	7	89	3%	13

## Starting Date

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Journals	3	2	15	13	10

**Publisher Category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	41	1,212	111%	30
Miscellaneous	2	225	21%	113

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	9	20.9%	
Grew 25-49.9%	5	11.6%	32.6%
Grew 10-24.99%	1	2.3%	34.9%
Even, $\pm 9.99\%$	12	27.9%	62.8%
Shrank 10-24.99%	5	11.6%	74.4%
Shrank 25-49.99%	7	16.3%	90.7%
Shrank 50%+	4	9.3%	

Slightly more shrinkage than growth, 37.2% to 34.9%.

**Subject**

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>	<b>Art/Jrn</b>
Sociology	7	340	49
Miscellany	5	296	59
Media & Communications	2	136	68
Engineering	4	118	30
Education	3	94	31
Arts & Architecture	3	75	25
Medicine	4	61	15
Language & Literature	1	59	59
Economics	2	44	22
Agriculture	3	43	14
Other Sciences	1	33	33
Technology	2	32	16
Biology	1	24	24
Ecology	1	20	20
Philosophy	1	19	19
Political Science	1	17	17
History	1	14	14
Computer Science	1	12	12

# Mexico

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	120	4,049			\$30	-97%
Fee	15	723	18%	-69%	\$169	-89%
No-fee	105	3,326	82%	96%		
Biomed	9	346	9%	-76%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	9	346	100%	235%		
STEM	31	1,185	29%	-28%	\$95	-91%
Fee	11	635	54%	-22%	\$177	-88%
No-fee	20	550	46%	49%		
H&SS	80	2,518	62%	161%	\$4	-97%
Fee	4	88	3%	-84%	\$110	-80%
No-fee	76	2,430	97%	24%		

No fees for biomed; mostly H&SS, mostly no-fee except STEM.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	116	119	118	116	111	103
%No-fee	87%	87%	88%	88%	87%	86%
Articles	4,049	3,816	3,371	3,131	2,984	2,947
%No-fee	82%	83%	85%	84%	83%	82%
Change	6.1%	13.2%	7.7%	4.9%	1.3%	

Growing every year.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	532	100%	\$0
Med.: 60-149	16	1,127	61%	\$66
Small: 20-59	79	2,156	87%	\$22
Smallest: 0-19	23	234	100%	\$0

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	6	304	\$89,981	\$296
\$0.01-\$199	9	419	\$32,118	\$77
No fee	105	3,326		

All low or nominal, when there are fees at all.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	2	2	6	4	1
No-fee	24	15	31	27	8
Total	26	17	37	31	9

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	11	9.2%	
Grew 25-49.9%	13	10.8%	20.0%
Grew 10-24.99%	15	12.5%	32.5%
Even, $\pm$ 9.99%	49	40.8%	73.3%
Shrank 10-24.99%	14	11.7%	85.0%
Shrank 25-49.99%	8	6.7%	91.7%
Shrank 50%+	10	8.3%	

More growth than shrinkage, 32.5% to 26.7%.



**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	110	3,735	83%	\$30
Society/govt	5	158	48%	\$69
Miscellaneous	3	92	100%	\$0
Traditional	1	53	100%	\$0
Open Access	1	11	100%	\$0

As is typical for Latin America, universities predominate.

**Subject**

Subject	Jour.	Art.	%No-fee	\$/article
Education	10	671	96%	\$0
Anthropology	12	370	100%	\$0
Agriculture	6	358	18%	\$196
Medicine	8	340	100%	\$0
Sociology	12	285	92%	\$31
Economics	13	264	100%	\$0
Other Sciences	8	223	71%	\$29
Ecology	4	208	24%	\$54
Language & Literature	7	206	100%	\$0
History	5	197	100%	\$0
Earth Sciences	6	188	70%	\$37
Political Science	6	177	88%	\$1
Zoology	4	146	58%	\$121
Philosophy	4	119	100%	\$0
Arts & Architecture	4	89	100%	\$0
Miscellany	3	77	100%	\$0
Engineering	2	42	100%	\$0
Psychology	2	30	50%	\$12
Media & Communications	1	21	100%	\$0
Mathematics	1	20	100%	\$0
Law	1	12	100%	\$0
Biology	1	6	100%	\$0

Total education revenue was \$233, just a bit under \$0.50/article.

# Peru

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	46	1,225			\$13	-99%
Fee	1	62	5%	-91%	\$250	-84%
No-fee	45	1,163	95%	127%		
Biomed	8	362	30%	-17%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	8	362	100%	235%		
STEM	11	306	25%	-39%	\$51	-95%
Fee	1	62	20%	-71%	\$250	-83%
No-fee	10	244	80%	156%		
H&SS	27	557	45%	91%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	27	557	100%	28%		

One fee-charging journal, in STEM (agriculture).

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	44	45	44	42	40	39
%No-fee	98%	98%	98%	98%	98%	97%
Articles	1,225	1,263	1,189	1,158	1,017	1,030
%No-fee	95%	97%	96%	98%	98%	97%
Change	-3.0%	6.2%	2.7%	13.9%	-1.3%	

Slight decline in 2018 after three years of growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	7	378	84%	\$41
Small: 20-59	31	738	100%	\$0
Smallest: 0-19	8	109	100%	\$0

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	62	\$15,500	\$250
No fee	45	1,163		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	0	1	0	0
No-fee	13	4	7	12	9
Total	13	4	8	12	9

Strong in early OA, growing in recent years.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	39	1,084	94%	\$14
Society/govt	6	138	100%	\$0
Miscellaneous	1	3	100%	\$0

Universities predominant.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	4	8.7%	
Grew 25-49.9%	6	13.0%	21.7%
Grew 10-24.99%	6	13.0%	34.8%
Even, $\pm 9.99\%$	17	37.0%	71.7%
Shrank 10-24.99%	7	15.2%	87.0%
Shrank 25-49.99%	1	2.2%	89.1%
Shrank 50%+	5	10.9%	

More growth than shrinkage, 34.8% to 28.3%.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	7	310	100%	\$0
Agriculture	2	117	47%	\$132
Other Sciences	3	114	100%	\$0
Psychology	4	92	100%	\$0
Anthropology	3	75	100%	\$0
Education	3	71	100%	\$0
Law	4	71	100%	\$0
Media & Communications	3	71	100%	\$0
Language & Literature	3	53	100%	\$0
Biology	1	52	100%	\$0
Miscellany	2	47	100%	\$0
Economics	3	46	100%	\$0
Earth Sciences	2	27	100%	\$0
Zoology	2	26	100%	\$0
Mathematics	1	22	100%	\$0
Arts & Architecture	1	17	100%	\$0
Political Science	1	14	100%	\$0
Ecology	1	0		

# Uruguay

No fees.

	Jrn.	Art.	Art%	Rel%
All	18	361		
Biomed	3	95	26%	-26%
STEM	4	74	20%	-50%
H&SS	11	192	53%	124%

## Articles and Journals by Date

	2018	2017	2016	2015	2014	2013
Journals	18	18	18	18	16	15
Articles	361	383	346	385	361	329
Change	-5.7%	10.7%	-10.1%	6.6%	9.7%	

Moves within a narrow range:  $357 \pm 28$ .

## Article Volume

	Journals	Articles	Percent	Art/Jrn
Med.: 60-149	1	37	5%	37
Small: 20-59	10	249	34%	25
Smallest: 0-19	7	75	10%	11

One medical journal has been declining ever since an 85 peak in 2014.

## Starting Date

	To 1998	99-2004	2005-10	2011-14	2015-18
Journals	1	1	8	6	2

**Publisher Category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	14	263	24%	19
Society/govt	3	68	6%	23
Miscellaneous	1	30	3%	30

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	1	5.6%	
Grew 25-49.9%	1	5.6%	11.1%
Grew 10-24.99%	1	5.6%	16.7%
Even, $\pm 9.99\%$	6	33.3%	50.0%
Shrank 10-24.99%	6	33.3%	83.3%
Shrank 25-49.99%	2	11.1%	94.4%
Shrank 50%+	1	5.6%	

Much more shrinkage than growth, 50% to 16.7%.

**Subject**

Subject	Journals	Articles	Art/Jrn
Medicine	3	95	32
Psychology	2	56	28
Education	3	48	16
Ecology	1	35	35
Law	1	25	25
Language & Literature	1	18	18
Technology	1	17	17
Miscellany	1	14	14
Political Science	1	14	14
Zoology	1	14	14
Library Science	1	11	11
Engineering	1	8	8
Anthropology	1	6	6

# Venezuela

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	29	508			\$68	-93%
Fee	6	168	33%	-43%	\$205	-87%
No-fee	23	340	67%	60%		
Biomed	3	35	7%	-81%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	3	35	100%	235%		
STEM	7	83	16%	-60%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	7	83	100%	221%		
H&SS	19	390	77%	223%	\$88	-28%
Fee	6	168	43%	95%	\$205	-63%
No-fee	13	222	57%	-27%		

Three-quarters H&SS, including all fee journals.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	23	27	27	23	21	20
%No-fee	78%	78%	78%	83%	81%	80%
Articles	508	591	491	441	360	412
%No-fee	67%	58%	75%	73%	65%	70%
Change	-14.0%	20.4%	11.3%	22.5%	-12.6%	

A drop in 2018 after three years of significant growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	2	166	47%	\$64
Small: 20-59	13	234	66%	\$102
Smallest: 0-19	14	108	100%	\$0

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	3	66	\$23,419	\$355
\$0.01-\$199	3	102	\$10,980	\$108
No fee	23	340		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	0	4	0	2
No-fee	4	2	5	5	7
Total	4	2	9	5	9

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	27	478	65%	\$72
Society/govt	2	30	100%	\$0

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	4	13.8%	
Grew 25-49.9%	2	6.9%	20.7%
Grew 10-24.99%	3	10.3%	31.0%
Even, $\pm$ 9.99%	4	13.8%	44.8%
Shrank 10-24.99%	4	13.8%	58.6%
Shrank 25-49.99%	2	6.9%	65.5%
Shrank 50%+	10	34.5%	

Mostly shrinkage: 55.2%, compared to 31.0% growth.



**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Education	3	108	87%	\$4
Miscellany	2	101	13%	\$105
Sociology	7	92	100%	\$0
Economics	3	75	16%	\$294
Medicine	3	35	100%	\$0
Zoology	2	35	100%	\$0
Chemistry	1	13	100%	\$0
Technology	1	13	100%	\$0
Engineering	1	12	100%	\$0
Political Science	1	11	100%	\$0
Mathematics	1	10	100%	\$0
Media & Communications	1	3	0%	\$450
Language & Literature	1	0		
Other Sciences	1	0		
Philosophy	1	0		

## Other Latin American Countries

Ten countries with a total of 33 journals.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	33	525			\$32	-96%
Fee	3	45	9%	-85%	\$376	-76%
No-fee	30	480	91%	118%		
Biomed	6	125	24%	-33%	\$104	-92%
Fee	1	13	10%	-85%	\$1,000	-46%
No-fee	5	112	90%	200%		
STEM	11	138	26%	-35%	\$29	-97%
Fee	2	32	23%	-66%	\$123	-92%
No-fee	9	106	77%	146%		
H&SS	16	262	50%	110%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	16	262	100%	28%		

Almost all no-fee.

### Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	28	29	31	31	29	22
%No-fee	89%	90%	90%	90%	90%	91%
Articles	525	468	522	547	435	351
%No-fee	91%	93%	94%	88%	87%	91%
Change	12.2%	-10.3%	-4.6%	25.7%	23.9%	

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Small: 20-59	18	384	90%	\$37
Smallest: 0-19	15	141	94%	\$20

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	13	\$13,000	\$1,000
\$200-\$599	1	8	\$2,800	\$350
\$0.01-\$199	1	24	\$1,140	\$48
No fee	30	480		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	1	1	1	0
No-fee	3	3	9	11	4
Total	3	4	10	12	4

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	27	415	89%	\$41
Society/govt	5	95	100%	\$0
Miscellaneous	1	15	100%	\$0

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	10	30.3%	
Grew 25-49.9%	6	18.2%	48.5%
Grew 10-24.99%	3	9.1%	57.6%
Even, $\pm$ 9.99%	5	15.2%	72.7%
Shrank 10-24.99%	2	6.1%	78.8%
Shrank 25-49.99%	4	12.1%	90.9%
Shrank 50%+	3	9.1%	

Much more growth than shrinkage, 57.6% to 27.3%

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	5	110	88%	\$118
Education	3	68	100%	\$0
Sociology	3	63	100%	\$0
Other Sciences	3	41	41%	\$28
Anthropology	2	39	100%	\$0
Economics	3	39	100%	\$0
Agriculture	2	30	100%	\$0
Law	1	30	100%	\$0
Engineering	2	29	100%	\$0
Miscellany	1	21	100%	\$0
Ecology	2	19	100%	\$0
Biology	1	15	100%	\$0
Zoology	1	11	100%	\$0
Earth Sciences	1	8	0%	\$350
Psychology	2	2	100%	\$0
Political Science	1	0		

**Country Summaries****Bahamas**

Two no-fee journals, 50 articles in 2018.

**Bolivia**

Five no-fee journals, 71 articles in 2018.

**El Salvador**

Three no-fee journals, 49 articles in 2018.

**Guam<sup>1</sup>**

One fee-charging journal with eight articles in 2018.

**Guatemala**

Three journals, one with fees, 43 articles in 2018.

**Jamaica**

One journal with relatively high fees and 13 articles in 2018.

**Nicaragua**

Six no-fee journals (four of them active), 77 articles in 2018.

**Paraguay**

Eight no-fee journals, 184 articles in 2018.

**Puerto Rico**

Four no-fee journals, 30 articles in 2018.

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<sup>1</sup> Which probably belongs with Asia, but was here in the two previous editions. If there's a GOA5, I'll move it.

## Middle East

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	897	38,880			\$59	-93%
Fee	157	11,099	29%	-51%	\$208	-87%
No-fee	740	27,781	71%	71%		
Biomed	349	17,003	44%	23%	\$41	-97%
Fee	43	3,330	20%	-72%	\$211	-89%
No-fee	306	13,673	80%	169%		
STEM	252	10,715	28%	-32%	\$79	-92%
Fee	55	3,109	29%	-58%	\$274	-82%
No-fee	197	7,606	71%	128%		
H&SS	296	11,162	29%	21%	\$68	-45%
Fee	59	4,660	42%	89%	\$162	-71%
No-fee	237	6,502	58%	-25%		

### Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	846	874	848	773	693	576
%No-fee	82%	82%	82%	82%	81%	80%
Articles	38,880	36,571	36,099	31,981	28,427	23,424
%No-fee	71%	72%	69%	69%	71%	70%
Change	6.3%	1.3%	12.9%	12.5%	21.4%	

Growing every year, if more slowly than in 2014-2016.

