

# Cites & Insights

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## The Front

# The Countries of OAWorld 2: 2011-2016

I'm delighted to announce that *The Countries of OAWorld 2: 2011-2016* is now available as a free PDF book or a \$7 trade paperback. Check the [Gold Open Access Journals page \(walcrawford.name/goaj.html\)](http://walcrawford.name/goaj.html) for links to this and to *GOAJ2: Gold Open Access Journals 2011-2016*.

The new publication devotes a chapter to each region and country (or named geographic entity in the [Directory of Open Access Journals](#)) with at least ten OAWorld journals (that is, active DOAJ-listed journals that aren't published by a dozen primarily-APC-charging publishers). Countries with at least 25 journals have six tables and two graphs providing a range of perspectives on OA activity. Those with ten to 24 have the same minus one graph. Countries with no APC-charging journals have simplified tables and, naturally, omit the table of APC levels and revenues. For six regions, an additional chapter summarizes OA activity in countries with fewer than ten OA journals (53 in all).

## Inside This Issue

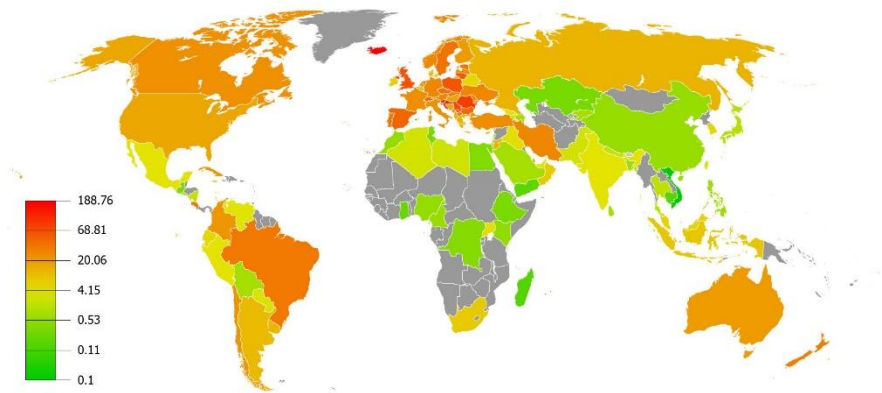
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What this book does *not* have is commentary on what makes each country's OA profile distinctive. *The Countries of OAWorld 2011-2016* included such commentary. Looking back at what's there, I concluded that what I found interesting wasn't necessarily what was important—and it was clear that the comments contributed to the book being rather long. By omitting the commentary and making some minor adjustments, it was possible to make the book 58 pages shorter without omitting information (three countries dropped below the ten-journal threshold, accounting for 10-12 of the 58 pages).

If there's strong reader interest in my thoughts on what makes each country's OA profile distinctive, I might do an article in a later *Cites & Insights*, but I don't expect to see lots of interest.

# The Heatmap

Figure 1. Heatmap, OAWorld, 2015-2016



The cover of *The Countries of OAWorld 2: 2011-2016* features the heatmap reproduced here, created using [GunnMap 2](#). The heatmap shows the combined article counts for 2015 and 2016 expressed as a ratio per 100,000 people (using Wikipedia’s “[List of countries by population \(United Nations\)](#)” as of May 29, 2017). I attempted to normalize country names to match the table found in GunnMap 2, but may not have always succeeded. (At least one “country,” Hong Kong, doesn’t appear in the map because the UN doesn’t include it.)

Table 1 shows the data used for this heatmap, but with country names as in *DOAJ*. The article count combines 2015 and 2016 results from the research behind *GOAJ2*—namely visiting each journal’s website at least once. *Pop16* is the 2016 estimated population divided by 100,000—so, for example, Iceland has an estimated population of roughly 341,000. “Density” is the result of dividing Articles by *Pop16*, and was used to generate the heatmap. The table is in descending order of OA articles per hundred thousand people.

Country	Articles	Pop16	Density
Iceland	642	3.40	188.76
Croatia	5,449	41.91	130.03
Slovenia	2,490	20.64	120.63
Romania	17,676	197.60	89.45
Hong Kong	5,712	73.75	77.45
Serbia	5,371	70.76	75.90
United Kingdom	44,757	651.10	68.74
Poland	24,846	384.24	64.66

Country	Articles	Pop16	Density
British Virgin Islands	17	0.29	59.62
Lithuania	1,674	28.32	59.12
Spain	23,903	468.12	51.06
Bulgaria	3,332	71.02	46.92
Switzerland	3,825	84.18	45.44
Sweden	4,181	100.39	41.65
Czech Republic	4,388	105.79	41.48
Costa Rica	1,993	48.90	40.75
Estonia	516	13.18	39.16
Brazil	79,360	2,075.50	38.24
Portugal	3,933	103.41	38.03
Montenegro	230	6.26	36.72
Slovakia	1,946	54.35	35.80
New Zealand	1,636	47.88	34.17
Macedonia, the Former Yugoslav Republic of	689	20.71	33.26
Moldova, Republic of	1,145	35.51	32.25
Germany	24,725	828.00	29.86
Austria	2,602	87.83	29.62
Iran, Islamic Republic of	23,701	801.60	29.57
Norway	1,556	52.67	29.54
Ukraine	12,415	425.23	29.20
Latvia	520	19.46	26.73
Turkey	21,306	798.15	26.69
France	17,586	670.32	26.24
Netherlands	4,406	171.25	25.73
Canada	9,392	365.51	25.70
Mauritius	311	12.64	24.61
Italy	14,876	606.00	24.55
Cuba	2,632	112.39	23.42
Colombia	11,278	492.40	22.90

Country	Articles	Pop16	Density
Chile	4,150	181.92	22.81
Australia	5,174	244.72	21.14
Brunei Darussalam	87	4.17	20.85
Barbados	59	2.85	20.70
Finland	1,127	55.04	20.48
Qatar	522	25.76	20.26
Bosnia and Herzegovina	627	35.31	17.76
United States	55,091	3,250.31	16.95
Hungary	1,652	97.99	16.86
Cyprus	125	8.48	14.74
Albania	401	28.77	13.94
Greece	1,417	107.84	13.14
Russian Federation	19,150	1,468.04	13.04
Jordan	1,230	98.96	12.43
Uruguay	417	34.80	11.98
Argentina	4,989	438.50	11.38
Denmark	648	57.56	11.26
Belgium	1,245	113.56	10.96
Indonesia	22,578	2,635.10	8.57
South Africa	4,569	559.08	8.17
Oman	358	45.73	7.83
Luxembourg	44	5.91	7.45
Ireland	333	47.58	7.00
Malaysia	2,104	320.76	6.56
Ecuador	997	167.44	5.95
Korea, Republic of	3,322	559.08	5.94
Belarus	551	94.99	5.80
Iraq	1,900	378.84	5.02
Uganda	2,038	416.53	4.89
Guam	9	1.84	4.89
Bahamas	18	3.78	4.76

Country	Articles	Pop16	Density
Malta	19	4.29	4.43
Mexico	5,453	1,235.18	4.41
India	57,826	13,164.40	4.39
Peru	1,396	318.26	4.39
United Arab Emirates	436	100.03	4.36
Georgia	141	37.18	3.79
Venezuela, Bolivarian Republic of	1,190	314.31	3.79
Kosova	64	18.37	3.48
Paraguay	229	69.54	3.29
Taiwan, Province of China	705	235.47	2.99
Pakistan	5,517	1,965.72	2.81
Algeria	1,135	410.64	2.76
Armenia	76	29.82	2.55
Libya	154	63.85	2.41
Nepal	587	288.26	2.04
Nicaragua	124	62.63	1.98
Israel	162	86.95	1.86
Thailand	1,183	682.98	1.73
Jamaica	42	27.23	1.54
Japan	1,844	1,267.30	1.46
El Salvador	70	65.82	1.06
Kyrgyzstan	61	61.40	0.99
Sri Lanka	207	212.03	0.98
Saudi Arabia	316	337.10	0.94
Bolivia, Plurinational State of	103	111.46	0.92
Azerbaijan	86	98.24	0.88
Bangladesh	1,303	1,625.15	0.80
Philippines	788	1,040.84	0.76
Cameroon	157	232.48	0.68
Lebanon	40	59.88	0.67
Palestine, State of	32	48.17	0.66

Country	Articles	Pop16	Density
Singapore	37	56.07	0.66
Morocco	211	343.27	0.61
China	8,205	13,834.00	0.59
Nigeria	1,050	1,918.36	0.55
Kenya	252	484.67	0.52
Congo, the Democratic Republic of the	299	822.43	0.36
Egypt	305	930.72	0.33
Guatemala	53	161.76	0.33
Tunisia	32	112.99	0.28
Ethiopia	279	1,043.45	0.27
Kazakhstan	46	179.76	0.26
Ghana	50	289.57	0.17
Yemen	40	281.20	0.14
Cambodia	21	156.26	0.13
Madagascar	27	224.34	0.12
Viet Nam	91	927.00	0.10

Table 1. 2015-2016 OAWorld articles per 100,000 people

The average for the entire set of countries with OAWorld journals is 9.11 articles per 100,000 people: more than Indonesia, fewer than Belgium.

## On the Other Hand...

*The Countries of OAWorld 2* deliberately excludes journals from the dozen large publishers I've grouped together as APCLand. To my mind, those publishers—some entirely OA, some traditional—have a somewhat different model than the thousands of universities, societies and small operations that make up the rest of serious OA.

Additionally, it's my impression—which may not be correct—that APCLand “centralizes” OA publishing in a somewhat unrealistic manner. I suspect that a large portion of Hindawi's editorial and other work takes place outside of Egypt, that much of MDPI's operation isn't in Switzerland, and so on.

For those who believe otherwise, the following pages provide an alternative heatmap and data table, including APCLand journals with the countries listed in their *DOAJ* entries. Note the major changes in position for Switzerland, the Netherlands and Egypt, and the smaller change for the

United Kingdom and some others. The average is now 14.92 articles per 100,000 people, somewhere between Cyprus and Hungary.

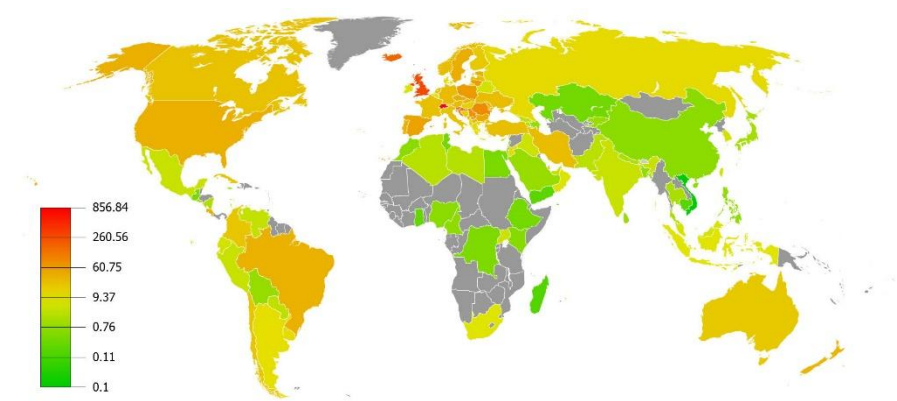


Figure 2. Heatmap for all of DOAJ 2015-2016

Country	Articles	Pop16	Density
Switzerland	72,126	84.18	856.84
United Kingdom	195,721	651.10	300.60
Iceland	642	3.40	188.76
Netherlands	24,525	171.25	143.21
Croatia	5,449	41.91	130.03
Slovenia	2,490	20.64	120.63
Hong Kong	6,897	73.75	93.52
Romania	17,676	197.60	89.45
Serbia	5,371	70.76	75.90
Poland	24,974	384.24	65.00
Lithuania	1,791	28.32	63.25
British Virgin Islands	17	0.29	59.62
Germany	46,168	828.00	55.76
Spain	24,911	468.12	53.21
Egypt	43,951	930.72	47.22
Bulgaria	3,332	71.02	46.92
Sweden	4,181	100.39	41.65
Czech Republic	4,388	105.79	41.48
Costa Rica	1,993	48.90	40.75

Country	Articles	Pop16	Density
United States	131,275	3,250.31	40.39
Estonia	516	13.18	39.16
Brazil	79,610	2,075.50	38.36
Portugal	3,933	103.41	38.03
New Zealand	1,815	47.88	37.90
Montenegro	230	6.26	36.72
Slovakia	1,946	54.35	35.80
Macedonia, the Former Yugoslav Republic of	689	20.71	33.26
Moldova, Republic of	1,145	35.51	32.25
Iran, Islamic Republic of	24,189	801.60	30.18
Austria	2,602	87.83	29.62
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France	17,764	670.32	26.50
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Italy	15,064	606.00	24.86
Mauritius	311	12.64	24.61
Cuba	2,632	112.39	23.42
Chile	4,182	181.92	22.99
Colombia	11,310	492.40	22.97
Australia	5,559	244.72	22.72
Qatar	571	25.76	22.16
Brunei Darussalam	87	4.17	20.85
Barbados	59	2.85	20.70
Finland	1,127	55.04	20.48
Bosnia and Herzegovina	627	35.31	17.76
Hungary	1,652	97.99	16.86
Cyprus	125	8.48	14.74

Country	Articles	Pop16	Density
Albania	401	28.77	13.94
Greece	1,417	107.84	13.14
Russian Federation	19,189	1,468.04	13.07
Ireland	614	47.58	12.90
Jordan	1,230	98.96	12.43
Uruguay	417	34.80	11.98
Argentina	4,989	438.50	11.38
Denmark	648	57.56	11.26
Belgium	1,245	113.56	10.96
Indonesia	22,578	2,635.10	8.57
South Africa	4,648	559.08	8.31
Korea, Republic of	4,383	559.08	7.84
Oman	358	45.73	7.83
Luxembourg	44	5.91	7.45
Malaysia	2,104	320.76	6.56
Saudi Arabia	2,135	337.10	6.33
Georgia	225	37.18	6.05
Ecuador	997	167.44	5.95
Belarus	551	94.99	5.80
Taiwan, Province of China	1,291	235.47	5.48
Iraq	1,900	378.84	5.02
Uganda	2,038	416.53	4.89
Guam	9	1.84	4.89
Bahamas	18	3.78	4.76
Singapore	256	56.07	4.57
Peru	1,424	318.26	4.47
Malta	19	4.29	4.43
Mexico	5,453	1,235.18	4.41
India	58,047	13,164.40	4.41
United Arab Emirates	436	100.03	4.36
Venezuela, Bolivarian Republic of	1,190	314.31	3.79

Country	Articles	Pop16	Density
Kosova	64	18.37	3.48
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Algeria	1,135	410.64	2.76
Armenia	76	29.82	2.55
Libya	154	63.85	2.41
Nepal	587	288.26	2.04
Nicaragua	124	62.63	1.98
Japan	2,442	1,267.30	1.93
Israel	162	86.95	1.86
Thailand	1,205	682.98	1.76
Jamaica	42	27.23	1.54
El Salvador	70	65.82	1.06
Kyrgyzstan	61	61.40	0.99
Sri Lanka	207	212.03	0.98
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Azerbaijan	86	98.24	0.88
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Bangladesh	1,303	1,625.15	0.80
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Lebanon	40	59.88	0.67
Palestine, State of	32	48.17	0.66
Morocco	211	343.27	0.61
Nigeria	1,050	1,918.36	0.55
Kenya	252	484.67	0.52
Congo, the Democratic Republic of the	299	822.43	0.36
Guatemala	53	161.76	0.33
Tunisia	32	112.99	0.28
Ethiopia	279	1,043.45	0.27
Kazakhstan	46	179.76	0.26

Country	Articles	Pop16	Density
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Yemen	40	281.20	0.14
Cambodia	21	156.26	0.13
Madagascar	27	224.34	0.12
Viet Nam	91	927.00	0.10

Table 2. 2015-2016 DOAJ articles per 100,000 people

## Intersections

# Subject Supplement to *GOAJ2*

There won't be a new version of *Gold Open Access Journals 2011-2015: A Subject Approach*. There were no print copies sold (other than my own proof copy) and relatively few downloads of the free ebook. I saw no indication that the book was useful or used enough to justify publishing a new edition.

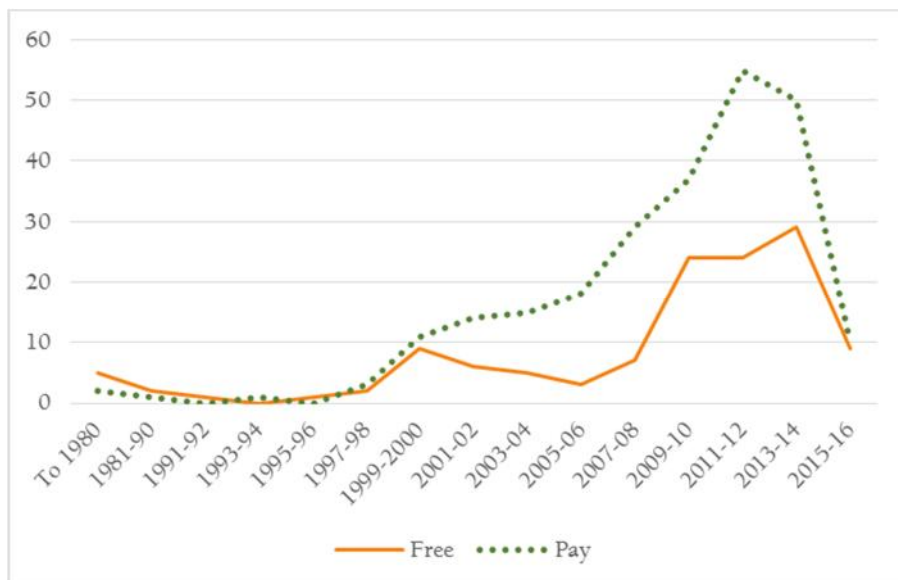
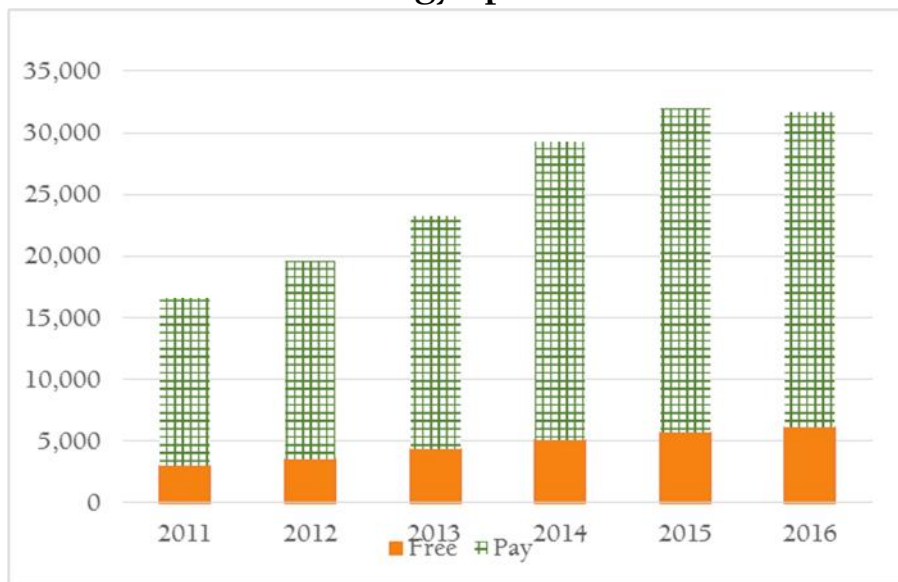
*GOAJ2* includes a single page for each subject as part of the segment chapters, providing three key tables on that subject. This article expands on those pages, providing additional tables and figures and, in most cases, limited commentary. In order to do that without creating a truly humongous issue of *Cites & Insights*, I'm omitting table headings and labels, and treating this as an article rather than a book section: that is, new subjects don't always start on new pages.