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	3	109	\$200,410	\$1,839
\$600-\$1,399	7	1,035	\$736,383	\$711
\$200-\$599	30	2,317	\$758,718	\$327
\$0.01-\$199	117	7,638	\$614,893	\$81
No fee	740	27,781		

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	7	11	43	67	29
No-fee	41	73	155	303	168
Total	48	84	198	370	197

**Country of Publication**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Egypt	51	3,338	58%	\$205
Iran	432	15,820	74%	\$42
Iraq	23	864	26%	\$83
Israel	2	57	100%	\$0
Jordan	5	233	64%	\$49
Kuwait	1	52	100%	\$0
Lebanon	1	16	100%	\$0
Oman	7	302	100%	\$0
Palestine	1	0		
Qatar	4	38	97%	\$26
Saudi Arabia	18	2,208	94%	\$18
Turkey	332	15,183	73%	\$46
United Arab Emirates	15	659	9%	\$210
Yemen	5	110	80%	\$30

# Egypt

Egypt OA is *up*, not down—except for Hindawi moving to the UK.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	51	3,338			\$205	-78%
Fee	20	1,388	42%	-28%	\$492	-69%
No-fee	31	1,950	58%	40%		
Biomed	23	1,472	44%	24%	\$11	-99%
Fee	5	168	11%	-84%	\$95	-95%
No-fee	18	1,304	89%	196%		
STEM	25	1,816	54%	34%	\$366	-65%
Fee	14	1,208	67%	-3%	\$550	-64%
No-fee	11	608	33%	7%		
H&SS	3	50	1%	-94%	\$48	-61%
Fee	1	12	24%	9%	\$200	-64%
No-fee	2	38	76%	-3%		

Very little H&SS; biomed mostly no-fee but STEM mostly fee.

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	51	50	49	44	40	34
%No-fee	61%	60%	61%	66%	63%	53%
Articles	3,338	2,093	2,272	1,840	1,726	1,259
%No-fee	58%	65%	57%	63%	60%	55%
Change	59.5%	-7.9%	23.5%	6.6%	37.1%	

An exceptionally large increase in 2018.



**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	5	1,190	28%	\$511
Med.: 60-149	15	1,345	83%	\$20
Small: 20-59	24	724	65%	\$58
Smallest: 0-19	7	79	51%	\$76

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	1	\$1,519	\$1,519
\$600-\$1,399	5	893	\$629,638	\$705
\$200-\$599	2	75	\$15,000	\$200
\$0.01-\$199	12	419	\$37,083	\$89
No fee	31	1,950		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	1	4	9	5
No-fee	0	1	5	19	6
Total	1	2	9	28	11

Mostly recent, falling off since 2015.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	34	2,912	65%	\$179
Univ/college	5	214	13%	\$653
Society/govt	6	154	0%	\$120
Miscellaneous	2	34	53%	\$47
Open Access	4	24	88%	\$123

Elsevier (all 34) dominates Egyptian OA with the departure of Hindawi, but the university journals are *more* expensive,

**Growth and Shrinkag**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	22	43.1%	
Grew 25-49.9%	3	5.9%	49.0%
Grew 10-24.99%	7	13.7%	62.7%
Even, $\pm 9.99\%$	4	7.8%	70.6%
Shrank 10-24.99%	5	9.8%	80.4%
Shrank 25-49.99%	6	11.8%	92.2%
Shrank 50%+	4	7.8%	

More than twice as much growth as shrinkage, 62.7% to 29.4%.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	20	1,354	88%	\$11
Engineering	4	823	12%	\$573
Zoology	7	409	17%	\$394
Earth Sciences	3	288	100%	\$0
Biology	3	118	92%	\$11
Other Sciences	3	95	42%	\$51
Physics	2	79	84%	\$20
Computer Science	2	67	57%	\$303
Agriculture	1	29	0%	\$60
Ecology	2	25	36%	\$64
Economics	1	20	100%	\$0
Library Science	1	18	100%	\$0
Anthropology	1	12	0%	\$200
Mathematics	1	1	0%	\$1,519

# Iran

The most journals and articles in the Middle East.

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	432	15,820			\$42	-95%
Fee	72	4,159	26%	-55%	\$159	-90%
No-fee	360	11,661	74%	76%		
Biomed	226	9,932	63%	77%	\$57	-96%
Fee	30	2,696	27%	-61%	\$210	-89%
No-fee	196	7,236	73%	144%		
STEM	115	3,539	22%	-45%	\$16	-98%
Fee	19	773	22%	-68%	\$73	-95%
No-fee	96	2,766	78%	151%		
H&SS	91	2,349	15%	-38%	\$17	-86%
Fee	23	690	29%	33%	\$59	-89%
No-fee	68	1,659	71%	-9%		

Mostly biomed, mostly no-fee.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	415	424	413	384	349	289
%No-fee	83%	83%	83%	82%	80%	79%
Articles	15,820	16,598	16,854	16,339	15,206	12,222
%No-fee	74%	73%	71%	69%	67%	68%
Change	-4.7%	-1.5%	3.2%	7.5%	24.4%	

Slow decline since 2016 peak; slow shift *toward* no-fee.

### Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	544	0%	\$400
Large: 150-599	14	2,030	52%	\$86
Med.: 60-149	68	4,327	71%	\$31
Small: 20-59	309	8,443	84%	\$16
Smallest: 0-19	40	476	95%	\$2

That largest journal had more than 1,800 articles in 2014.

### Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$600-\$1,399	1	141	\$105,750	\$750
\$200-\$599	8	932	\$335,072	\$360
\$0.01-\$199	63	3,086	\$222,293	\$72
No fee	360	11,661		

### Starting Date

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	3	7	25	33	4
No-fee	15	25	68	174	78
Total	18	32	93	207	82

Another country where the big OA surge was 2011-2014.

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 50%+	35	8.1%	
Grew 25-49.9%	39	9.0%	17.1%
Grew 10-24.99%	40	9.3%	26.4%
Even, $\pm$ 9.99%	172	39.8%	66.2%
Shrank 10-24.99%	57	13.2%	79.4%
Shrank 25-49.99%	49	11.3%	90.7%
Shrank 50%+	40	9.3%	

Large core of stable journals, but more shrinkage than growth.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	382	13,266	80%	\$19
Society/govt	27	1,377	42%	\$171
Traditional	6	465	14%	\$82
Open Access	8	458	58%	\$288
Miscellaneous	9	254	64%	\$26

**Subject**

Subject	Jour.	Art.	%No-fee	\$/article
Medicine	211	9,534	73%	\$58
Agriculture	21	702	57%	\$24
Engineering	18	608	85%	\$13
Education	16	496	77%	\$15
Earth Sciences	16	479	92%	\$3
Ecology	16	449	76%	\$15
Economics	17	423	79%	\$10
Biology	15	398	71%	\$33
Zoology	8	396	53%	\$29
Chemistry	14	389	88%	\$30
Sociology	11	270	61%	\$25
Mathematics	9	195	100%	\$0
Language & Literature	9	179	59%	\$16
Psychology	8	174	59%	\$25
Law	6	157	76%	\$14
Philosophy	4	124	72%	\$15
Technology	4	116	100%	\$0
Religion	6	111	100%	\$0
Physics	3	110	100%	\$0
Anthropology	3	103	30%	\$49
Computer Science	6	95	100%	\$0
History	3	93	32%	\$43
Library Science	2	92	100%	\$0
Political Science	3	63	100%	\$0
Media & Communications	1	27	0%	\$71
Arts & Architecture	1	23	100%	\$0
Miscellany	1	14	100%	\$0

# Iraq

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	23	864			\$83	-91%
Fee	17	637	74%	27%	\$112	-93%
No-fee	6	227	26%	-37%		
Biomed	5	137	16%	-55%	\$202	-84%
Fee	5	137	100%	43%	\$202	-89%
No-fee	0	0	0%	-100%		
STEM	15	671	78%	91%	\$66	-94%
Fee	11	500	75%	8%	\$88	-94%
No-fee	4	171	25%	-18%		
H&SS	3	56	6%	-73%	\$0	-100%
Fee	1	0	0%	-100%		
No-fee	2	56	100%	28%		

Fee-oriented except for H&SS, although the fees are typically low.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	21	23	20	17	15	12
%No-fee	29%	26%	25%	29%	27%	25%
Articles	864	1,076	944	737	720	658
%No-fee	26%	23%	29%	27%	38%	28%
Change	-19.7%	14.0%	28.1%	2.4%	9.4%	

Significant drop in 2018 after four years of growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	114	63%	\$37
Med.: 60-149	7	467	23%	\$57
Small: 20-59	10	232	15%	\$155
Smallest: 0-19	4	51	24%	\$101

Unusual, with fee/volume correlation inverted to some extent.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	4	109	\$26,732	\$245
\$0.01-\$199	13	528	\$44,916	\$85
No fee	6	227		

The most expensive journal charges \$300.

**Starting Date**

	1999-2004	2005-10	2011-14	2015-18
Fee	1	7	3	6
No-fee	1	2	2	1
Total	2	9	5	7

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	21	779	29%	\$80
Miscellaneous	2	85	0%	\$110

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	3	13.0%	
Grew 25-49.9%	3	13.0%	26.1%
Grew 10-24.99%	4	17.4%	43.5%
Shrank 10-24.99%	2	8.7%	52.2%
Shrank 25-49.99%	4	17.4%	69.6%
Shrank 50%+	7	30.4%	

Unusual, with no steady-state journals. More shrinkage than growth—especially major shrinkage.

### Subject

Subject	Jour.	Art.	%No-fee	\$/article
Engineering	4	260	25%	\$53
Other Sciences	3	147	63%	\$35
Medicine	5	137	0%	\$202
Agriculture	1	104	0%	\$75
Technology	2	87	0%	\$133
Sociology	2	56	100%	\$0
Zoology	3	44	0%	\$112
Computer Science	1	15	0%	\$63
Chemistry	1	14	100%	\$0
Education	1	0		



# Saudi Arabia

There's only one fee journal, \$291 with 136 2018 articles, medicine.

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	18	2,208			\$18	-98%
Fee	1	136	6%	-89%	\$291	-81%
No-fee	17	2,072	94%	124%		
Biomed	9	1,281	58%	63%	\$31	-98%
Fee	1	136	11%	-85%	\$291	-84%
No-fee	8	1,145	89%	199%		
STEM	6	864	39%	-4%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	6	864	100%	221%		
H&SS	3	63	3%	-88%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	3	63	100%	28%		

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	17	18	18	18	18	16
%No-fee	94%	94%	94%	94%	94%	94%
Articles	2,208	1,851	1,455	1,303	1,135	1,009
%No-fee	94%	87%	81%	85%	86%	86%
Change	19.3%	27.2%	11.7%	14.8%	12.5%	

Significant growth every year.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	8	1,562	91%	\$25
Med.: 60-149	6	563	100%	\$0
Small: 20-59	4	83	100%	\$0

Fees & revenue table deleted as redundant.

**Starting Date**

	To 1998	2005-10	2011-14	2015-18
Fee	1	0	0	0
No-fee	2	10	4	1
Total	3	10	4	1

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	12	1,817	100%	\$0
Univ/college	5	255	100%	\$0
Society/govt	1	136	0%	\$291

“Traditional” is all Elsevier, all or most university-underwritten.

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	5	27.8%	
Grew 25-49.9%	2	11.1%	38.9%
Grew 10-24.99%	4	22.2%	61.1%
Even, $\pm 9.99\%$	4	22.2%	83.3%
Shrank 10-24.99%	1	5.6%	88.9%
Shrank 25-49.99%	1	5.6%	94.4%
Shrank 50%+	1	5.6%	

More than three times as much growth (much of it rapid) as shrinkage, 61.1% to 16.7%.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	8	884	85%	\$45
Biology	1	397	100%	\$0
Other Sciences	1	281	100%	\$0
Computer Science	1	210	100%	\$0
Chemistry	1	149	100%	\$0
Agriculture	1	109	100%	\$0
Engineering	1	95	100%	\$0
Law	1	37	100%	\$0
Education	1	26	100%	\$0
Mathematics	1	20	100%	\$0
Religion	1	0		

# Turkey

Fewer journals than Iran, but roughly the same article count and no-fee%.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	332	15,183			\$46	-95%
Fee	31	4,075	27%	-54%	\$172	-89%
No-fee	301	11,108	73%	75%		
Biomed	77	3,756	25%	-30%	\$1	-100%
Fee	1	169	4%	-94%	\$30	-98%
No-fee	76	3,587	96%	220%		
STEM	76	3,604	24%	-42%	\$19	-98%
Fee	5	574	16%	-77%	\$117	-92%
No-fee	71	3,030	84%	170%		
H&SS	179	7,823	52%	117%	\$80	-35%
Fee	25	3,332	43%	93%	\$188	-66%
No-fee	154	4,491	57%	-26%		

Strong in H&SS, thinner elsewhere.

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	304	319	309	274	243	199
%No-fee	90%	90%	90%	90%	90%	88%
Articles	15,183	13,669	13,124	10,738	8,758	7,408
%No-fee	73%	74%	71%	71%	81%	80%
Change	11.1%	4.2%	22.2%	22.6%	18.2%	

Growing every year, more than doubling in six years.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	3	1,306	5%	\$101
Large: 150-599	18	3,652	46%	\$89
Med.: 60-149	70	4,860	88%	\$42
Small: 20-59	175	4,631	94%	\$7
Smallest: 0-19	66	734	96%	\$5

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	84	\$151,200	\$1,800
\$200-\$599	10	862	\$288,775	\$335
\$0.01-\$199	20	3,129	\$259,002	\$83
No fee	301	11,108		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	2	5	17	6
No-fee	22	43	60	97	79
Total	23	45	65	114	85

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	76	22.9%	
Grew 25-49.9%	30	9.0%	31.9%
Grew 10-24.99%	42	12.7%	44.6%
Even, $\pm$ 9.99%	85	25.6%	70.2%
Shrank 10-24.99%	35	10.5%	80.7%
Shrank 25-49.99%	35	10.5%	91.3%
Shrank 50%+	29	8.7%	

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	185	7,989	78%	\$38
Open Access	70	3,057	77%	\$78
Miscellaneous	36	2,219	36%	\$69
Society/govt	33	1,168	86%	\$4
Traditional	8	750	100%	\$0

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	72	3,630	95%	\$1
Language & Literature	14	1,708	26%	\$74
Economics	37	1,476	30%	\$178
Education	36	1,296	92%	\$22
Sociology	19	909	46%	\$29
Agriculture	18	890	61%	\$14
Other Sciences	11	784	91%	\$18
Engineering	13	738	100%	\$0
Anthropology	16	479	82%	\$316
Arts & Architecture	7	454	30%	\$62
Religion	12	400	100%	\$0
Zoology	8	361	62%	\$96
Political Science	9	348	100%	\$0
Mathematics	8	261	100%	\$0
Miscellany	5	257	100%	\$0
Technology	4	182	100%	\$0
Earth Sciences	6	175	100%	\$0
History	9	172	100%	\$0
Chemistry	4	151	87%	\$40
Biology	5	126	100%	\$0
Psychology	5	110	68%	\$18
Media & Communications	4	83	100%	\$0
Library Science	3	67	100%	\$0
Law	2	52	100%	\$0
Ecology	2	45	100%	\$0
Computer Science	2	17	100%	\$0
Philosophy	1	12	100%	\$0

Anthropology and economics are the only areas with three-digit costs.