Subjects appear in the same order as in *GOAJ2*: alphabetically within each segment, with biomed, STEM, and HSS segments in that order. To make it easier to look at *all* of a subject, the subject subheads in this article have page references to the relevant page in *GOAJ2*.

Tables and graphs normally appear in this order, modified to fit page breaks:

- Articles-by-year graph
- Starting year graph
- Article volume
- Publisher category (sorted by 2016 article count)
- Growth/shrinkage table
- Comments (if any)
- Countries with the most 2016 articles (typically either 50+ articles or what will fit on a page).

## Biology [p. 87]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	11	9%	11,358	11%
Large: 150-599	50	14%	10,081	9%
Med.: 60-149	82	28%	5,802	32%
Small: 20-59	148	43%	3,931	48%
Smallest: 0-19	60	42%	541	43%

Category	Journals	%Free	Articles	%Free
Open Access	186	16%	16,959	3%
Traditional	52	17%	5,522	14%
Miscellaneous	42	64%	3,237	64%
Univ/college	63	71%	3,189	59%
Society/govt	30	53%	2,806	28%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	62	16.6%	
Grew 25-49.9%	29	7.8%	24.4%
Grew 10-24.99%	39	10.5%	34.9%
Even, $\pm$ 9.99%	80	21.4%	56.3%
Shrank 10-24.99%	51	13.7%	70.0%
Shrank 25-49.99%	53	14.2%	84.2%
Shrank 50%+	59	15.8%	

### Comments

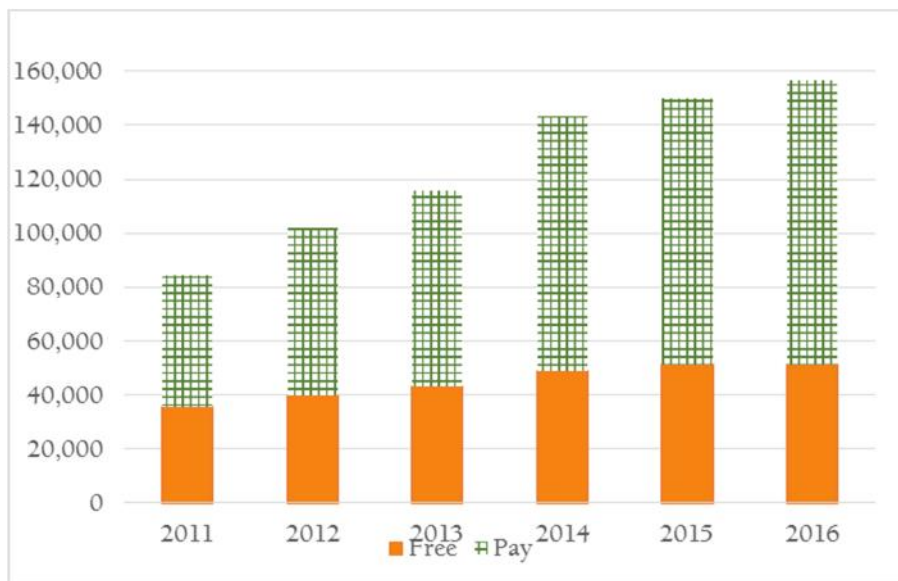
Much more heavily slanted toward APC-charging journals than most. Even medium-sized and smaller journals mostly charge. Traditional publishers play a larger-than-usual role. APC-based journals started outnumbering free ones as early as 1997.

Overall, the percentage of growing journals (38.4%) is nearly equal to the percentage of shrinking journals (37.4%). That's also true for biology—and, as is true overall, growth *slightly* exceeds shrinkage,

It's particularly unusual that Brazil (second-largest actual country here; first overall) offers mostly APC-based articles, given that its overall OA picture is 82% free. Once APCLand articles are filtered out, the high free-article percentage for United Kingdom is actually typical (65% for Biology, 63% overall).

Country	Journals	%Free	Articles	%Free
APCLand	172	7%	20,488	4%
United Kingdom	11	27%	1,953	65%
Brazil	17	47%	1,724	42%
United States	22	41%	1,557	15%
India	11	45%	865	33%
Switzerland	2	0%	621	0%
Iran, Islamic Republic of	16	69%	495	79%
Ukraine	4	100%	334	100%
Indonesia	14	64%	309	63%
Bulgaria	6	17%	280	12%
Poland	17	82%	279	57%
Romania	7	100%	243	100%
Serbia	2	100%	175	100%
Pakistan	2	50%	159	0%
France	2	100%	156	100%
Australia	3	33%	152	1%
New Zealand	11	9%	146	5%
Thailand	1	100%	128	100%
Russian Federation	2	100%	121	100%
Chile	2	50%	120	3%
Malaysia	3	33%	113	37%
Germany	3	67%	109	93%
Korea, Republic of	1	0%	100	0%
Finland	2	0%	86	0%
Colombia	3	100%	85	100%
Lithuania	1	100%	84	100%
Turkey	3	100%	82	100%
Austria	1	0%	76	0%
Peru	2	100%	73	100%
Canada	2	100%	62	100%
Italy	5	80%	60	80%
Macedonia, the Former Yugoslav Republic of	2	0%	57	0%
Cuba	1	100%	50	100%

## Medicine [p. 88]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	39	8%	34,438	3%
Large: 150-599	272	30%	54,379	27%
Med.: 60-149	581	46%	39,819	47%
Small: 20-59	891	57%	25,218	60%
Smallest: 0-19	282	43%	2,627	50%

Category	Journals	%Free	Articles	%Free
Open Access	923	20%	73,651	15%
Traditional	346	31%	27,233	21%
Univ/college	447	84%	23,442	67%
Miscellaneous	285	72%	20,936	50%
Society/govt	188	85%	11,219	76%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	353	16.1%	
Grew 25-49.9%	210	9.6%	25.7%
Grew 10-24.99%	239	10.9%	36.6%
Even, $\pm$ 9.99%	535	24.4%	61.1%
Shrank 10-24.99%	294	13.4%	74.5%
Shrank 25-49.99%	281	12.8%	87.3%
Shrank 50%+	277	12.7%	

### Comments

By far the largest subject area. Since so much of gold OA is medical, you'd expect most patterns to reflect overall patterns, and that's truer of medicine than biology. For example, most articles in small journals don't involve APCs (although the free percentage is lower than it is overall).

OA publishers make up a larger part of medicine than overall—and university/college journals are outpublished (but not outnumbered) by traditional publishers.

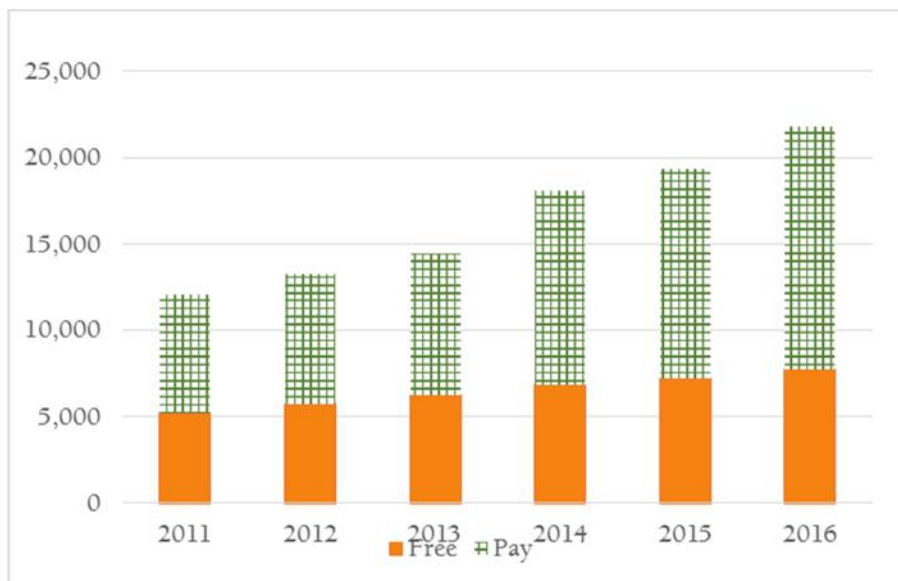
The sharp increase in APC-based journals is at the same time as it is overall but is considerably more dramatic.

More medical journals shrank than grew from 2015 to 2016, although it's not a big margin.

Note India's prominence in medical articles—and considerably more than half of all Indian OAWorld articles are in medical fields (58%), compared to 36.9% for the United States and 25.6% for Brazil. Iran is also focused: 63.6% of all Iran OAWorld articles are in medicine, mostly free.