## United Arab Emirates

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	15	659			\$210	-77%
Fee	11	598	91%	56%	\$231	-85%
No-fee	4	61	9%	-78%		
Biomed	2	52	8%	-78%	\$917	-29%
Fee	1	24	46%	-34%	\$1,987	7%
No-fee	1	28	54%	80%		
STEM	5	49	7%	-82%	\$327	-69%
Fee	3	32	65%	-5%	\$500	-67%
No-fee	2	17	35%	11%		
H&SS	8	558	85%	256%	\$133	8%
Fee	7	542	97%	341%	\$137	-75%
No-fee	1	16	3%	-96%		

Almost all fee, and mostly H&SS.

### Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	15	15	14	12	6	7
%No-fee	27%	27%	21%	17%	17%	29%
Articles	659	486	556	332	236	341
%No-fee	9%	12%	7%	9%	9%	7%
Change	35.6%	-12.6%	67.5%	40.7%	-30.8%	

Growing long-term, if erratic year to year (on a very small scale).

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	479	0%	\$133
Med.: 60-149	3	66	0%	\$786
Small: 20-59	5	71	62%	\$162
Smallest: 0-19	5	43	40%	\$251

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	24	\$47,691	\$1,987
\$200-\$599	5	203	\$53,500	\$264
\$0.01-\$199	5	371	\$36,900	\$99
No fee	4	61		

One expensive medical journal.

**Starting Date**

	1999-2004	2005-10	2011-14	2015-18
Fee	0	2	3	6
No-fee	1	2	0	1
Total	1	4	3	7

No pioneers, mostly recent.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	3	340	5%	\$95
Open Access	11	295	15%	\$197
Miscellaneous	1	24	0%	\$1,987



**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	2	13.3%	
Grew 25-49.9%	1	6.7%	20.0%
Grew 10-24.99%	1	6.7%	26.7%
Even, $\pm 9.99\%$	3	20.0%	46.7%
Shrank 10-24.99%	1	6.7%	53.3%
Shrank 25-49.99%	3	20.0%	73.3%
Shrank 50%+	4	26.7%	

Most journals shrinking, some rapidly.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Arts & Architecture	1	319	0%	\$100
Economics	3	192	0%	\$206
Medicine	2	52	54%	\$917
Education	2	21	76%	\$24
Sociology	1	21	0%	\$100
Agriculture	2	17	100%	\$0
Computer Science	1	11	0%	\$500
Engineering	1	11	0%	\$500
Other Sciences	1	10	0%	\$500
Miscellany	1	5	0%	\$60

## Other Middle Eastern Countries

Eight countries with a total of 26 OA journals.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	26	808			\$19	-98%
Fee	5	106	13%	-77%	\$148	-91%
No-fee	21	702	87%	108%		
Biomed	7	373	46%	30%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	7	373	100%	235%		
STEM	10	172	21%	-48%	\$18	-98%
Fee	3	22	13%	-81%	\$141	-91%
No-fee	7	150	87%	180%		
H&SS	9	263	33%	37%	\$48	-61%
Fee	2	84	32%	45%	\$150	-73%
No-fee	7	179	68%	-13%		

Mostly no-fee, light on STEM.

### Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	23	25	25	24	22	19
%No-fee	83%	84%	84%	88%	86%	89%
Articles	808	798	894	692	646	527
%No-fee	87%	88%	93%	91%	88%	88%
Change	1.3%	-10.7%	29.2%	7.1%	22.6%	

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	0		
Med.: 60-149	4	355	83%	\$26
Small: 20-59	14	357	88%	\$18
Smallest: 0-19	7	96	100%	\$0

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	1	1	\$995	\$995
\$0.01-\$199	4	105	\$14,700	\$140
No fee	21	702		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	0	0	2	2
No-fee	2	2	8	7	2
Total	3	2	8	9	4

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	22	589	96%	\$7
Traditional	2	136	100%	\$0
Miscellaneous	1	62	0%	\$150
Open Access	1	21	0%	\$100

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 50%+	2	7.7%	
Grew 25-49.9%	1	3.8%	11.5%
Grew 10-24.99%	4	15.4%	26.9%
Even, $\pm 9.99\%$	9	34.6%	61.5%
Shrank 10-24.99%	5	19.2%	80.8%
Shrank 25-49.99%	2	7.7%	88.5%
Shrank 50%+	3	11.5%	

More shrinkage than growth, 38.5% to 26.9%.

### Subject

Subject	Jour.	Art.	%No-fee	\$/article
Medicine	7	373	100%	\$0
Education	2	92	100%	\$0
Engineering	3	66	100%	\$0
Economics	1	62	0%	\$150
Arts & Architecture	1	34	100%	\$0
Other Sciences	3	32	97%	\$31
Earth Sciences	1	27	100%	\$0
Sociology	1	22	0%	\$150
Language & Literature	1	21	100%	\$0
Mathematics	1	21	0%	\$100
Psychology	1	18	100%	\$0
Anthropology	1	14	100%	\$0
Computer Science	1	14	100%	\$0
Agriculture	1	12	100%	\$0
Law	1	0		

## Country Summaries

### Israel

Two no-fee journals, 37 articles in 2018.

**Jordan**

Five journals (two with fees), 233 articles in 2018.

**Kuwait**

One no-fee journal with 52 articles in 2018.

**Lebanon**

One no-fee journal with 16 articles in 2018.

**Oman**

Seven no-fee journals, 302 articles in 2018.

**Palestine**

One fee-based journal with no articles after 2015.

**Qatar**

Four journals (one fee-based); 38 articles in 2018.

**Yemen**

Five journals (one fee-based); 110 articles in 2018.

# Pacific/English

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

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	859	861	817	762	691	614
%No-fee	65%	66%	68%	69%	71%	75%
Articles	92,102	83,101	77,685	72,183	66,769	60,260
%No-fee	22%	22%	21%	20%	20%	20%
Change	10.8%	7.0%	7.6%	8.1%	10.8%	

Significant growth every year.

## Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,400+	164	56,370	\$114,146,401	\$2,025
\$600-\$1,399	58	9,747	\$9,997,326	\$1,026
\$200-\$599	68	4,777	\$2,011,176	\$421
\$0.01-\$199	20	664	\$80,730	\$122
No fee	607	20,544		

## Country of Publication

Country	Journals	Articles	%No-fee	\$/article
Australia	92	4,236	46%	\$735
Canada	149	4,925	62%	\$693
New Zealand	13	202	100%	\$0
United States	663	82,739	19%	\$1,447

# Australia

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	92	4,236			\$735	-19%
Fee	22	2,267	54%	-8%	\$1,373	-13%
No-fee	70	1,969	46%	11%		
Biomed	27	2,424	57%	61%	\$1,229	-5%
Fee	16	1,919	79%	13%	\$1,553	-16%
No-fee	11	505	21%	-30%		
STEM	8	518	12%	-70%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	8	518	100%	221%		
H&SS	57	1,294	31%	28%	\$102	-17%
Fee	6	348	27%	22%	\$381	-32%
No-fee	51	946	73%	-6%		

Strong in biomed, light in STEM, fees mostly in biomed.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	83	83	77	75	69	63
%No-fee	73%	78%	79%	81%	80%	79%
Articles	4,236	3,956	3,203	2,962	2,544	2,562
%No-fee	46%	51%	57%	63%	63%	64%
Change	7.1%	23.5%	8.1%	16.4%	-0.7%	

Growth for four straight years, with drop in no-fee percentage.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	8	2,135	26%	\$1,158
Med.: 60-149	12	858	66%	\$285
Small: 20-59	41	1,026	62%	\$379
Smallest: 0-19	31	217	91%	\$31

No very large journals; all but large are mostly no-fee.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	10	1,657	\$2,950,011	\$1,780
\$600-\$1,399	2	79	\$51,333	\$650
\$200-\$599	5	238	\$64,123	\$269
\$0.01-\$199	5	293	\$47,030	\$161
No fee	70	1,969		

More than 90% of revenue is from ten expensive journals.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	2	3	9	8
No-fee	6	7	25	21	11
Total	6	9	28	30	19

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	21	2,489	24%	\$1,032
Univ/college	46	837	89%	\$19
Traditional	12	644	59%	\$806
Miscellaneous	7	158	86%	\$54
Society/govt	6	108	100%	\$0

OA publishers account for most articles, lowest no-fee percentage and highest costs.



**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	13	14.1%	
Grew 25-49.9%	12	13.0%	27.2%
Grew 10-24.99%	8	8.7%	35.9%
Even, $\pm 9.99\%$	24	26.1%	62.0%
Shrank 10-24.99%	12	13.0%	75.0%
Shrank 25-49.99%	10	10.9%	85.9%
Shrank 50%+	13	14.1%	

Slightly more shrinkage than growth, 38% to 35.9%.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	23	2,181	23%	\$1,228
Language & Literature	8	504	57%	\$92
Mathematics	1	247	100%	\$0
Biology	4	243	1%	\$1,243
Computer Science	3	199	100%	\$0
Education	9	175	66%	\$50
Philosophy	3	80	100%	\$0
Anthropology	6	74	73%	\$31
Sociology	4	70	100%	\$0
Media & Communications	4	69	100%	\$0
Law	4	68	100%	\$0
Arts & Architecture	3	67	25%	\$1,119
Political Science	2	55	100%	\$0
Economics	5	51	100%	\$0
Earth Sciences	2	42	100%	\$0
Engineering	2	30	100%	\$0
History	5	30	100%	\$0
Miscellany	2	30	100%	\$0
Religion	2	21	100%	\$0

Oddly enough, arts & architecture joins biomed in having four-digit average cost per article.

# Canada

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	149	4,925			\$693	-24%
Fee	26	1,894	38%	-34%	\$1,802	15%
No-fee	123	3,031	62%	47%		
Biomed	28	1,838	37%	5%	\$1,549	19%
Fee	12	1,361	74%	6%	\$2,092	13%
No-fee	16	477	26%	-13%		
STEM	25	845	17%	-58%	\$488	-53%
Fee	11	415	49%	-29%	\$993	-34%
No-fee	14	430	51%	63%		
H&SS	96	2,242	46%	91%	\$68	-44%
Fee	3	118	5%	-76%	\$1,298	133%
No-fee	93	2,124	95%	22%		

Strong on mostly no-fee H&SS, light on STEM.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	140	138	135	127	115	110
%No-fee	82%	83%	84%	84%	86%	88%
Articles	4,925	4,589	4,234	3,681	3,363	3,242
%No-fee	62%	66%	69%	71%	75%	77%
Change	7.3%	8.4%	15.0%	9.5%	3.7%	

Growing every year, with slow move toward more fees.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	6	1,497	9%	\$1,865
Med.: 60-149	18	1,140	83%	\$244
Small: 20-59	74	1,862	86%	\$169
Smallest: 0-19	51	426	84%	\$66

Extreme case of fee/volume correlation,

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	12	1,486	\$3,131,530	\$2,107
\$600-\$1,399	3	228	\$223,325	\$979
\$200-\$599	9	153	\$54,052	\$353
\$0.01-\$199	2	27	\$3,762	\$139
No fee	123	3,031		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	2	4	10	10
No-fee	10	21	44	30	18
Total	10	23	48	40	28

The gold rush is recent.

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	24	16.1%	
Grew 25-49.9%	23	15.4%	31.5%
Grew 10-24.99%	11	7.4%	38.9%
Even, $\pm 9.99\%$	35	23.5%	62.4%
Shrank 10-24.99%	19	12.8%	75.2%
Shrank 25-49.99%	23	15.4%	90.6%
Shrank 50%+	14	9.4%	

Nearly even growth and shrinkage: 38.9% to 37.6%.

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Open Access	37	2,082	24%	\$1,529
Univ/college	75	1,484	98%	\$2
Society/govt	28	1,111	74%	\$204
Miscellaneous	9	248	100%	\$0

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	26	1,769	23%	\$1,609
Education	23	521	100%	\$0
Economics	10	349	100%	\$0
Ecology	5	310	6%	\$708
Sociology	8	253	100%	\$0
Language & Literature	12	199	100%	\$0
Philosophy	8	159	100%	\$0
Psychology	4	141	23%	\$1,058
Mathematics	3	138	100%	\$0
Media & Communications	5	138	100%	\$0
Computer Science	4	128	23%	\$1,455
Anthropology	6	113	91%	\$35
Library Science	3	106	100%	\$0
Political Science	4	95	100%	\$0
Technology	2	89	96%	\$11
Biology	2	69	100%	\$0
History	5	64	100%	\$0
Arts & Architecture	2	53	100%	\$0
Chemistry	2	44	100%	\$0
Engineering	3	42	76%	\$78
Earth Sciences	1	38	100%	\$0
Miscellany	3	26	100%	\$0
Other Sciences	2	26	100%	\$0
Law	3	25	100%	\$0
Agriculture	2	19	100%	\$0
Zoology	1	11	0%	\$225

# New Zealand

Thirteen small no-fee journals.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>
All	13	202		
Biomed	1	31	15%	-57%
STEM	2	18	9%	-78%
H&SS	10	153	76%	218%

Mostly H&SS.

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	13	12	12	12	12	10
Articles	202	191	154	173	164	133
Change	5.8%	24.0%	-11.0%	5.5%	23.3%	

## Article Volume

	<b>Journals</b>	<b>Articles</b>	<b>Art/Jrn</b>
Small: 20-59	6	138	23
Smallest: 0-19	7	64	9

## Starting Date

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Journals	1	2	2	6	2

**Publisher Category**

Category	Journals	Articles	Percent	Art/Jrn
Univ/college	6	96	9%	16
Society/govt	4	83	8%	21
Open Access	3	23	2%	8

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	3	23.1%	
Grew 25-49.9%	2	15.4%	38.5%
Even, $\pm 9.99\%$	2	15.4%	53.8%
Shrank 10-24.99%	1	7.7%	61.5%
Shrank 25-49.99%	4	30.8%	92.3%
Shrank 50%+	1	7.7%	

Five journals growing (three rapidly), six shrinking (one rapidly).