Country	Journals	%Free	Articles	%Free
APCLand	842	11%	73,031	7%
India	160	61%	17,416	44%
United States	122	40%	11,224	24%
Brazil	134	86%	10,141	79%
Iran, Islamic Republic of	159	89%	7,728	74%
Poland	62	66%	3,175	54%
Turkey	58	100%	2,791	100%
United Kingdom	52	48%	2,207	32%
Canada	32	38%	1,896	12%
China	10	50%	1,636	12%
Italy	53	49%	1,636	41%
Russian Federation	36	100%	1,632	100%
Spain	37	89%	1,603	84%
Indonesia	45	80%	1,520	77%
Switzerland	19	16%	1,155	24%
Sweden	15	27%	1,090	21%
Netherlands	3	67%	1,046	97%
Australia	14	64%	1,025	31%
Pakistan	16	69%	957	62%
Uganda	1	0%	864	0%
Colombia	23	100%	854	100%
Germany	14	64%	756	41%
Ukraine	11	55%	675	62%
South Africa	14	71%	602	73%
Korea, Republic of	10	80%	571	70%
Nigeria	4	50%	498	13%
Cuba	9	100%	494	100%
New Zealand	37	0%	483	0%
Hong Kong	3	100%	436	100%
Austria	12	92%	425	86%
Argentina	12	92%	408	86%
Romania	14	86%	399	77%
Japan	6	33%	396	11%
Portugal	10	90%	393	87%

## Agriculture [p. 96]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	3	0%	4,839	0%
Large: 150-599	26	23%	4,503	27%
Med.: 60-149	106	42%	7,490	43%
Small: 20-59	159	64%	4,447	65%
Smallest: 0-19	50	70%	540	74%

Category	Journals	%Free	Articles	%Free
Univ/college	171	66%	8,167	52%
Open Access	59	36%	4,846	8%
Miscellaneous	63	59%	3,580	55%
Traditional	26	31%	3,317	13%
Society/govt	35	46%	1,909	35%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	56	15.8%	
Grew 25-49.9%	45	12.7%	28.5%
Grew 10-24.99%	39	11.0%	39.5%
Even, $\pm$ 9.99%	102	28.8%	68.4%
Shrank 10-24.99%	52	14.7%	83.1%
Shrank 25-49.99%	34	9.6%	92.7%
Shrank 50%+	26	7.3%	

### Comments

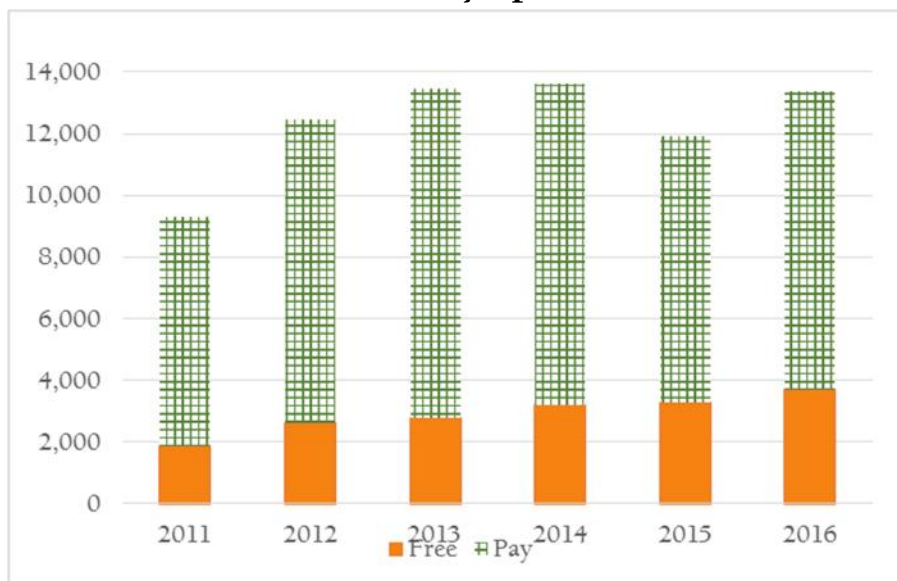
While APC-based OA increasingly dominates this field over time, the most unusual journal-introduction point is the *free* spike in 2013-2014. Very few very large journals, none of them free; overall, the size-and-cost pattern is fairly typical. University/college journals are the largest group.

Considerably more journals are growing than are shrinking, 39.5% to 31.6%. Additionally, what shrinkage there is, is mostly in the 10%-25% range.

What's surprising about Brazil is not its role as the largest OAWorld publisher, but the fact that over half of the articles appear in APC-based journals (compared to only 18% for Brazil in general). The sharp drop from Brazil to the second most prolific country is *quite* unusual.

Country	Journals	%Free	Articles	%Free
APCLand	48	17%	7,019	4%
Brazil	55	62%	4,080	45%
Poland	26	69%	802	50%
Turkey	12	67%	737	70%
Romania	13	62%	714	42%
China	6	50%	589	46%
Italy	12	67%	585	77%
United Kingdom	3	0%	563	0%
Czech Republic	11	27%	536	28%
Indonesia	24	58%	530	60%
Iran, Islamic Republic of	11	18%	462	19%
United States	13	31%	455	27%
Russian Federation	4	75%	370	48%
Spain	8	100%	337	100%
Colombia	11	100%	309	100%
Pakistan	6	17%	308	3%
Germany	6	83%	274	84%
Croatia	6	100%	272	100%
Costa Rica	4	100%	248	100%
Mexico	5	40%	222	67%
India	2	0%	190	0%
Ukraine	4	100%	184	100%
France	5	80%	148	84%
Argentina	8	38%	147	14%
Iraq	1	0%	130	0%
Bulgaria	2	0%	129	0%
Bangladesh	4	25%	124	20%
Serbia	4	100%	124	100%
Slovakia	4	100%	123	100%
Korea, Republic of	2	50%	117	60%
Sweden	1	0%	110	0%
Kenya	2	0%	104	0%
Chile	2	50%	94	32%
Slovenia	3	100%	83	100%

## Chemistry [p. 97]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	6	0%	6,830	0%
Large: 150-599	15	53%	2,753	54%
Med.: 60-149	32	50%	2,106	57%
Small: 20-59	61	54%	1,572	58%
Smallest: 0-19	16	69%	115	74%

Category	Journals	%Free	Articles	%Free
Open Access	61	21%	5,972	5%
Society/govt	16	69%	2,855	29%
Univ/college	37	78%	2,120	56%
Traditional	17	53%	1,643	54%
Miscellaneous	13	69%	786	63%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	23	16.0%	
Grew 25-49.9%	15	10.4%	26.4%
Grew 10-24.99%	14	9.7%	36.1%
Even, $\pm$ 9.99%	33	22.9%	59.0%
Shrank 10-24.99%	17	11.8%	70.8%
Shrank 25-49.99%	20	13.9%	84.7%
Shrank 50%+	22	15.3%	

### *Comments*

Heavy dominance of APC-based articles, but sharp rise in such journals is recent. The largest journals all charge APCs—but, unusually for STEM, all other categories are mostly free, including large journals.

More shrinkage than growth, and a fair amount of substantial shrinkage.

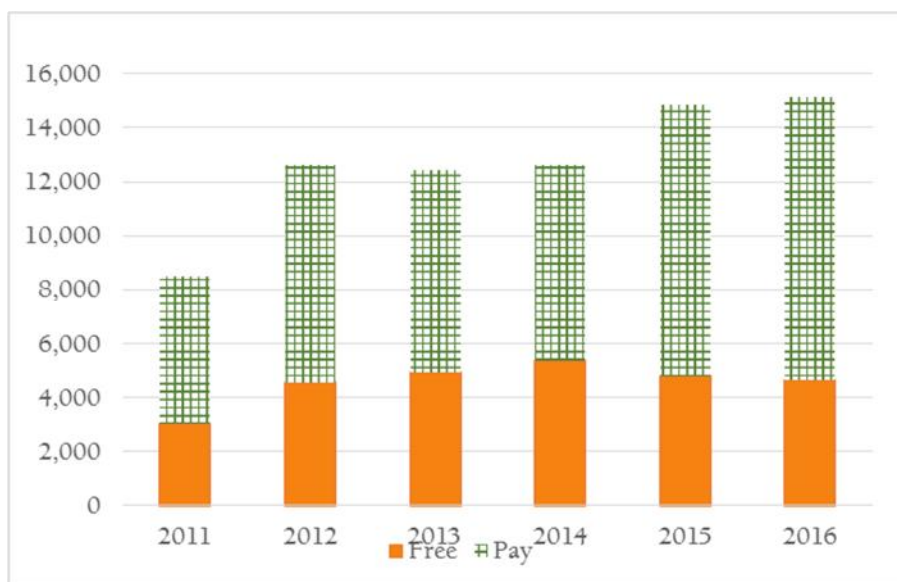
Note that the UK published more than twice as many OAWorld articles as the next-largest country, and nearly all of them were in APC-based journals. That all of Brazil's chemistry articles were in free journals isn't that unusual; that all of Germany's and a majority of India's were free is somewhat more unusual.