**Subject**

Subject	Journals	Articles	Art/Jrn
Education	3	69	23
Biology	1	31	31
Religion	1	24	24
Economics	3	19	6
Sociology	1	19	19
Mathematics	1	14	14
Arts & Architecture	1	12	12
Psychology	1	10	10
Computer Science	1	4	4

## United States

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	663	82,739			\$1,447	59%
Fee	262	67,397	81%	40%	\$1,776	13%
No-fee	401	15,342	19%	-56%		
Biomed	238	31,282	38%	6%	\$1,603	24%
Fee	168	25,146	80%	15%	\$1,994	8%
No-fee	70	6,136	20%	-34%		
STEM	125	43,588	53%	29%	\$1,581	52%
Fee	68	41,080	94%	37%	\$1,677	11%
No-fee	57	2,508	6%	-82%		
H&SS	300	7,869	10%	-60%	\$84	-32%
Fee	26	1,171	15%	-32%	\$563	1%
No-fee	274	6,698	85%	9%		

Most H&SS is no-fee—but it's on the lean side. The rest? Mostly high fees.

### Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	623	628	593	548	495	431
%No-fee	60%	60%	62%	64%	65%	71%
Articles	82,739	74,365	70,094	65,367	60,698	54,323
%No-fee	19%	18%	16%	15%	15%	15%
Change	11.3%	6.1%	7.2%	7.7%	11.7%	

Growth every year, and a *slight* increase in no-fee percentage.

**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Largest: 600+	21	52,421	8%	\$1,581
Large: 150-599	57	12,759	19%	\$1,725
Med.: 60-149	122	8,967	31%	\$1,195
Small: 20-59	285	7,178	63%	\$536
Smallest: 0-19	178	1,414	83%	\$199

Not quite the usual correlation: large journals cost more than largest.

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	142	53,227	\$108,064,860	\$2,030
\$600-\$1,399	53	9,440	\$9,722,668	\$1,030
\$200-\$599	54	4,386	\$1,893,001	\$432
\$0.01-\$199	13	344	\$29,938	\$87
No fee	401	15,342		

Most articles are in very expensive journals.

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	5	18	42	96	101
No-fee	41	48	115	124	73
Total	46	66	157	220	174

Strong in early OA, most growth in 2005-2014, still growing.

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Open Access	93	32,139	4%	\$1,653
Society/govt	121	23,335	13%	\$1,717
Traditional	138	13,611	2%	\$1,683
Univ/college	267	8,737	70%	\$400
Miscellaneous	44	4,917	94%	\$21

OA publishers account for the most articles, but society and traditional publishers show roughly equal costs per article.



**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	122	18.4%	
Grew 25-49.9%	66	10.0%	28.4%
Grew 10-24.99%	74	11.2%	39.5%
Even, $\pm 9.99\%$	133	20.1%	59.6%
Shrank 10-24.99%	74	11.2%	70.7%
Shrank 25-49.99%	99	14.9%	85.7%
Shrank 50%+	95	14.3%	

Slightly more shrinkage than growth, 40.4% to 39.5%.

**Subject (next page)**

Medicine is the biggest segment, but biology and physics (despite SCOAP<sup>3</sup>) are the only ones to break \$2,000 per article. At the other extreme, consider History, Library Science, Philosophy, Political Science, Media & Communications, Religion, and Law: even in the fee-happy United States, these fields show no fees at all.

Subject	Jour.	Art.	%No-fee	\$/article
Medicine	201	24,057	25%	\$1,468
Other Sciences	10	21,684	0%	\$1,692
Biology	37	7,225	1%	\$2,052
Engineering	9	7,021	1%	\$1,730
Physics	13	5,698	4%	\$2,222
Computer Science	12	2,454	19%	\$580
Chemistry	5	2,393	11%	\$741
Ecology	24	1,568	26%	\$1,063
Education	53	1,405	86%	\$71
Sociology	37	1,128	84%	\$190
History	15	997	100%	\$0
Language & Literature	46	982	86%	\$39
Mathematics	16	746	97%	\$28
Agriculture	12	725	12%	\$1,441
Technology	10	599	19%	\$895
Anthropology	22	592	92%	\$2
Zoology	6	541	11%	\$1,324
Library Science	26	540	100%	\$0
Miscellany	9	406	35%	\$255
Arts & Architecture	17	335	76%	\$47
Philosophy	14	305	100%	\$0
Economics	14	261	44%	\$103
Psychology	11	256	52%	\$625
Political Science	12	241	100%	\$0
Media & Communications	9	235	100%	\$0
Earth Sciences	8	159	18%	\$1,393
Religion	7	108	100%	\$0
Law	8	78	100%	\$0

## Western Europe

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	3,822	342,951			\$1,449	59%
Fee	1,737	259,141	76%	30%	\$1,918	22%
No-fee	2,085	83,810	24%	-42%		
Biomed	1,238	130,570	38%	7%	\$1,983	53%
Fee	973	118,566	91%	30%	\$2,184	18%
No-fee	265	12,004	9%	-69%		
STEM	923	164,852	48%	18%	\$1,346	30%
Fee	563	127,612	77%	12%	\$1,739	15%
No-fee	360	37,240	23%	-28%		
H&SS	1,661	47,529	14%	-42%	\$341	177%
Fee	201	12,963	27%	24%	\$1,249	124%
No-fee	1,460	34,566	73%	-7%		

Thin on H&SS, expensive everywhere else.

### Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	3,612	3,665	3,536	3,331	3,063	2,712
%No-fee	53%	54%	54%	55%	55%	56%
Articles	342,951	286,458	242,950	213,946	191,003	151,649
%No-fee	24%	26%	28%	27%	28%	30%
Change	19.7%	17.9%	13.6%	12.0%	26.0%	

Solid growth every year, with ever more fee articles.

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	892	199,684	\$451,155,104	\$2,259
\$600-\$1,399	521	38,394	\$38,197,692	\$995
\$200-\$599	254	17,032	\$7,349,639	\$432
\$0.01-\$199	70	4,031	\$341,755	\$85
No fee	2,085	83,810		

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	45	170	491	633	398
No-fee	242	250	547	655	391
Total	287	420	1,038	1,288	789

**Country of Publication**

<b>Country</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Austria	49	1,051	56%	\$241
Azerbaijan	6	132	10%	\$45
Belgium	35	594	85%	\$87
Denmark	24	347	91%	\$26
Finland	24	746	78%	\$194
France	206	22,697	98%	\$24
Germany	256	18,887	53%	\$468
Greece	32	1,606	66%	\$125
Iceland	6	291	100%	\$0
Ireland	16	501	46%	\$907
Italy	334	9,628	78%	\$158
Luxembourg	3	38	100%	\$0
Malta	2	29	100%	\$0
Netherlands	213	17,093	37%	\$1,284
Norway	89	1,437	91%	\$92
Portugal	87	2,870	72%	\$140
Spain	674	19,194	90%	\$68
Sweden	38	1,204	55%	\$784
Switzerland	290	97,620	5%	\$1,803
United Kingdom	1,438	146,986	6%	\$1,934

# Austria

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	49	1,051			\$241	-74%
Fee	11	462	44%	-24%	\$547	-65%
No-fee	38	589	56%	34%		
Biomed	7	147	14%	-61%	\$950	-27%
Fee	3	147	100%	43%	\$950	-49%
No-fee	4	0	0%	-100%		
STEM	11	270	26%	-37%	\$311	-70%
Fee	5	203	75%	9%	\$414	-73%
No-fee	6	67	25%	-20%		
H&SS	31	634	60%	154%	\$46	-63%
Fee	3	112	18%	-20%	\$261	-53%
No-fee	28	522	82%	6%		

Mostly no-fee H&SS, with relatively low fees elsewhere.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	41	49	45	41	34	25
%No-fee	73%	78%	82%	83%	82%	80%
Articles	1,051	1,216	1,303	1,122	950	792
%No-fee	56%	62%	69%	64%	74%	71%
Change	-13.6%	-6.7%	16.1%	18.1%	19.9%	

Two down years after three years of growth.

**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Med.: 60-149	10	473	32%	\$372
Small: 20-59	26	489	71%	\$157
Smallest: 0-19	13	89	100%	\$0

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1.399	3	147	\$139,606	\$950
\$200-\$599	8	315	\$113,267	\$360
No fee	38	589		

No large journals but no nominal fees.

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	0	0	3	3	5
No-fee	3	4	10	10	11
Total	3	4	13	13	16

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	7	14.3%	
Grew 25-49.9%	3	6.1%	20.4%
Grew 10-24.99%	2	4.1%	24.5%
Even, $\pm$ 9.99%	10	20.4%	44.9%
Shrank 10-24.99%	8	16.3%	61.2%
Shrank 25-49.99%	8	16.3%	77.6%
Shrank 50%+	11	22.4%	

More than half the journals are shrinking, one-quarter growing.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	25	532	58%	\$153
Society/govt	12	302	69%	\$105
Miscellaneous	5	116	54%	\$389
Open Access	3	101	7%	\$936
Traditional	4	0		

**Subject**

Subject	Jour.	Art.	%No-fee	\$/article
Earth Sciences	5	135	19%	\$435
Media & Communications	3	113	100%	\$0
Biology	2	94	0%	\$1,005
Political Science	6	93	100%	\$0
Physics	1	73	0%	\$224
Philosophy	4	64	100%	\$0
Library Science	1	58	100%	\$0
Education	2	56	100%	\$0
Medicine	5	53	0%	\$851
Law	2	52	10%	\$203
Economics	1	47	0%	\$224
History	3	38	100%	\$0
Anthropology	2	36	50%	\$225
Religion	1	34	100%	\$0
Mathematics	1	26	100%	\$0
Sociology	2	22	100%	\$0
Agriculture	1	20	0%	\$449
Arts & Architecture	3	14	100%	\$0
Ecology	1	12	100%	\$0
Language & Literature	1	7	100%	\$0
Engineering	2	4	100%	\$0

An interesting mix, with biomed the only over-\$450 area.

# Belgium

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	35	594			\$87	-91%
Fee	3	90	15%	-74%	\$572	-64%
No-fee	32	504	85%	103%		
Biomed	2	11	2%	-95%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	2	11	100%	235%		
STEM	16	314	53%	30%	\$159	-85%
Fee	2	84	27%	-61%	\$593	-61%
No-fee	14	230	73%	135%		
H&SS	17	269	45%	90%	\$6	-95%
Fee	1	6	2%	-90%	\$281	-50%
No-fee	16	263	98%	25%		

Only three fee journals. Very little biomed.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	29	34	35	33	30	25
%No-fee	90%	91%	91%	94%	93%	92%
Articles	594	654	715	657	537	400
%No-fee	85%	93%	93%	92%	90%	88%
Change	-9.2%	-8.5%	8.8%	22.3%	34.3%	

Two years of decline after three years of growth.



**Article Volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	2	145	46%	\$302
Small: 20-59	27	399	98%	\$4
Smallest: 0-19	6	50	88%	\$120

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	1	6	\$6,006	\$1,001
\$200-\$599	2	84	\$45,471	\$541
No fee	32	504		

Like Austria: no large journals, no very high or nominal fees.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	0	1	0	1
No-fee	4	2	9	14	3
Total	5	2	10	14	4

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Society/govt	15	277	72%	\$158
Univ/college	16	272	100%	\$0
Miscellaneous	3	39	85%	\$154
Open Access	1	6	0%	\$281

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	5	14.3%	
Grew 25-49.9%	5	14.3%	28.6%
Grew 10-24.99%	1	2.9%	31.4%
Even, $\pm 9.99\%$	5	14.3%	45.7%
Shrank 10-24.99%	3	8.6%	54.3%
Shrank 25-49.99%	5	14.3%	68.6%
Shrank 50%+	11	31.4%	

Considerably more shrinkage than growth (54.3% to 31.4%).

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Language & Literature	6	134	100%	\$0
Agriculture	3	111	30%	\$394
Technology	6	97	100%	\$0
Earth Sciences	2	61	100%	\$0
Arts & Architecture	2	34	100%	\$0
Economics	2	29	100%	\$0
Media & Communications	1	23	100%	\$0
Computer Science	3	22	100%	\$0
Zoology	1	17	100%	\$0
Education	2	16	100%	\$0
Library Science	1	13	100%	\$0
Medicine	2	11	100%	\$0
Sociology	1	10	100%	\$0
Ecology	1	6	0%	\$1,001
Psychology	1	6	0%	\$281
Political Science	1	4	100%	\$0

Another interesting mix, with only agriculture having fees for more than six articles.

# Denmark

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	24	347			\$26	-97%
Fee	1	30	9%	-85%	\$298	-81%
No-fee	23	317	91%	118%		
Biomed	1	0	0%	-100%		
Fee	0	0				
No-fee	1	0				
STEM	2	39	11%	-72%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	2	39	100%	221%		
H&SS	21	308	89%	273%	\$29	-76%
Fee	1	30	10%	-56%	\$298	-47%
No-fee	20	278	90%	16%		

There's only one fee journal, H&SS, \$298 fee; no biomed at all.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	20	21	23	21	19	17
%No-fee	95%	95%	96%	95%	95%	94%
Articles	347	355	420	392	376	355
%No-fee	91%	90%	95%	91%	91%	92%
Change	-2.3%	-15.5%	7.1%	4.3%	5.9%	

Another case of two declining years after three growth years.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Small: 20-59	15	291	90%	\$31
Smallest: 0-19	9	56	100%	\$0

All small journals. Fees & revenue table omitted as redundant.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	0	0	1	0
No-fee	2	2	4	10	5
Total	2	2	4	11	5

Mostly 2011-2014.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	19	277	89%	\$32
Society/govt	3	51	100%	\$0
Open Access	1	5	100%	\$0
Miscellaneous	1	14	100%	\$0

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	5	20.8%	
Grew 25-49.9%	2	8.3%	29.2%
Even, $\pm$ 9.99%	8	33.3%	62.5%
Shrank 10-24.99%	1	4.2%	66.7%
Shrank 25-49.99%	4	16.7%	83.3%
Shrank 50%+	4	16.7%	

Seven grew, nine shrank.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Philosophy	3	65	100%	\$0
Education	4	55	100%	\$0
Economics	2	51	100%	\$0
Media & Communications	3	42	100%	\$0
Earth Sciences	1	34	100%	\$0
Anthropology	3	30	100%	\$0
Sociology	2	30	0%	\$298
Political Science	1	16	100%	\$0
History	1	9	100%	\$0
Ecology	1	5	100%	\$0
Law	1	5	100%	\$0
Psychology	1	5	100%	\$0
Medicine	1	0		

# Finland

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	24	746			\$194	-79%
Fee	3	162	22%	-63%	\$894	-43%
No-fee	21	584	78%	87%		
Biomed	2	115	15%	-57%	\$867	-33%
Fee	2	115	100%	43%	\$867	-53%
No-fee	0	0	0%	-100%		
STEM	7	342	46%	13%	\$132	-87%
Fee	1	47	14%	-80%	\$960	-36%
No-fee	6	295	86%	177%		
H&SS	15	289	39%	63%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	15	289	100%	28%		

Three-quarters no-fee (but not biomed!).

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	23	23	24	23	21	21
%No-fee	87%	87%	88%	87%	86%	86%
Articles	746	741	708	597	541	507
%No-fee	78%	80%	82%	78%	76%	76%
Change	0.7%	4.7%	18.6%	10.4%	6.7%	

Level after four years of growth.

**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Large: 150-599	1	138	100%	\$0
Med.: 60-149	3	181	63%	\$296
Small: 20-59	12	327	71%	\$279
Smallest: 0-19	8	100	100%	\$0

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1.399	3	162	\$144,800	\$894
No fee	21	584		

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	0	0	2	1	0
No-fee	2	4	7	6	2
Total	2	4	9	7	2

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Univ/college	13	464	65%	\$312
Society/govt	10	234	100%	\$0
Miscellaneous	1	48	100%	\$0

Unusual that only (some) university journals have fees.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	5	20.8%	
Grew 25-49.9%	4	16.7%	37.5%
Grew 10-24.99%	2	8.3%	45.8%
Even, $\pm 9.99\%$	5	20.8%	66.7%
Shrank 10-24.99%	4	16.7%	83.3%
Shrank 25-49.99%	2	8.3%	91.7%
Shrank 50%+	2	8.3%	

More growth than shrinkage, 45.8% to 33.3%.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Technology	1	138	100%	\$0
Biology	2	115	0%	\$867
Anthropology	4	103	100%	\$0
Earth Sciences	3	91	48%	\$496
Mathematics	1	66	100%	\$0
Religion	3	50	100%	\$0
History	1	35	100%	\$0
Agriculture	1	34	100%	\$0
Arts & Architecture	1	28	100%	\$0
Political Science	1	22	100%	\$0
Language & Literature	2	19	100%	\$0
Education	1	16	100%	\$0
Philosophy	1	16	100%	\$0
Computer Science	1	13	100%	\$0
Sociology	1	0		



# France

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	206	22,697			\$24	-97%
Fee	18	481	2%	-96%	\$1,147	-27%
No-fee	188	22,216	98%	134%		
Biomed	7	432	2%	-95%	\$499	-62%
Fee	3	128	30%	-58%	\$1,684	-9%
No-fee	4	304	70%	135%		
STEM	49	19,094	84%	107%	\$18	-98%
Fee	14	317	2%	-98%	\$1,056	-30%
No-fee	35	18,777	98%	215%		
H&SS	150	3,171	14%	-41%	\$0	-100%
Fee	1	36	1%	-95%	\$39	-93%
No-fee	149	3,135	99%	27%		

Mostly STEM, almost no fees in any field.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	180	193	193	193	189	173
%No-fee	91%	91%	91%	92%	93%	94%
Articles	22,697	14,902	12,327	7,536	7,130	6,409
%No-fee	98%	97%	96%	95%	96%	96%
Change	52.3%	20.9%	63.6%	5.7%	11.2%	

Strong growth pattern over past three years.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	4	17,318	100%	\$0
Large: 150-599	3	653	100%	\$0
Med.: 60-149	31	1,785	86%	\$179
Small: 20-59	106	2,510	92%	\$68
Smallest: 0-19	62	431	92%	\$141

All of the largest journals are conference-based.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	13	310	\$522,133	\$1,684
\$200-\$599	1	30	\$16,841	\$561
\$0.01-\$199	4	141	\$12,796	\$91
No fee	188	22,216		

\$1,684 is 1,500€ (in late March 2019).

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	0	2	9	7
No-fee	15	38	78	51	6
Total	15	38	80	60	13

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	38	18.4%	
Grew 25-49.9%	18	8.7%	27.2%
Grew 10-24.99%	13	6.3%	33.5%
Even, $\pm$ 9.99%	52	25.2%	58.7%
Shrank 10-24.99%	26	12.6%	71.4%
Shrank 25-49.99%	25	12.1%	83.5%
Shrank 50%+	34	16.5%	

Slightly more shrinkage than growth, 41.3% to 33.5%.

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Traditional	26	18,470	98%	\$28
Univ/college	105	2,453	99%	\$1
Society/govt	36	968	95%	\$3
Open Access	31	552	100%	\$0
Miscellaneous	8	254	65%	\$92

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Technology	3	10,176	100%	\$3
Ecology	8	3,907	100%	\$7
Physics	4	2,573	100%	\$8
Other Sciences	2	1,271	100%	\$0
Language & Literature	48	747	100%	\$0
Anthropology	26	674	100%	\$0
Sociology	17	504	100%	\$0
Earth Sciences	8	371	84%	\$272
History	16	319	100%	\$0
Biology	3	260	100%	\$0
Media & Communications	8	248	85%	\$6
Education	6	172	100%	\$0
Medicine	4	172	26%	\$1,253
Computer Science	6	154	79%	\$21
Chemistry	2	151	100%	\$0
Engineering	6	149	0%	\$925
Agriculture	4	145	79%	\$116
Arts & Architecture	6	145	100%	\$0
Zoology	3	125	100%	\$0
Philosophy	6	112	100%	\$0
Political Science	5	83	100%	\$0
Mathematics	3	72	100%	\$0
Economics	3	66	100%	\$0
Miscellany	4	41	100%	\$0
Law	3	31	100%	\$0
Religion	2	29	100%	\$0

# Germany

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	256	18,887			\$468	-49%
Fee	83	8,877	47%	-19%	\$995	-37%
No-fee	173	10,010	53%	27%		
Biomed	35	1,455	8%	-78%	\$1,100	-15%
Fee	15	781	54%	-23%	\$2,050	11%
No-fee	20	674	46%	55%		
STEM	122	14,741	78%	92%	\$473	-55%
Fee	57	7,413	50%	-27%	\$940	-38%
No-fee	65	7,328	50%	59%		
H&SS	99	2,691	14%	-40%	\$99	-19%
Fee	11	683	25%	15%	\$391	-30%
No-fee	88	2,008	75%	-4%		

A majority no-fee; very strong in STEM.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	246	251	244	242	214	182
%No-fee	68%	68%	68%	68%	67%	71%
Articles	18,887	16,869	16,764	14,979	12,479	9,909
%No-fee	53%	57%	58%	57%	61%	53%
Change	12.0%	0.6%	11.9%	20.0%	25.9%	

Growing every year.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	5	6,529	66%	\$138
Large: 150-599	26	6,055	30%	\$890
Med.: 60-149	41	2,696	41%	\$679
Small: 20-59	126	3,175	77%	\$205
Smallest: 0-19	58	432	81%	\$145

Not the usual correlation, since the largest journals have lowest cost.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	20	1,543	\$4,581,368	\$2,969
\$600-\$1,399	34	4,059	\$3,560,299	\$877
\$200-\$599	19	1,448	\$573,741	\$396
\$0.01-\$199	10	1,827	\$118,615	\$65
No fee	173	10,010		

The top row represents some very expensive journals.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	5	8	25	35	10
No-fee	11	23	47	65	27
Total	16	31	72	100	37

Quite a few pioneers, strongest 2005-2014, trailing off recently.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	126	12,224	55%	\$368
Univ/college	80	4,221	52%	\$58
Traditional	18	1,415	15%	\$2,804
Miscellaneous	19	674	81%	\$137
Society/govt	13	353	76%	\$75

Traditional publishers include \$5,000 and \$4,200 price points.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	47	18.4%	
Grew 25-49.9%	32	12.5%	30.9%
Grew 10-24.99%	22	8.6%	39.5%
Even, $\pm 9.99\%$	53	20.7%	60.2%
Shrank 10-24.99%	39	15.2%	75.4%
Shrank 25-49.99%	33	12.9%	88.3%
Shrank 50%+	30	11.7%	

One more journal shrank than grew—but growth was faster.

**Subject (next page)**

“Other Sciences” breaks the \$4,000 mark for average cost; only one other field—medicine—tops \$1,000.

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Physics	11	3,586	96%	\$87
Earth Sciences	32	3,109	53%	\$360
Ecology	16	2,792	14%	\$754
Computer Science	14	1,943	9%	\$109
Medicine	26	1,096	36%	\$1,197
Chemistry	6	1,019	38%	\$545
Technology	8	779	81%	\$211
Education	16	626	35%	\$247
Other Sciences	7	541	7%	\$4,131
Engineering	9	386	64%	\$169
Biology	9	359	79%	\$805
Language & Literature	14	323	97%	\$6
Religion	5	259	23%	\$61
Anthropology	9	246	87%	\$290
Agriculture	6	213	80%	\$68
Zoology	6	213	22%	\$857
Sociology	8	206	100%	\$0
Political Science	10	186	100%	\$0
Library Science	4	181	100%	\$0
Psychology	8	175	91%	\$6
Mathematics	7	160	100%	\$0
Economics	4	110	100%	\$0
Law	3	95	100%	\$0
Media & Communications	4	88	100%	\$0
History	6	74	100%	\$0
Miscellany	3	67	100%	\$0
Arts & Architecture	3	46	50%	\$490
Philosophy	2	9	100%	\$0

# Greece

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	32	1,606			\$125	-86%
Fee	11	541	34%	-42%	\$372	-76%
No-fee	21	1,065	66%	58%		
Biomed	11	595	37%	4%	\$214	-83%
Fee	4	114	19%	-73%	\$1,119	-39%
No-fee	7	481	81%	171%		
STEM	4	438	27%	-33%	\$157	-85%
Fee	2	368	84%	22%	\$186	-88%
No-fee	2	70	16%	-49%		
H&SS	17	573	36%	50%	\$9	-93%
Fee	5	59	10%	-53%	\$85	-85%
No-fee	12	514	90%	15%		

Two-thirds no-fee; rich in H&SS.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	29	30	30	27	25	22
%No-fee	66%	63%	67%	67%	68%	68%
Articles	1,606	1,310	1,190	808	852	706
%No-fee	66%	66%	65%	59%	64%	63%
Change	22.6%	10.1%	47.3%	-5.2%	20.7%	

Strong growth for the last three years.



**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	5	995	63%	\$69
Med.: 60-149	3	263	78%	\$441
Small: 20-59	17	272	61%	\$38
Smallest: 0-19	7	76	89%	\$83

Another case where larger journals cost less per article.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	59	\$116,003	\$1,966
\$600-\$1,399	1	8	\$6,284	\$786
\$200-\$599	2	243	\$54,539	\$224
\$0.01-\$199	7	231	\$24,326	\$105
No fee	21	1,065		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	1	3	4	3
No-fee	1	3	11	2	4
Total	1	4	14	6	7

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	18	733	75%	\$26
Open Access	5	357	0%	\$510
Society/govt	3	282	100%	\$0
Traditional	1	157	100%	\$0
Miscellaneous	5	77	100%	\$0

Universities don't quite publish half of articles.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	5	15.6%	
Grew 25-49.9%	4	12.5%	28.1%
Grew 10-24.99%	5	15.6%	43.8%
Even, $\pm 9.99\%$	9	28.1%	71.9%
Shrank 10-24.99%	2	6.3%	78.1%
Shrank 25-49.99%	4	12.5%	90.6%
Shrank 50%+	3	9.4%	

More growth than shrinkage: 43.8% to 28.1%.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	10	587	82%	\$207
Engineering	2	368	0%	\$186
Sociology	2	261	100%	\$0
Anthropology	2	157	100%	\$0
Earth Sciences	2	70	100%	\$0
Economics	6	53	25%	\$71
History	3	34	100%	\$0
Education	2	29	34%	\$44
Arts & Architecture	1	26	100%	\$0
Language & Literature	1	13	100%	\$0
Biology	1	8	0%	\$786

Except for education, no H&SS journals have fees.

# Ireland

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	16	501			\$907	-1%
Fee	3	269	54%	-8%	\$1,690	8%
No-fee	13	232	46%	11%		
Biomed	5	278	55%	56%	\$1,267	-2%
Fee	2	208	75%	7%	\$1,694	-8%
No-fee	3	70	25%	-16%		
STEM	2	67	13%	-67%	\$1,526	47%
Fee	1	61	91%	32%	\$1,676	11%
No-fee	1	6	9%	-71%		
H&SS	9	156	31%	31%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	9	156	100%	28%		

Mostly fee, mostly biomed.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	14	15	13	11	8	8
%No-fee	79%	80%	85%	91%	88%	100%
Articles	501	396	357	280	197	73
%No-fee	46%	58%	68%	39%	35%	100%
Change	26.5%	10.9%	27.5%	42.1%	169.9%	

Growth every year, strong growth most years.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	155	0%	\$1,700
Med.: 60-149	2	89	31%	\$1,149
Small: 20-59	6	209	75%	\$425
Smallest: 0-19	7	48	100%	\$0

Usual correlation between cost and size.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	3	269	\$454,564	\$1,690
No fee	13	232		

The only fee journals are from Elsevier.