Country	Journals	%Free	Articles	%Free
APCLand	60	20%	7,160	13%
United Kingdom	6	17%	1,984	2%
United States	3	33%	909	18%
India	5	60%	392	56%
Brazil	5	100%	307	100%
Germany	1	100%	290	100%
Indonesia	12	58%	277	42%
Serbia	5	60%	268	53%
Poland	10	80%	206	65%
Iran, Islamic Republic of	5	100%	186	100%
Russian Federation	1	100%	182	100%
Romania	2	100%	173	100%
Turkey	3	100%	152	100%
France	2	100%	140	100%
Croatia	3	100%	134	100%
Slovenia	1	100%	114	100%
Hungary	2	50%	85	7%
Moldova, Republic of	2	50%	77	26%
Czech Republic	1	100%	50	100%
Italy	1	0%	50	0%

## Computer Science [p. 98]

Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	8	0%	6,385	0%
Large: 150-599	17	35%	2,242	38%
Med.: 60-149	57	47%	3,210	51%
Small: 20-59	116	59%	2,633	63%
Smallest: 0-19	65	71%	682	76%

Category	Journals	%Free	Articles	%Free
Miscellaneous	55	64%	4,787	21%
Univ/college	96	84%	3,747	58%
Open Access	78	24%	3,402	30%
Traditional	24	21%	1,869	8%
Society/govt	21	71%	1,347	24%



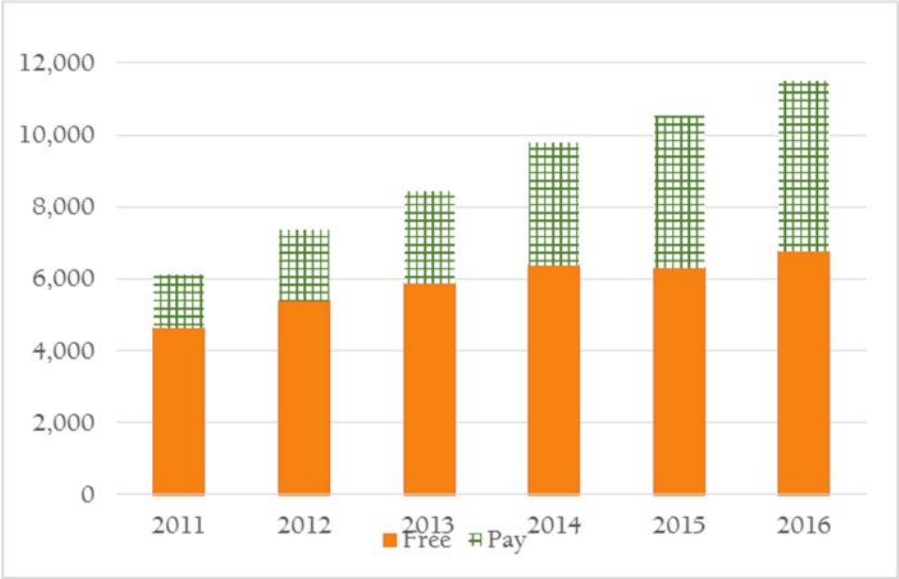
### Comments

Fairly typical for STEM, but with a recent surge of free journals and miscellaneous publishers the largest group. Somewhat more shrinkage (42%) than growth (37.2%). Brazil doesn't do a lot in this field. More than a third of all Hong Kong OAWorld activity is in computer science.

Change 2015-16	Count	Percent	Cum%
Grew 50%+	53	19.3%	
Grew 25-49.9%	27	9.9%	29.2%
Grew 10-24.99%	22	8.0%	37.2%
Even, $\pm$ 9.99%	57	20.8%	58.0%
Shrank 10-24.99%	31	11.3%	69.3%
Shrank 25-49.99%	42	15.3%	84.7%
Shrank 50%+	42	15.3%	

Country	Journals	%Free	Articles	%Free
APCLand	55	11%	3,324	5%
United States	16	44%	2,648	10%
India	30	17%	2,174	12%
Germany	5	40%	1,178	1%
Hong Kong	14	57%	933	66%
Pakistan	2	50%	663	7%
Russian Federation	5	100%	456	100%
Indonesia	23	74%	439	90%
Austria	2	50%	287	16%
Australia	3	100%	282	100%
Brazil	9	100%	273	100%
Romania	15	73%	262	54%
Canada	4	50%	159	63%
Spain	7	100%	156	100%
United Kingdom	5	40%	135	43%
Ukraine	4	100%	122	100%
Bulgaria	3	100%	118	100%
Iran, Islamic Republic of	4	75%	118	61%
Poland	10	90%	113	96%
Taiwan, Province of China	2	50%	106	24%
Cuba	1	100%	97	100%
Korea, Republic of	2	100%	96	100%
Mauritius	1	0%	95	0%
Latvia	2	50%	91	29%

# Earth Sciences [p. 99]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	1	0%	1,038	0%
Large: 150-599	14	50%	2,688	40%
Med.: 60-149	46	67%	2,998	66%
Small: 20-59	155	79%	4,214	77%
Smallest: 0-19	61	66%	553	77%

Category	Journals	%Free	Articles	%Free
Open Access	74	46%	5,151	37%
Univ/college	116	90%	2,724	90%
Miscellaneous	40	88%	1,432	84%
Traditional	32	38%	1,277	40%
Society/govt	37	78%	907	77%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	51	17.1%	
Grew 25-49.9%	37	12.4%	29.4%
Grew 10-24.99%	44	14.7%	44.1%
Even, $\pm$ 9.99%	64	21.4%	65.6%
Shrank 10-24.99%	32	10.7%	76.3%
Shrank 25-49.99%	31	10.4%	86.6%
Shrank 50%+	40	13.4%	

### *Comments*

This cluster of subjects is mostly free, with a brief spike of APC-based journals.

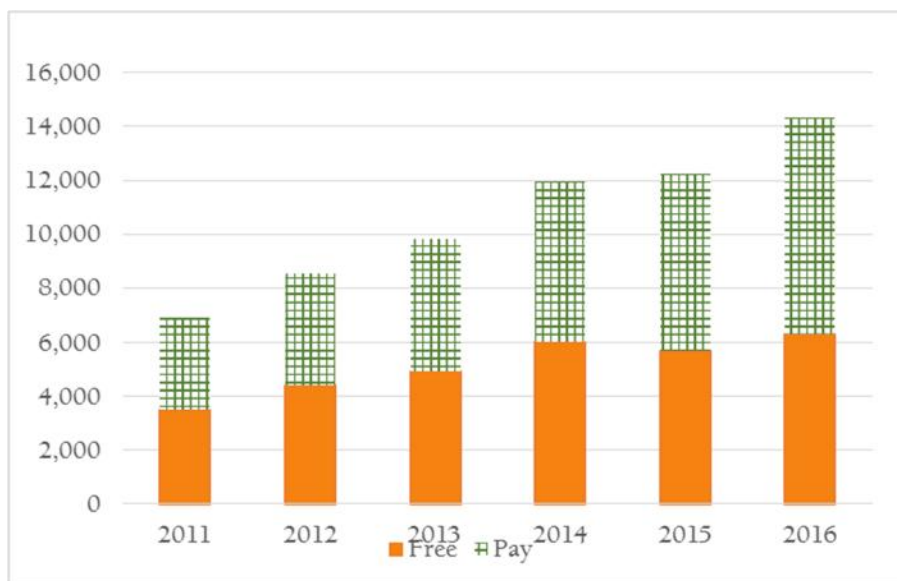
Considerably more growth (44.1%) than shrinkage (34.4%).

The United States and UK have relatively sparse showings, as (to a lesser extent) does India.

Country	Journals	%Free	Articles	%Free
APC/Land	54	24%	3,226	16%
Germany	32	56%	2,492	50%
Brazil	30	97%	1,192	94%
Poland	24	92%	677	92%
Spain	21	100%	510	100%
Italy	8	75%	326	81%
Romania	17	100%	267	100%
France	7	71%	265	83%
India	3	100%	217	100%
Mexico	7	71%	195	72%
Iran, Islamic Republic of	7	71%	179	81%
Colombia	6	100%	172	100%
Indonesia	8	50%	164	43%
Croatia	6	83%	131	79%
United States	7	57%	105	57%
Argentina	7	86%	95	92%
China	2	100%	81	100%
Greece	2	100%	79	100%
Switzerland	1	100%	78	100%
Czech Republic	3	67%	75	53%
Russian Federation	2	100%	75	100%
United Kingdom	3	0%	67	0%
Korea, Republic of	2	50%	62	34%
Austria	2	50%	61	25%
Canada	2	50%	59	0%
Finland	3	33%	58	17%
Chile	3	100%	50	100%

## Ecology [p. 100]

Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	4	50%	3,659	39%
Large: 150-599	21	29%	4,837	27%
Med.: 60-149	41	54%	2,663	53%
Small: 20-59	105	71%	2,737	71%
Smallest: 0-19	48	60%	432	61%



### Comments

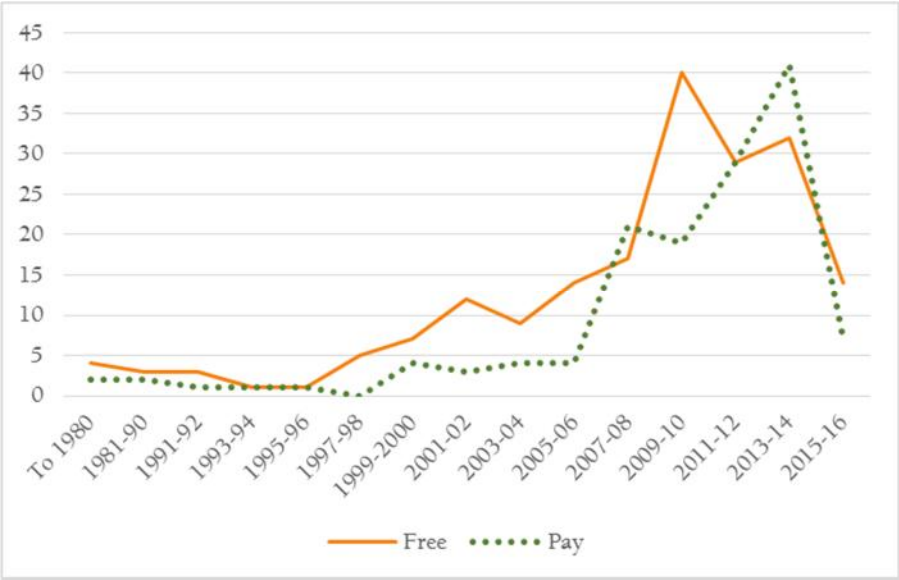
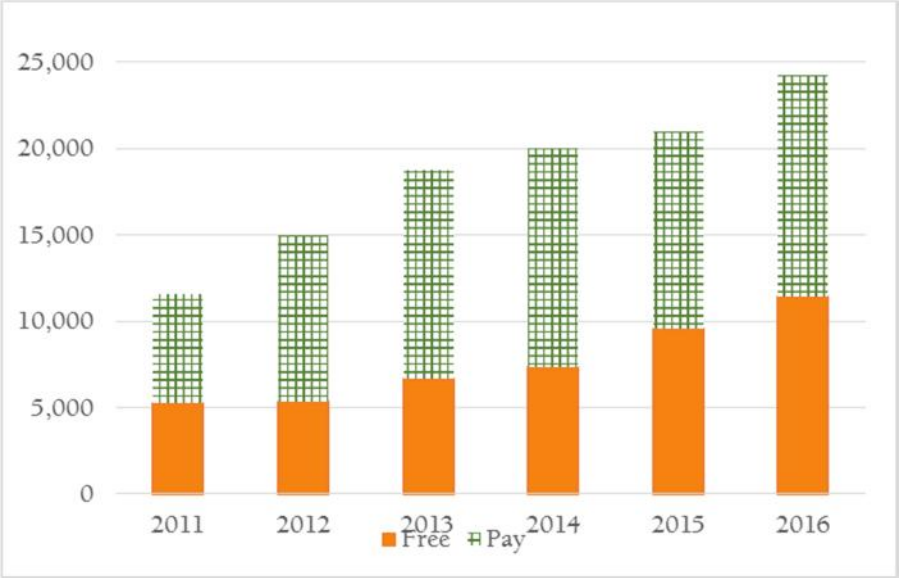
Mostly OA publishers. More growth than shrinkage. Hungary (three journals, 50 articles, all free) omitted because of space.

Category	Journals	%Free	Articles	%Free
Open Access	61	43%	6,399	25%
Miscellaneous	40	65%	3,004	61%
Univ/college	78	86%	1,886	80%
Traditional	29	34%	1,843	45%
Society/govt	25	56%	1,196	48%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	49	21.0%	
Grew 25-49.9%	20	8.6%	29.6%
Grew 10-24.99%	24	10.3%	39.9%
Even, $\pm 9.99\%$	55	23.6%	63.5%
Shrank 10-24.99%	24	10.3%	73.8%
Shrank 25-49.99%	25	10.7%	84.5%
Shrank 50%+	36	15.5%	

Country	Journals	%Free	Articles	%Free
APCLand	47	23%	3,889	13%
Germany	15	47%	3,236	33%
United Kingdom	7	43%	1,700	64%
Brazil	25	88%	956	73%
United States	23	43%	773	55%
Poland	18	72%	653	41%
France	6	83%	507	98%
Canada	4	25%	271	19%
Italy	4	75%	264	86%
India	3	33%	253	14%
Spain	9	100%	237	100%
Iran, Islamic Republic of	7	86%	213	93%
Japan	3	0%	132	0%
Indonesia	7	71%	121	70%
Russian Federation	3	67%	106	63%
Mexico	4	75%	92	71%
Romania	3	67%	90	36%
South Africa	2	100%	89	100%
Croatia	3	67%	88	63%
Montenegro	1	100%	65	100%
Ukraine	1	100%	59	100%

# Engineering [p. 101]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	9	11%	8,206	45%
Large: 150-599	29	41%	6,748	30%
Med.: 60-149	77	55%	4,909	57%
Small: 20-59	147	62%	3,827	65%
Smallest: 0-19	47	72%	521	73%

Category	Journals	%Free	Articles	%Free
Miscellaneous	42	57%	7,225	67%
Open Access	92	27%	5,561	14%
Univ/college	123	85%	5,014	70%
Society/govt	23	70%	3,567	28%
Traditional	50	42%	2,844	44%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	63	19.1%	
Grew 25-49.9%	37	11.2%	30.3%
Grew 10-24.99%	32	9.7%	40.0%
Even, $\pm$ 9.99%	81	24.5%	64.5%
Shrank 10-24.99%	41	12.4%	77.0%
Shrank 25-49.99%	28	8.5%	85.5%
Shrank 50%+	48	14.5%	

### *Comments*

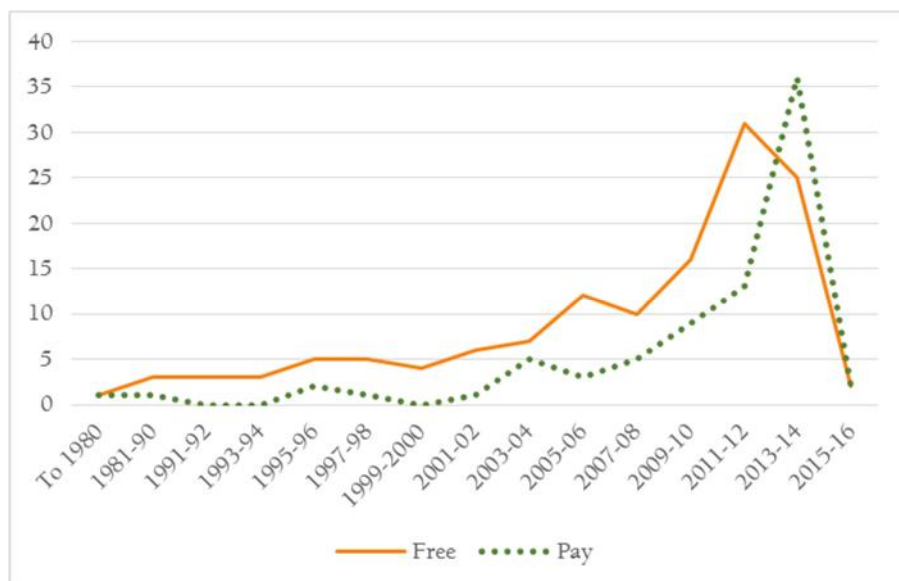
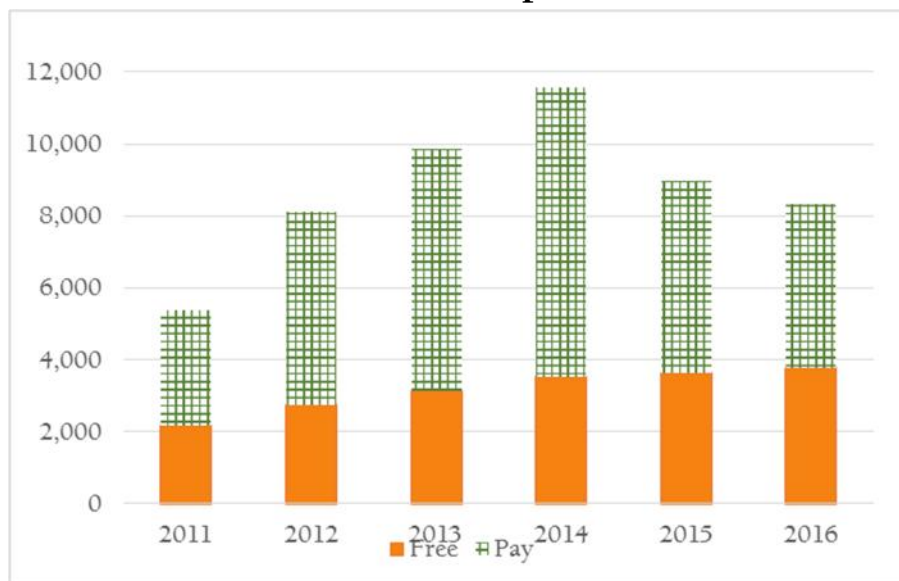
Overall, not unusual for STEM, and more growth than shrinkage.

Somewhat unusual country profiles, as UK is well-represented and predominantly free, while the US has much lower free percentage than usual (as does Hong Kong).

Latvia (two journals, 56 articles, all free), Ecuador (two, 53, all free) and Mexico (three, 52, all free) omitted from the next page for space reasons.

Country	Journals	%Free	Articles	%Free
APCLand	89	24%	5,320	24%
United Kingdom	7	29%	4,516	83%
India	13	31%	3,482	14%
United States	14	29%	1,297	5%
Poland	27	74%	961	72%
Indonesia	26	58%	931	29%
China	5	20%	891	8%
Hong Kong	2	0%	691	0%
Serbia	10	90%	632	42%
Brazil	14	93%	602	95%
Iran, Islamic Republic of	10	100%	534	100%
Romania	11	100%	424	100%
Croatia	4	50%	326	78%
Czech Republic	6	83%	305	67%
Malaysia	8	100%	283	100%
Ukraine	5	80%	271	78%
Colombia	10	100%	254	100%
Greece	2	50%	244	70%
Turkey	6	100%	230	100%
Italy	1	100%	176	100%
Belarus	3	100%	165	100%
Germany	8	63%	147	52%
Iraq	4	75%	145	68%
Korea, Republic of	1	100%	129	100%
Pakistan	2	0%	115	0%
Chile	3	67%	113	73%
Cuba	4	100%	105	100%
Spain	3	67%	93	43%
Japan	1	0%	84	0%
Thailand	1	100%	84	100%
Algeria	2	100%	82	100%
Slovakia	4	75%	77	74%
South Africa	1	0%	77	0%
France	3	0%	69	0%
Netherlands	3	33%	57	14%

## Mathematics [p. 102]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	3	0%	1,228	0%
Large: 150-599	10	10%	2,464	14%
Med.: 60-149	31	58%	2,004	62%
Small: 20-59	96	73%	2,148	82%
Smallest: 0-19	51	80%	479	89%

Category	Journals	%Free	Articles	%Free
Univ/college	73	93%	2,817	76%
Open Access	73	25%	2,607	19%
Traditional	17	35%	1,334	9%
Miscellaneous	26	85%	1,018	56%
Society/govt	23	83%	547	77%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	36	17.0%	
Grew 25-49.9%	17	8.0%	25.0%
Grew 10-24.99%	29	13.7%	38.7%
Even, $\pm$ 9.99%	45	21.2%	59.9%
Shrank 10-24.99%	19	9.0%	68.9%
Shrank 25-49.99%	25	11.8%	80.7%
Shrank 50%+	41	19.3%	