**Starting Date**

	To 1998	2005-10	2011-14	2015-18
Fee	0	0	1	2
No-fee	1	1	6	5
Total	1	1	7	7

Other than one pioneer, nearly all in last few years.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	3	269	0%	\$1,690
Univ/college	8	141	100%	\$0
Miscellaneous	4	85	100%	\$0
Society/govt	1	6	100%	\$0

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	3	18.8%	
Grew 25-49.9%	3	18.8%	37.5%
Grew 10-24.99%	1	6.3%	43.8%
Even, $\pm 9.99\%$	4	25.0%	68.8%
Shrank 10-24.99%	2	12.5%	81.3%
Shrank 25-49.99%	2	12.5%	93.8%
Shrank 50%+	1	6.3%	

Seven journals grew, five shrank.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	5	278	25%	\$1,267
Media & Communications	2	67	100%	\$0
Physics	1	61	0%	\$1,676
Religion	1	32	100%	\$0
Arts & Architecture	1	26	100%	\$0
Economics	1	17	100%	\$0
Education	1	8	100%	\$0
Anthropology	1	6	100%	\$0
Ecology	1	6	100%	\$0
Language & Literature	2	0		

# Italy

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	334	9,628			\$158	-83%
Fee	58	2,106	22%	-62%	\$724	-54%
No-fee	276	7,522	78%	87%		
Biomed	54	1,860	19%	-46%	\$669	-48%
Fee	26	1,200	65%	-8%	\$1,037	-44%
No-fee	28	660	35%	19%		
STEM	52	2,062	21%	-47%	\$105	-90%
Fee	14	462	22%	-67%	\$467	-69%
No-fee	38	1,600	78%	149%		
H&SS	228	5,706	59%	149%	\$12	-91%
Fee	18	444	8%	-65%	\$148	-73%
No-fee	210	5,262	92%	18%		

Predominantly no-fee except for biomed. Mostly H&SS.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	311	320	315	300	277	246
%No-fee	82%	83%	83%	82%	81%	82%
Articles	9,628	9,903	9,314	8,992	8,445	8,057
%No-fee	78%	79%	80%	79%	77%	81%
Change	-2.8%	6.3%	3.6%	6.5%	4.8%	

Down slightly after four years of moderate growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	366	100%	\$0
Large: 150-599	8	1,759	70%	\$551
Med.: 60-149	38	2,298	71%	\$111
Small: 20-59	200	4,515	81%	\$60
Smallest: 0-19	87	690	88%	\$41

Other than the largest journal being no-fee, the usual correlation seems to be in effect: the smaller the journal, the lower the cost per article.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	2	529	\$978,597	\$1,850
\$600-\$1,399	14	313	\$234,534	\$749
\$200-\$599	21	739	\$265,050	\$359
\$0.01-\$199	21	525	\$47,507	\$90
No fee	276	7,522		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	5	22	25	5
No-fee	19	32	82	96	47
Total	20	37	104	121	52

What seems to be a fairly common European pattern: quite a few pioneering OA journals, most growth 2005-2014, trailing off somewhat.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	196	5,371	91%	\$20
Open Access	61	1,549	49%	\$260
Miscellaneous	33	1,333	50%	\$750
Society/govt	34	770	81%	\$23
Traditional	10	605	100%	\$0

Mostly universities.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	43	12.9%	
Grew 25-49.9%	30	9.0%	21.9%
Grew 10-24.99%	19	5.7%	27.5%
Even, $\pm 9.99\%$	89	26.6%	54.2%
Shrank 10-24.99%	43	12.9%	67.1%
Shrank 25-49.99%	60	18.0%	85.0%
Shrank 50%+	50	15.0%	

Much more shrinkage than growth: 45.8% to 27.5%.

**Subject (next page)'**

The only article costs over \$260 are medicine and chemistry—but chemistry's only one small journal.



<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	49	1,781	34%	\$696
Language & Literature	49	1,307	86%	\$12
Law	14	754	100%	\$0
Arts & Architecture	30	723	75%	\$48
Agriculture	11	630	73%	\$124
Philosophy	22	506	100%	\$0
Anthropology	25	501	100%	\$0
Other Sciences	4	420	97%	\$9
History	23	408	86%	\$7
Education	11	296	100%	\$0
Earth Sciences	8	278	83%	\$145
Sociology	10	259	100%	\$0
Ecology	4	170	39%	\$253
Zoology	10	170	85%	\$21
Political Science	7	162	94%	\$66
Economics	12	160	89%	\$13
Psychology	9	148	100%	\$0
Library Science	4	142	100%	\$0
Media & Communications	6	142	100%	\$0
Religion	2	125	100%	\$0
Technology	4	118	65%	\$16
Mathematics	7	115	87%	\$9
Engineering	1	87	100%	\$0
Biology	5	79	76%	\$49
Miscellany	4	73	100%	\$0
Chemistry	1	46	0%	\$954
Computer Science	2	28	100%	\$0

# Netherlands

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	213	17,093			\$1,284	41%
Fee	103	10,708	63%	8%	\$2,050	31%
No-fee	110	6,385	37%	-11%		
Biomed	89	9,291	54%	53%	\$1,938	49%
Fee	64	7,552	81%	16%	\$2,384	29%
No-fee	25	1,739	19%	-37%		
STEM	61	5,672	33%	-18%	\$634	-39%
Fee	29	2,836	50%	-27%	\$1,268	-16%
No-fee	32	2,836	50%	60%		
H&SS	63	2,130	12%	-48%	\$164	33%
Fee	10	320	15%	-32%	\$1,089	95%
No-fee	53	1,810	85%	9%		

Worth noting: 88% of articles are in Elsevier journals.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	195	201	201	178	149	106
%No-fee	51%	51%	52%	53%	58%	63%
Articles	17,093	15,129	13,254	11,464	8,976	5,445
%No-fee	37%	41%	46%	47%	56%	53%
Change	13.0%	14.1%	15.6%	27.7%	64.8%	

Solid growth every year, shifting toward more fees over time.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	5	4,081	42%	\$2,170
Large: 150-599	30	5,817	17%	\$1,435
Med.: 60-149	54	4,042	46%	\$748
Small: 20-59	99	2,932	58%	\$552
Smallest: 0-19	25	221	63%	\$473

The common cost/volume correlation, all at fairly high costs.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	53	6,054	\$18,651,079	\$3,081
\$600-\$1,399	30	2,940	\$2,479,821	\$843
\$200-\$599	19	1,684	\$816,698	\$485
\$0.01-\$199	1	30	\$1,541	\$51
No fee	110	6,385		

Breaking the \$3,000-per-article mark for a large group of journals.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	0	7	51	44
No-fee	7	6	20	50	27
Total	8	6	27	101	71

Most growth in 2011-2014, but continuing rapid introductions.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Traditional	170	15,882	34%	\$1,372
Univ/college	34	896	89%	\$118
Open Access	3	166	64%	\$338
Society/govt	4	106	100%	\$0
Miscellaneous	2	43	100%	\$0

Traditional publishers account for more than 90% of articles, and as already noted, most (but not quite all) of that is Elsevier.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	58	27.2%	
Grew 25-49.9%	28	13.1%	40.4%
Grew 10-24.99%	32	15.0%	55.4%
Even, $\pm 9.99\%$	50	23.5%	78.9%
Shrank 10-24.99%	16	7.5%	86.4%
Shrank 25-49.99%	9	4.2%	90.6%
Shrank 50%+	20	9.4%	

Much more growth than shrinkage: 55.4% to 21.1%.

**Subject (next page)**

Medicine has by far the most articles, but biology has by far the highest cost per article, partly because there are no-fee medical journals but not no-fee biology journals. At the other extreme, most of H&SS subjects are entirely no-fee journals.

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	77	6,810	26%	\$1,186
Biology	12	2,481	0%	\$4,002
Physics	6	2,065	62%	\$333
Computer Science	6	707	16%	\$1,945
Engineering	7	657	39%	\$287
Ecology	7	452	44%	\$951
Earth Sciences	8	438	83%	\$308
Technology	7	395	38%	\$727
Sociology	6	354	100%	\$0
History	7	323	100%	\$0
Arts & Architecture	9	317	57%	\$414
Other Sciences	4	279	0%	\$561
Agriculture	7	266	58%	\$610
Political Science	5	231	78%	\$194
Zoology	4	197	55%	\$826
Economics	8	164	84%	\$55
Religion	3	158	100%	\$0
Media & Communications	4	148	61%	\$751
Chemistry	3	137	94%	\$79
Anthropology	4	126	70%	\$356
Language & Literature	9	107	88%	\$68
Mathematics	2	79	100%	\$0
Miscellany	2	79	100%	\$0
Library Science	2	73	100%	\$0
Law	2	25	100%	\$0
Philosophy	1	18	100%	\$0
Education	1	7	100%	\$0

# Norway

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	89	1,437			\$92	-90%
Fee	8	126	9%	-85%	\$1,053	-33%
No-fee	81	1,311	91%	118%		
Biomed	6	101	7%	-80%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	6	101	100%	235%		
STEM	7	70	5%	-88%	\$63	-94%
Fee	1	7	10%	-85%	\$628	-58%
No-fee	6	63	90%	189%		
H&SS	76	1,266	88%	270%	\$101	-18%
Fee	7	119	9%	-57%	\$1,078	93%
No-fee	69	1,147	91%	16%		

Predominantly no-fee, but the few H&SS fees are on the high side.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	84	83	67	64	59	50
%No-fee	92%	90%	90%	91%	93%	94%
Articles	1,437	1,362	1,098	958	1,056	965
%No-fee	91%	91%	91%	93%	95%	97%
Change	5.5%	24.0%	14.6%	-9.3%	9.4%	

Three years of growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	2	33	100%	\$0
Small: 20-59	46	1,024	93%	\$86
Smallest: 0-19	41	380	86%	\$117

The inverse of the usual correlation: smaller journals have *higher* costs.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	25	\$36,176	\$1,447
\$600-\$1,399	6	101	\$96,499	\$955
\$200-\$599	1	0	\$0	
No fee	81	1,311		

No nominal-fee journals—indeed, no articles below \$600.

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	0	1	1	6
No-fee	4	2	23	22	30
Total	4	2	24	23	36

Highest growth period is 2015-2018, which is quite unusual.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	67	1,056	95%	\$35
Open Access	8	148	61%	\$554
Traditional	6	116	84%	\$114
Society/govt	4	77	100%	\$0
Miscellaneous	4	40	100%	\$0

### Growth and Shrinkage

Change 2017-18	Count	Percent	Cum%
Grew 50%+	20	22.5%	
Grew 25-49.9%	10	11.2%	33.7%
Grew 10-24.99%	9	10.1%	43.8%
Even, $\pm 9.99\%$	18	20.2%	64.0%
Shrank 10-24.99%	8	9.0%	73.0%
Shrank 25-49.99%	13	14.6%	87.6%
Shrank 50%+	11	12.4%	

More growth than shrinkage, 43.8% to 36%.

### Subject

Subject	Jour.	Art.	%No-fee	\$/article
Education	14	303	90%	\$89
Sociology	9	169	100%	\$0
Anthropology	7	151	100%	\$0
Language & Literature	14	145	100%	\$0
Law	6	104	76%	\$348
Medicine	6	101	100%	\$0
Arts & Architecture	5	80	71%	\$399
Political Science	4	72	100%	\$0
Religion	3	61	59%	\$332
History	3	56	100%	\$0
Media & Communications	3	54	100%	\$0
Zoology	5	42	100%	\$0
Philosophy	2	39	56%	\$328
Computer Science	1	21	100%	\$0
Library Science	3	15	100%	\$0
Miscellany	2	13	100%	\$0
Other Sciences	1	7	0%	\$628
Psychology	1	4	100%	\$0

The five most common subjects are all in H&SS—as, for that matter, are ten of the eleven.



# Portugal

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	87	2,870			\$140	-85%
Fee	12	807	28%	-52%	\$497	-68%
No-fee	75	2,063	72%	72%		
Biomed	14	610	21%	-40%	\$2	-100%
Fee	1	62	10%	-86%	\$17	-99%
No-fee	13	548	90%	201%		
STEM	10	326	11%	-72%	\$62	-94%
Fee	1	121	37%	-46%	\$168	-89%
No-fee	9	205	63%	102%		
H&SS	63	1,934	67%	183%	\$196	60%
Fee	10	624	32%	46%	\$609	9%
No-fee	53	1,310	68%	-13%		

Mostly H&SS, mostly no-fee.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	82	87	85	82	75	69
%No-fee	85%	86%	86%	87%	87%	87%
Articles	2,870	2,863	2,450	2,304	1,999	1,668
%No-fee	72%	75%	77%	78%	79%	78%
Change	0.2%	16.9%	6.3%	15.3%	19.8%	

Flat after four years of growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	179	100%	\$0
Med.: 60-149	17	1,175	45%	\$318
Small: 20-59	51	1,362	89%	\$20
Smallest: 0-19	18	154	100%	\$0

Another atypical case, with all fees in medium and small journals.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	4	325	\$328,247	\$1,010
\$200-\$599	3	144	\$34,906	\$242
\$0.01-\$199	5	338	\$38,040	\$113
No fee	75	2,063		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	0	1	4	5	2
No-fee	9	8	23	26	9
Total	9	9	27	31	11

Fairly common for Europe: good early on, most growth 2005-2014.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	54	1,589	84%	\$28
Society/govt	18	630	70%	\$42
Open Access	6	412	14%	\$801
Miscellaneous	9	239	100%	\$0

The highest costs are from OA publishers (mostly Cogitatio)

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	10	11.5%	
Grew 25-49.9%	6	6.9%	18.4%
Grew 10-24.99%	17	19.5%	37.9%
Even, $\pm 9.99\%$	21	24.1%	62.1%
Shrank 10-24.99%	15	17.2%	79.3%
Shrank 25-49.99%	8	9.2%	88.5%
Shrank 50%+	10	11.5%	

Equal growth and shrinkage, 33 journals each.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	14	610	90%	\$2
Media & Communications	9	411	83%	\$174
Sociology	10	392	56%	\$443
Arts & Architecture	9	261	33%	\$140
Anthropology	6	178	70%	\$50
Language & Literature	6	150	100%	\$0
Earth Sciences	4	125	100%	\$0
Agriculture	1	121	0%	\$168
Political Science	3	115	29%	\$720
Education	6	106	100%	\$0
History	4	90	100%	\$0
Computer Science	4	80	100%	\$0
Psychology	2	78	9%	\$77
Library Science	3	63	100%	\$0
Miscellany	2	42	100%	\$0
Economics	2	29	100%	\$0
Law	1	19	100%	\$0
Ecology	1	0		

Political Science has the highest cost per article—and medicine's very low, with a single fee journal at very low fees.

# Spain

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	674	19,194			\$68	-93%
Fee	30	1,988	10%	-82%	\$656	-58%
No-fee	644	17,206	90%	114%		
Biomed	58	3,463	18%	-49%	\$87	-93%
Fee	5	384	11%	-84%	\$788	-57%
No-fee	53	3,079	89%	198%		
STEM	73	2,041	11%	-74%	\$111	-89%
Fee	9	398	20%	-72%	\$571	-62%
No-fee	64	1,643	80%	158%		
H&SS	543	13,690	71%	200%	\$57	-54%
Fee	16	1,206	9%	-60%	\$643	15%
No-fee	527	12,484	91%	17%		

Mostly H&SS, predominantly no-fee in every area.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	631	653	652	632	612	571
%No-fee	95%	96%	95%	96%	96%	96%
Articles	19,194	19,442	18,191	17,007	15,371	14,361
%No-fee	90%	92%	91%	90%	90%	90%
Change	-1.3%	6.9%	7.0%	10.6%	7.0%	

Tiny decline after four straight years of growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	12	2,058	66%	\$377
Med.: 60-149	81	5,115	82%	\$75
Small: 20-59	407	10,263	97%	\$14
Smallest: 0-19	174	1,758	99%	\$2

The usual cost/volume correlation, albeit at relatively low costs.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	4	474	\$719,192	\$1,517
\$600-\$1,399	3	334	\$281,771	\$844
\$200-\$599	12	823	\$273,842	\$333
\$0.01-\$199	11	357	\$29,678	\$83
No fee	644	17,206		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	3	6	7	11	3
No-fee	143	98	156	184	63
Total	146	104	163	195	66

Very strong early on and continuing through 2014.