### *Comments*

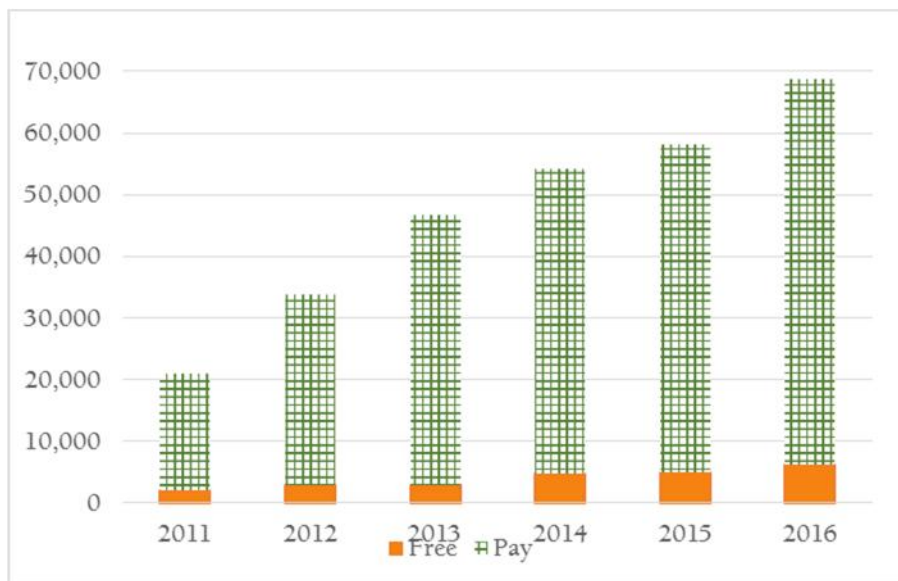
The APC-charging section has been shrinking substantially since 2014 (when new APC-based journals peaked), and overall shrinkage is slightly higher than growth. University-based journals more significant than in some STEM areas.

Iran is prominent here—and, unusually for Iran, mostly APC-based. Equally unusual for US to be almost entirely free.

Country	Journals	%Free	Articles	%Free
APCLand	63	10%	3,151	5%
Iran, Islamic Republic of	9	89%	754	21%
Poland	22	91%	682	83%
United States	14	86%	654	95%
Turkey	5	80%	485	40%
Indonesia	13	77%	236	80%
United Kingdom	5	20%	218	2%
Ukraine	5	100%	207	100%
Brazil	6	100%	179	100%
Canada	4	100%	168	100%
Korea, Republic of	2	100%	145	100%
Romania	10	100%	127	100%
Hungary	1	100%	122	100%
Italy	6	83%	121	76%
India	4	50%	109	65%
Hong Kong	2	50%	107	25%
Serbia	4	100%	101	100%
Bulgaria	1	0%	87	0%
Spain	5	100%	87	100%
Russian Federation	2	100%	85	100%
Slovakia	2	50%	70	43%
Finland	1	100%	61	100%
Pakistan	1	100%	52	100%

### Other Sciences [p. 103]

Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	12	25%	59,084	3%
Large: 150-599	22	27%	5,228	27%
Med.: 60-149	40	65%	2,573	67%
Small: 20-59	59	71%	1,532	67%
Smallest: 0-19	28	82%	263	84%



### Comments

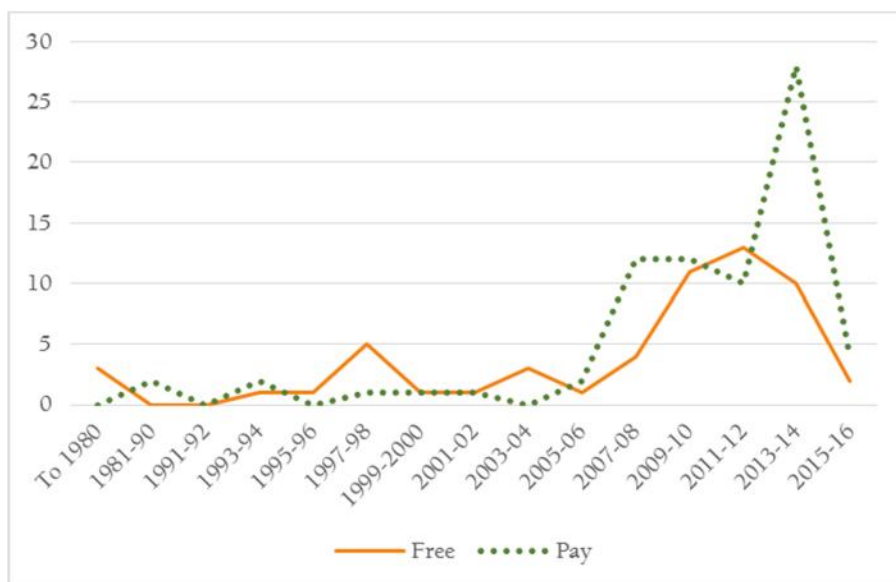
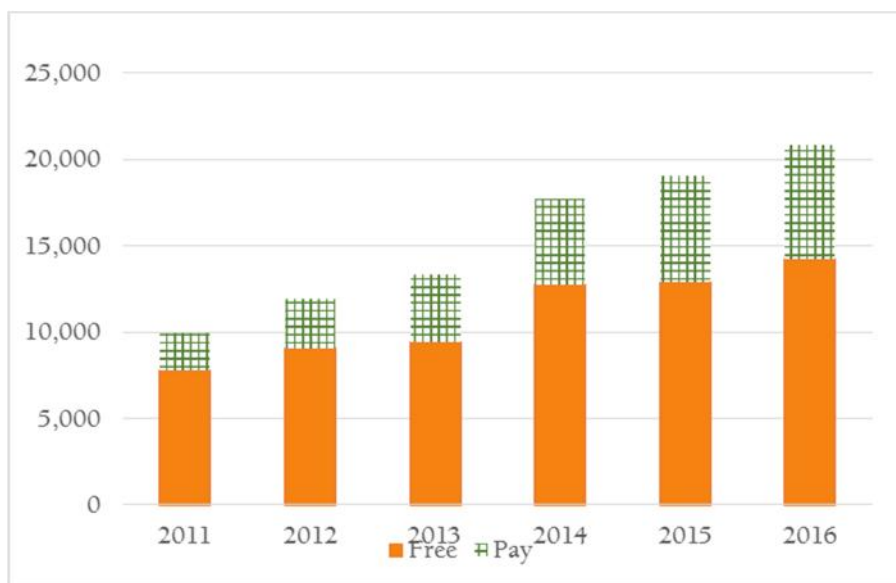
Predominantly APC-based megajournals and other very large journals (86% of the articles), from APCLand (84%), with fast overall growth and *much* more growth (46.4%) than shrinkage (35.1%). Country table cut off at 100 articles.

Category	Journals	%Free	Articles	%Free
Traditional	23	48%	29,089	6%
Open Access	16	13%	28,194	0%
Univ/college	76	89%	5,315	66%
Society/govt	16	63%	3,163	23%
Miscellaneous	37	43%	2,919	8%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	43	25.6%	
Grew 25-49.9%	20	11.9%	37.5%
Grew 10-24.99%	15	8.9%	46.4%
Even, $\pm$ 9.99%	31	18.5%	64.9%
Shrank 10-24.99%	18	10.7%	75.6%
Shrank 25-49.99%	13	7.7%	83.3%
Shrank 50%+	28	16.7%	

Country	Journals	%Free	Articles	%Free
APCLand	30	33%	57,576	2%
India	11	18%	2,217	11%
United States	11	55%	1,864	3%
United Kingdom	3	33%	925	46%
France	2	100%	774	100%
Algeria	1	100%	607	100%
Jordan	1	0%	560	0%
Ukraine	2	50%	525	74%
Indonesia	11	64%	411	29%
Turkey	8	88%	406	97%
Brazil	7	100%	371	100%
Thailand	6	83%	259	88%
Russian Federation	5	100%	186	100%
South Africa	2	100%	179	100%
Mexico	4	100%	171	100%
China	2	100%	161	100%
Bulgaria	2	50%	137	45%
Colombia	5	100%	115	100%
Costa Rica	2	100%	102	100%

## Physics [p. 104]



### Comments

Mostly free (unusual for STEM), shrinking (42%) faster than growing (35.1%), most articles in very large free journals, with mostly-free UK and France featuring as large players. Germany and Iraq (63, 53) omitted.