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	71	10.5%	
Grew 25-49.9%	62	9.2%	19.7%
Grew 10-24.99%	76	11.3%	31.0%
Even, $\pm$ 9.99%	227	33.7%	64.7%
Shrank 10-24.99%	91	13.5%	78.2%
Shrank 25-49.99%	70	10.4%	88.6%
Shrank 50%+	77	11.4%	

More shrinkage than growth, 35.3% to 31.0%.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Univ/college	483	12,428	94%	\$10
Traditional	32	2,922	72%	\$314
Society/govt	84	2,238	89%	\$79
Miscellaneous	38	885	94%	\$19
Open Access	37	721	74%	\$98

Universities predominate.

**Subject (next page)**

No subjects with \$500 or more average cost per article. Eleven of the twelve most active subjects are in H&SS.

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	55	3,438	89%	\$88
Education	68	1,829	98%	\$7
Language & Literature	88	1,680	100%	\$0
Anthropology	62	1,620	80%	\$48
History	52	1,318	100%	\$0
Arts & Architecture	50	1,300	73%	\$412
Sociology	46	1,157	92%	\$6
Media & Communications	35	1,141	89%	\$12
Law	28	838	96%	\$1
Political Science	24	747	100%	\$0
Philosophy	23	723	100%	\$0
Earth Sciences	24	547	82%	\$175
Psychology	22	536	62%	\$218
Economics	27	392	92%	\$28
Agriculture	9	297	88%	\$9
Ecology	8	293	69%	\$149
Zoology	7	223	100%	\$0
Other Sciences	5	177	100%	\$0
Library Science	10	164	100%	\$0
Computer Science	7	154	100%	\$0
Technology	4	153	20%	\$448
Miscellany	6	141	100%	\$0
Religion	2	104	100%	\$0
Mathematics	5	100	100%	\$0
Engineering	4	97	48%	\$171
Biology	3	25	100%	\$0

# Sweden

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	38	1,204			\$784	-14%
Fee	6	539	45%	-23%	\$1,751	12%
No-fee	32	665	55%	32%		
Biomed	6	671	56%	57%	\$1,146	-12%
Fee	2	427	64%	-9%	\$1,800	-3%
No-fee	4	244	36%	22%		
STEM	5	97	8%	-80%	\$1,615	55%
Fee	3	82	85%	23%	\$1,910	27%
No-fee	2	15	15%	-50%		
H&SS	27	436	36%	52%	\$43	-65%
Fee	1	30	7%	-69%	\$619	11%
No-fee	26	406	93%	19%		

Mostly biomed with fees, almost no STEM; H&SS nearly all no-fee.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	35	34	36	34	33	29
%No-fee	83%	82%	83%	82%	82%	83%
Articles	1,204	1,356	1,513	1,395	1,159	1,001
%No-fee	55%	57%	58%	57%	68%	63%
Change	-11.2%	-10.4%	8.5%	20.4%	15.8%	

Two years of decline after three years of growth.



**Article Volume**

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	628	32%	\$1,224
Med.: 60-149	5	151	62%	\$956
Small: 20-59	14	314	84%	\$95
Smallest: 0-19	16	111	96%	\$9

The common correlation again: larger journals, higher costs per article.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	3	485	\$913,093	\$1,883
\$600-\$1,399	1	30	\$18,577	\$619
\$200-\$599	2	24	\$12,240	\$510
No fee	32	665		

**Starting Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	1	2	1	2	0
No-fee	3	4	11	9	5
Total	4	6	12	11	5

Fairly typical Western European pattern.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Society/govt	5	670	36%	\$1,147
Univ/college	28	431	87%	\$72
Open Access	3	99	41%	\$1,459
Miscellaneous	2	4	100%	\$0

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	12	31.6%	
Grew 25-49.9%	2	5.3%	36.8%
Grew 10-24.99%	1	2.6%	39.5%
Even, $\pm 9.99\%$	7	18.4%	57.9%
Shrank 10-24.99%	5	13.2%	71.1%
Shrank 25-49.99%	8	21.1%	92.1%
Shrank 50%+	3	7.9%	

Fifteen journals grew, 16 shrank.

**Subject**

<b>Subject</b>	<b>Jour.</b>	<b>Art.</b>	<b>%No-fee</b>	<b>\$/article</b>
Medicine	6	671	36%	\$1,146
Language & Literature	4	81	100%	\$0
Education	5	75	100%	\$0
Agriculture	2	67	13%	\$2,156
Miscellany	1	62	100%	\$0
Sociology	3	47	36%	\$395
Anthropology	2	43	100%	\$0
History	2	34	100%	\$0
Economics	3	28	100%	\$0
Political Science	2	23	100%	\$0
Zoology	1	20	0%	\$563
Media & Communications	1	19	100%	\$0
Arts & Architecture	2	14	100%	\$0
Religion	2	10	100%	\$0
Other Sciences	1	6	100%	\$0
Earth Sciences	1	4	0%	\$247

Notable mostly for one quite pricey agriculture (really food/nutrition) journal (the other agriculture journal is no-fee).

# Switzerland

Second largest in articles, second highest average cost.

	Jrn.	Art.	Art%	Rel%	\$/Art	Rel%
All	290	97,620			\$1,803	98%
Fee	220	93,074	95%	64%	\$1,891	21%
No-fee	70	4,546	5%	-89%		
Biomed	113	31,674	32%	-9%	\$2,299	77%
Fee	91	30,338	96%	37%	\$2,401	30%
No-fee	22	1,336	4%	-86%		
STEM	130	58,678	60%	48%	\$1,600	54%
Fee	107	57,413	98%	42%	\$1,636	8%
No-fee	23	1,265	2%	-93%		
H&SS	47	7,268	7%	-69%	\$1,282	942%
Fee	22	5,323	73%	232%	\$1,750	214%
No-fee	25	1,945	27%	-66%		

Very little H&SS, almost all fees, and high ones at that.

## Articles and Journals by Year

	2018	2017	2016	2015	2014	2013
Journals	283	282	264	240	223	192
%No-fee	23%	23%	19%	14%	14%	15%
Articles	97,620	60,406	41,806	33,073	26,694	19,501
%No-fee	5%	6%	5%	6%	8%	11%
Change	61.6%	44.5%	26.4%	23.9%	36.9%	

Growth every year, and increasingly rapid growth.

**Article Volume**

	Journals	Articles	%No-fee	\$/article
Largest: 600+	39	67,901	2%	\$2,084
Large: 150-599	59	17,253	2%	\$1,562
Med.: 60-149	105	9,807	15%	\$677
Small: 20-59	72	2,569	46%	\$373
Smallest: 0-19	15	90	72%	\$96

The usual cost/volume correlation, and most articles in largest journals.

**Fees and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	82	78,119	\$166,126,650	\$2,127
\$600-\$1,399	54	7,112	\$6,530,424	\$918
\$200-\$599	84	7,843	\$3,388,977	\$432
No fee	70	4,546		

Predominantly high-fee.

**Starring Date**

	To 1998	99-2004	2005-10	2011-14	2015-18
Fee	2	7	58	125	28
No-fee	3	7	7	17	36
Total	5	14	65	142	64

The gold rush was primarily 2011-2014.

**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	249	94,774	4%	\$1,803
Traditional	21	2,447	7%	\$2,073
Univ/college	12	152	74%	\$197
Society/govt	4	131	57%	\$321
Miscellaneous	4	116	100%	\$0

Mostly MDPI and Frontiers, with very few no-fee articles.

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	159	54.8%	
Grew 25-49.9%	45	15.5%	70.3%
Grew 10-24.99%	22	7.6%	77.9%
Even, $\pm 9.99\%$	23	7.9%	85.9%
Shrank 10-24.99%	17	5.9%	91.7%
Shrank 25-49.99%	14	4.8%	96.6%
Shrank 50%+	10	3.4%	

An extreme case: more than half of journals grew by half or more from 2017 to 2018, and only 14.1% shrank.

**Subject (next page)**

Medicine's by far the biggest, but psychology has the highest average cost per article.

Subject	Jour.	Art.	%No-fee	\$/article
Medicine	85	21,401	5%	\$2,284
Chemistry	22	12,404	2%	\$1,655
Ecology	11	10,628	1%	\$1,678
Biology	28	10,273	2%	\$2,332
Physics	18	8,360	3%	\$1,516
Agriculture	13	6,008	1%	\$2,011
Technology	13	5,411	5%	\$1,615
Earth Sciences	15	5,156	1%	\$1,431
Engineering	9	4,686	1%	\$1,630
Other Sciences	7	3,374	5%	\$1,352
Psychology	1	2,732	0%	\$2,950
Miscellany	6	1,718	66%	\$128
Zoology	5	925	5%	\$1,205
Mathematics	8	908	8%	\$716
Computer Science	9	818	0%	\$856
Economics	7	619	16%	\$328
Religion	3	452	7%	\$515
Anthropology	4	384	54%	\$162
Education	3	381	14%	\$591
Sociology	7	342	16%	\$363
Arts & Architecture	2	286	36%	\$418
Language & Literature	4	95	100%	\$0
Law	4	81	53%	\$165
Media & Communications	1	58	0%	\$950
Library Science	2	49	100%	\$0
Philosophy	1	45	100%	\$0
Political Science	1	17	100%	\$0
History	1	9	100%	\$0

# United Kingdom

The biggest and most expensive.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	1,438	146,986			\$1,934	112%
Fee	1,162	138,762	94%	62%	\$2,048	31%
No-fee	276	8,224	6%	-87%		
Biomed	826	79,651	54%	53%	\$2,050	58%
Fee	755	77,110	97%	38%	\$2,117	15%
No-fee	71	2,541	3%	-89%		
STEM	365	60,440	41%	1%	\$1,921	85%
Fee	312	57,681	95%	39%	\$2,013	33%
No-fee	53	2,759	5%	-85%		
H&SS	247	6,895	5%	-80%	\$703	472%
Fee	95	3,971	58%	161%	\$1,221	119%
No-fee	152	2,924	42%	-46%		

Mostly biomed, very little H&SS—and even that's mostly high-fee.

## Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	1,392	1,372	1,296	1,201	1,087	970
%No-fee	18%	18%	18%	17%	16%	15%
Articles	146,986	139,075	121,027	111,996	103,810	81,122
%No-fee	6%	5%	6%	5%	5%	5%
Change	5.7%	14.9%	8.1%	7.9%	28.0%	

Growing every year, if not as rapidly as Switzerland.

**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Largest: 600+	49	63,784	2%	\$2,168
Large: 150-599	190	42,772	1%	\$2,056
Med.: 60-149	300	22,422	9%	\$1,610
Small: 20-59	601	15,532	23%	\$1,268
Smallest: 0-19	298	2,476	38%	\$886

The usual correlation, but flattened somewhat since even large journals (not just largest) journals average more than \$2,000 per article and only the smallest are under \$1,000.

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	710	111,817	\$258,056,252	\$2,308
\$600-\$1,399	367	22,857	\$24,370,825	\$1,066
\$200-\$599	79	3,625	\$1,745,143	\$481
\$0.01-\$199	6	463	\$63,303	\$137
No fee	276	8,224		

Almost 90% of fees go to very expensive journals.

**Starting Date**

	<b>To 1998</b>	<b>99-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	31	140	355	359	277
No-fee	15	16	52	86	107
Total	46	156	407	445	384

After a relatively slow start, the gold rush took hold in 2005-2010 and hasn't slowed down all that much.



**Publisher Category**

Category	Journals	Articles	%No-fee	\$/article
Open Access	851	71,661	4%	\$1,886
Traditional	385	53,058	3%	\$2,258
Univ/college	144	11,061	18%	\$1,628
Society/govt	35	9,243	19%	\$829
Miscellaneous	23	1,963	17%	\$1,826

OA publishers do more, but traditional publishers charge even more per article—and university journals aren't cheap. Note that this calculation has BMC/BioMedCentral and SpringerOpen as OA publishers; including them as part of SpringerNature and treating that combination as a traditional publisher would shift these figures considerably, adding more than 41,000 to the article count but actually *lowering* the average cost per article to about \$2,060.

**Growth and Shrinkage**

Change 2017-18	Count	Percent	Cum%
Grew 50%+	320	22.3%	
Grew 25-49.9%	182	12.7%	34.9%
Grew 10-24.99%	178	12.4%	47.3%
Even, $\pm 9.99\%$	305	21.2%	68.5%
Shrank 10-24.99%	152	10.6%	79.1%
Shrank 25-49.99%	178	12.4%	91.4%
Shrank 50%+	123	8.6%	

Not as dramatic as Switzerland, but still much more growth than shrinkage, 47.3% to 21.5%.

**Subject (next page)**

Medicine, other sciences (including megajournals) and biology: the only subject with more than \$2,000 average cost per article, but also two-thirds of all UK OA publishing.

Subject	Jour.	Art.	%No-fee	\$/article
Medicine	707	65,927	4%	\$2,042
Other Sciences	19	27,624	0%	\$2,471
Biology	119	13,724	1%	\$2,087
Chemistry	24	7,876	16%	\$873
Physics	35	4,304	5%	\$1,740
Mathematics	34	4,068	2%	\$1,731
Engineering	42	3,674	7%	\$1,607
Ecology	37	2,699	7%	\$1,731
Agriculture	37	2,453	6%	\$1,770
Computer Science	47	2,052	3%	\$1,391
Zoology	34	1,972	11%	\$1,342
Technology	22	1,874	6%	\$1,708
Earth Sciences	34	1,844	4%	\$1,538
Sociology	25	1,749	20%	\$977
Education	34	839	56%	\$620
Economics	35	820	44%	\$708
Language & Literature	28	510	46%	\$357
Psychology	14	454	17%	\$1,047
Miscellany	9	451	33%	\$880
Arts & Architecture	19	387	65%	\$448
Anthropology	20	308	24%	\$1,423
Law	14	298	74%	\$246
Library Science	11	289	94%	\$22
Media & Communications	7	232	48%	\$159
History	7	171	95%	\$21
Political Science	14	168	77%	\$120
Philosophy	7	153	29%	\$1,356
Religion	3	66	33%	\$371

## Other Western European Countries

Four countries, seventeen journals.

	<b>Jrn.</b>	<b>Art.</b>	<b>Art%</b>	<b>Rel%</b>	<b>\$/Art</b>	<b>Rel%</b>
All	17	490			\$12	-99%
Fee	5	119	24%	-58%	\$50	-97%
No-fee	12	371	76%	81%		
Biomed	2	216	44%	24%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	2	216	100%	235%		
STEM	7	161	33%	-19%	\$37	-96%
Fee	5	119	74%	7%	\$50	-97%
No-fee	2	42	26%	-16%		
H&SS	8	113	23%	-3%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	8	113	100%	28%		

### Articles and Journals by Year

	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Journals	17	17	13	9	8	6
%No-fee	71%	71%	77%	100%	100%	100%
Articles	490	479	513	386	431	378
%No-fee	76%	74%	95%	100%	100%	100%
Change	2.3%	-6.6%	32.9%	-10.4%	14.0%	

**Article Volume**

	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Large: 150-599	1	210	100%	\$0
Med.: 60-149	2	26	100%	\$0
Small: 20-59	9	207	43%	\$29
Smallest: 0-19	5	47	100%	\$0

**Fees and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$0.01-\$199	5	119	\$5,950	\$50
No fee	12	371		

**Starting Date**

	<b>1999-2004</b>	<b>2005-10</b>	<b>2011-14</b>	<b>2015-18</b>
Fee	0	0	0	5
No-fee	1	6	1	4
Total	1	6	1	9

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>	<b>%No-fee</b>	<b>\$/article</b>
Society/govt	2	231	100%	\$0
Open Access	6	132	10%	\$45
Univ/college	8	117	100%	\$0
Miscellaneous	1	10	100%	\$0

**Growth and Shrinkage**

<b>Change 2017-18</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	4	23.5%	
Grew 25-49.9%	2	11.8%	35.3%
Grew 10-24.99%	2	11.8%	47.1%
Even, $\pm$ 9.99%	4	23.5%	70.6%
Shrank 10-24.99%	1	5.9%	76.5%
Shrank 25-49.99%	3	17.6%	94.1%
Shrank 50%+	1	5.9%	

## Subject

Change 2017-18	Count	Percent	Cum%
Grew 50%+	4	23.5%	
Grew 25-49.9%	2	11.8%	35.3%
Grew 10-24.99%	2	11.8%	47.1%
Even, $\pm 9.99\%$	4	23.5%	70.6%
Shrank 10-24.99%	1	5.9%	76.5%
Shrank 25-49.99%	3	17.6%	94.1%
Shrank 50%+	1	5.9%	

## Country Summaries

### Azerbaijan

Six journals (five of them with \$50 fees), 132 articles in 2018.

### Iceland

Six no-fee journals, 291 articles in 2018.

### Luxembourg

Three no-fee journals, 38 articles in 2017

### Malta

Two no-fee journals, 29 articles in 2017.

# Groups and Costs: A Thought Experiment

It's hard not to be struck by the dramatic differences from country to country (and region to region) as to what percentage of articles involves fees and how big those fees are.

The thought experiment: if all current scholarly journals were replaced by OA journals (not necessarily from the same publishers) would the resulting economics free up money for libraries to restore some of their shriveled non-serials budgets, or would we be even worse off?

There's no easy answer, and wouldn't be even if I had access to all the information needed. But I can offer a few scenarios with results.

## How Many Journals?

As a common ground for all four scenarios (a dozen projections), I'm using a SWAG as to how many refereed articles are published each year and how they fall into biomed, STEM and H&SS segments. I've seen enough estimates for the first number to suggest that "more than 2.5 million" is one answer, but may be very low on H&SS articles. I'm using three million as a figure, especially since article counts keep escalating.

As for division into segments, I'm suggesting (with little evidence) that the overall breakdown isn't too much different than the breakdown for OA journals. With a little tweaking, I come out with 35% biomed, 40% STEM and 25% H&SS.

That yields estimates of 1.05 million biomed articles, 1.2 million STEM articles (including megajournals) and 750,000 H&SS articles.

## Three Paths for a General Approach

Then, looking at a group of countries, I see three plausible paths toward overall cost/support for journals within a segment:

- **Low:** Cost per article is about the same as it is now across all OA articles within a segment.
- **All Fee:** All journals want support at the level of fee articles in the current environment.
- **Race to the Top:** Publishers decide that all journals should be as well supported as, say, the average of the three most expensive active OA journals in the segment.

None of these say anything about actual, justifiable costs (leaving out profit and other aspects of current corporate publishing). I've seen analyses suggesting that \$200 to \$400 is a rational figure, which would mean \$600 million to \$1.2 billion overall costs—an enormous improvement over today's \$10 billion or so.

I'll suggest \$5 to \$6 billion as a sustainability target, but won't attempt to justify it.

## The West and Everybody Else

The first two scenarios take OA journals and divide them into two groups: **The West**, here defined as Western Europe and the United States, and **Everybody Else**.

**The West: Partial Key Facts**

	<b>Journals</b>	<b>Articles</b>	<b>\$/Art</b>
All	4,485	425,690	\$1,449
Fee	1,999	326,538	\$1,889
No-fee	2,486	99,152	
Biomed	1,476	161,852	\$1,910
Fee	1,141	143,712	\$2,151
No-fee	335	18,140	
STEM	1,048	208,440	\$1,395
Fee	631	168,692	\$1,724
No-fee	417	39,748	
H&SS	1,961	55,398	\$304
Fee	227	14,134	\$1,192
No-fee	1,734	41,264	

**The West: Cost of Three Models**

- **Low:** \$3,907,572,143. Clearly sustainable.
- **All Fee:** \$5,221,155,072. Marginally sustainable.
- **Race to the Top:** \$13,747,650,000. Not sustainable.



**Everybody Else: Partial Key Facts**

	<b>Journals</b>	<b>Articles</b>	<b>\$/Art</b>
All	7,695	285,980	\$114
Fee	1,507	87,288	\$374
No-fee	6,188	198,692	
Biomed	1,586	90,990	\$205
Fee	378	33,575	\$555
No-fee	1,208	57,415	
STEM	2,133	81,082	\$124
Fee	572	30,540	\$329
No-fee	1,561	50,542	
H&SS	3,976	113,908	\$35
Fee	557	23,173	\$171
No-fee	3,419	90,735	

**Everybody Else: Cost of Three Models**

- **Low:** \$390,016,549. Less than is now being paid in OA fees alone.
- **All Fee:** \$1,106,356,968. Clearly sustainable.
- **Race to the Top:** \$7,248,600,000. Perhaps not sustainable but better than \$13.7 billion.

**Three and Three**

The second two scenarios take the three highest-cost countries in Western Europe as one group, and the leading OA country in three other regions as the other group. Call the first NethSwiUK and the second BrazIndIran.

**NethSwiUK: Partial Key Facts**

	<b>Journals</b>	<b>Articles</b>	<b>\$/Art</b>
All	1,941	261,699	\$1,843
Fee	1,485	242,544	\$1,988
No-fee	456	19,155	
Biomed	1,028	120,616	\$2,107
Fee	910	115,000	\$2,210
No-fee	118	5,616	
STEM	556	124,790	\$1,712
Fee	448	117,930	\$1,811
No-fee	108	6,860	
H&SS	357	16,293	\$891
Fee	127	9,614	\$1,509
No-fee	230	6,679	

**NethSwiUK: Cost of Three Models**

- **Low:** \$4,934,135,690. Marginally sustainable.
- **All Fee:** \$5,625,664,494. A little less sustainable.
- **Race to the Top:** \$13,200,000,000. Unsustainable.

The Low and All Fee models are nearly identical because there isn't much no-fee publishing in NethSwiUK: 19,155 articles out of 261,699 total articles, or about 7%.

**BrazIndIran: Partial Key Facts**

	<b>Journals</b>	<b>Articles</b>	<b>\$/Art</b>
All	3,016	99,757	\$48
Fee	626	25,005	\$191
No-fee	2,390	74,752	
Biomed	546	26,614	\$98
Fee	124	8,075	\$323
No-fee	422	18,539	
STEM	760	26,108	\$66
Fee	239	10,433	\$165
No-fee	521	15,675	
H&SS	1,710	47,035	\$10
Fee	263	6,497	\$69
No-fee	1,447	40,538	

**BrazIndIran: Cost of Three Models**

- **Low:** \$189,265,600. A fraction of what's being spent on fees.
- **All Fee:** \$589,019,869. Still under today's total fee load.
- **Race to the Top:** \$2,614,950,000. Clearly sustainable.

**Comments**

If I'm saying anything here, it's that we should be looking long and hard at what today's large-scale low-cost OA publishers are doing right, and see if it's worth emulating.

## Appendix: The Heatmap

The world map on the front cover is a heatmap generated at [GunnMap 2](#) (thanks!). The number in the legend is 2018 articles per 100,000 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 official 2018 estimates as noted in the article). Some countries may not appear: I did not attempt to verify each country on the heatmap.

Country	Articles	Population	Art./100K
Albania	94	2,862,427	3.284
Algeria	1,093	43,378,027	2.520
Angola	18	30,175,553	0.060
Argentina	4,295	44,938,712	9.557
Armenia	35	2,969,200	1.179
Australia	4,236	25,361,300	16.703
Austria	1,051	8,859,992	11.862
Azerbaijan	132	9,981,457	1.322
Bahamas	7	385,340	1.817
Bangladesh	669	166,560,000	0.402
Barbados	43	287,010	14.982
Belarus	573	9,465,300	6.054
Belgium	594	11,463,692	5.182
Bolivia	71	11,469,896	0.619
Bosnia and Herzegovina	475	3,502,550	13.562
Brazil	56,512	209,911,000	26.922

Country	Articles	Population	Art./100K
Bulgaria	2,361	7,000,039	33.728
Cameroon	61	24,348,251	0.251
Canada	4,925	37,478,300	13.141
Chile	2,594	19,107,216	13.576
China	8,589	1,397,350,000	0.615
Colombia	7,936	45,500,000	17.442
Costa Rica	1,367	5,058,007	27.026
Croatia	3,132	4,105,493	76.288
Cuba	3,682	11,221,060	32.813
Cyprus	181	864,200	20.944
Czech Republic	2,569	10,649,800	24.123
Dem. Rep. Congo	50	86,727,573	0.058
Denmark	347	5,811,413	5.971
Ecuador	1,437	17,239,100	8.336
Egypt	3,338	98,715,400	3.381
El Salvador	49	6,704,864	0.731
Estonia	392	1,324,820	29.589
Ethiopia	99	98,665,000	0.100
Finland	746	5,518,393	13.518
France	22,697	66,992,000	33.880
Georgia	166	3,723,500	4.458
Germany	18,887	82,979,100	22.761
Ghana	67	30,280,811	0.221
Greece	1,606	10,741,165	14.952
Guam	8	172,400	4.640
Guatemala	43	17,679,735	0.243
Hong Kong	1,086	7,482,500	14.514
Hungary	1,032	9,771,000	10.562
Iceland	291	358,780	81.108
India	18,624	1,347,260,000	1.382
Indonesia	27,425	268,074,600	10.230
Iran	15,820	82,452,600	19.187

Country	Articles	Population	Art./100K
Iraq	864	39,127,900	2.208
Ireland	501	4,857,000	10.315
Israel	57	9,029,630	0.631
Italy	9,628	60,375,749	15.947
Jamaica	13	2,726,667	0.477
Japan	1,020	126,230,000	0.808
Jordan	233	10,416,300	2.237
Kazakhstan	95	18,476,120	0.514
Kenya	260	52,214,791	0.498
Kuwait	52	4,420,110	1.176
Kyrgyzstan	51	6,389,500	0.798
Latvia	510	1,916,200	26.615
Lebanon	16	6,065,922	0.264
Libya	125	6,569,864	1.903
Lithuania	1,841	2,790,472	65.975
Luxembourg	38	613,894	6.190
Macedonia	553	2,075,301	26.647
Malaysia	2,192	32,726,700	6.698
Mali	23	19,973,000	0.115
Malta	29	475,701	6.096
Mauritius	120	1,265,577	9.482
Mexico	4,049	126,577,691	3.199
Moldova	1,033	3,547,539	29.119
Mongolia	118	3,257,815	3.622
Montenegro	410	622,359	65.878
Morocco	299	35,020,500	0.854
Nepal	452	29,609,623	1.527
Netherlands	17,093	17,318,400	98.698
New Zealand	202	4,963,940	4.069
Nicaragua	77	6,393,824	1.204
Nigeria	613	200,962,417	0.305
Norway	1,437	5,328,212	26.970

Country	Articles	Population	Art./100K
Oman	302	4,689,639	6.440
Pakistan	2,097	204,677,000	1.025
Paraguay	184	7,152,703	2.572
Peru	1,225	32,495,510	3.770
Philippines	197	107,644,000	0.183
Poland	16,251	38,413,000	42.306
Portugal	2,870	10,291,027	27.888
Puerto Rico	30	3,195,153	0.939
Qatar	38	2,772,294	1.371
Romania	9,208	19,523,621	47.163
Russia	16,422	146,793,744	11.187
Saudi Arabia	2,208	33,413,660	6.608
Serbia	4,635	7,001,444	66.201
Singapore	336	5,638,700	5.959
Slovakia	1,021	5,450,421	18.732
Slovenia	1,365	2,080,908	65.596
South Africa	3,295	57,725,600	5.708
South Korea	5,199	51,811,167	10.035
South Sudan	22	12,778,250	0.172
Spain	19,194	46,733,038	41.072
Sri Lanka	301	21,670,112	1.389
Sweden	1,204	10,255,102	11.740
Switzerland	97,620	8,542,323	1142.780
Taiwan	1,700	25,589,192	6.643
Thailand	974	66,363,830	1.468
Tunisia	165	11,551,448	1.428
Turkey	15,183	82,003,882	18.515
Turkmenistan	10	5,942,561	0.168
Uganda	786	40,006,700	1.965
Ukraine	10,687	42,101,650	25.384
United Arab Emirates	659	9,682,088	6.806
United Kingdom	146,986	66,040,229	222.570

Country	Articles	Population	Art./100K
United States	82,739	329,210,000	25.133
Uruguay	361	3,518,552	10.260
Venezuela	508	32,219,521	1.577
Viet Nam	48	95,354,000	0.050
Yemen	110	29,579,986	0.372
Zimbabwe	21	15,159,624	0.139