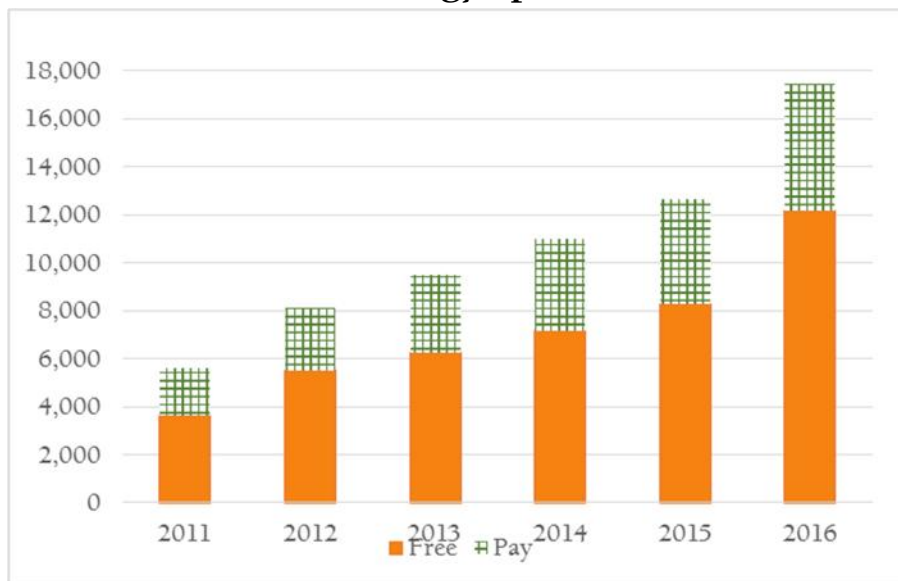
Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	6	67%	13,683	86%
Large: 150-599	16	31%	4,131	27%
Med.: 60-149	31	35%	1,722	34%
Small: 20-59	39	49%	1,093	58%
Smallest: 0-19	24	46%	180	48%

Category	Journals	%Free	Articles	%Free
Miscellaneous	12	75%	7,055	99%
Traditional	27	33%	6,408	86%
Open Access	55	20%	4,111	10%
Univ/college	25	76%	1,701	38%
Society/govt	12	67%	1,534	46%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	23	17.6%	
Grew 25-49.9%	8	6.1%	23.7%
Grew 10-24.99%	15	11.5%	35.1%
Even, $\pm$ 9.99%	30	22.9%	58.0%
Shrank 10-24.99%	11	8.4%	66.4%
Shrank 25-49.99%	19	14.5%	80.9%
Shrank 50%+	25	19.1%	

Country	Journals	%Free	Articles	%Free
APCLand	64	19%	8,144	47%
United Kingdom	4	25%	7,608	88%
France	3	67%	1,990	99%
United States	10	40%	1,107	24%
Ukraine	6	100%	437	100%
India	2	100%	290	100%
Poland	8	75%	265	46%
China	3	0%	232	0%
Brazil	3	100%	173	100%
Romania	4	100%	81	100%
Indonesia	7	57%	80	18%
Iran, Islamic Republic of	3	100%	79	100%
Sweden	2	0%	75	0%

## Technology [p. 105]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	5	60%	7,714	71%
Large: 150-599	17	65%	4,077	64%
Med.: 60-149	40	60%	2,969	63%
Small: 20-59	95	78%	2,412	80%
Smallest: 0-19	36	86%	301	96%

Category	Journals	%Free	Articles	%Free
Traditional	31	48%	5,620	82%
Open Access	47	55%	5,542	42%
Univ/college	73	92%	3,424	88%
Miscellaneous	35	77%	1,800	85%
Society/govt	21	86%	1,087	64%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	40	19.3%	
Grew 25-49.9%	25	12.1%	31.4%
Grew 10-24.99%	21	10.1%	41.5%
Even, $\pm$ 9.99%	48	23.2%	64.7%
Shrank 10-24.99%	23	11.1%	75.8%
Shrank 25-49.99%	23	11.1%	87.0%
Shrank 50%+	27	13.0%	

### *Comments*

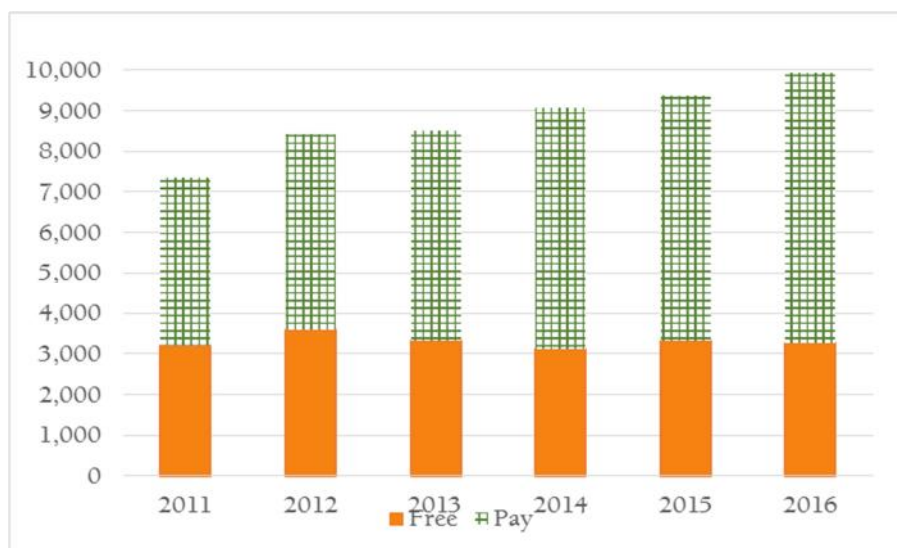
Rapidly growing, mostly in free journals. Mostly free. Growth (41.5%) considerably exceeds shrinkage (35.3%). Distinctive for STEM in that articles in free journals are the majority at all journal sizes.

Very little APCLand activity. Note that the US—seventh among countries—is the first country to have most articles in APC-based journals, and the only one among the top dozen.

Country	Journals	%Free	Articles	%Free
APCLand	45	38%	5,037	20%
France	4	75%	3,848	99%
Germany	5	80%	1,831	99%
Brazil	15	100%	919	100%
Indonesia	15	93%	856	98%
Poland	11	91%	683	84%
Ukraine	3	67%	638	93%
United States	9	67%	415	33%
China	4	75%	309	82%
Canada	2	100%	291	100%
Hungary	2	100%	188	100%
Slovakia	3	100%	185	100%
Russian Federation	7	86%	177	84%
Slovenia	2	50%	174	3%
United Kingdom	6	0%	163	0%
India	8	63%	157	38%
Romania	5	100%	155	100%
Chile	1	100%	133	100%
Croatia	3	100%	132	100%
Belgium	6	100%	118	100%
Serbia	3	100%	115	100%
Lithuania	1	0%	103	0%
Bulgaria	3	100%	89	100%
Japan	1	0%	69	0%
Colombia	4	100%	66	100%
Czech Republic	4	100%	59	100%

## Zoology [p. 106]

Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	1	0%	648	0%
Large: 150-599	14	29%	3,012	15%
Med.: 60-149	52	33%	3,371	29%
Small: 20-59	103	61%	2,587	61%
Smallest: 0-19	34	62%	311	71%



Category	Journals	%Free	Articles	%Free
Univ/college	83	64%	3,863	42%
Traditional	16	6%	1,869	1%
Open Access	57	35%	1,857	23%
Miscellaneous	35	63%	1,442	53%
Society/govt	23	70%	898	49%

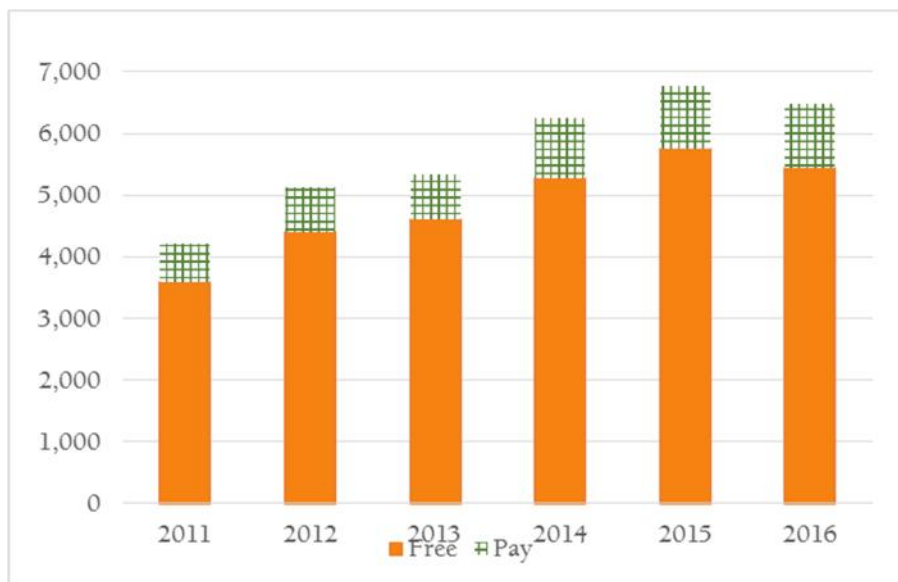
Change 2015-16	Count	Percent	Cum%
Grew 50%+	29	13.6%	
Grew 25-49.9%	19	8.9%	22.4%
Grew 10-24.99%	30	14.0%	36.4%
Even, $\pm$ 9.99%	66	30.8%	67.3%
Shrank 10-24.99%	16	7.5%	74.8%
Shrank 25-49.99%	26	12.1%	86.9%
Shrank 50%+	28	13.1%	

Country	Journals	%Free	Articles	%Free
Brazil	23	57%	1,714	32%
APC Land	34	15%	1,569	12%
India	4	50%	1,120	20%
Bulgaria	6	50%	723	10%
Indonesia	23	52%	706	42%
Italy	11	73%	353	64%
Romania	9	33%	345	44%
Turkey	7	57%	306	40%
United States	4	0%	300	0%
Iran, Islamic Republic of	7	43%	291	56%
Pakistan	4	50%	271	25%
Poland	12	75%	257	53%
Spain	8	88%	223	90%
China	2	50%	210	35%
Germany	6	33%	190	17%
Czech Republic	2	0%	149	0%
Korea, Republic of	2	0%	122	0%
Colombia	4	100%	120	100%
France	2	100%	93	100%
Ukraine	2	50%	92	58%
Bangladesh	2	50%	80	24%
Russian Federation	3	100%	68	100%
United Kingdom	3	67%	63	35%
South Africa	3	33%	57	54%

### *Comments*

Unusual for Brazil to be mostly APC-based, among other things.

## Anthropology [p. 113]



	Journals	%Free	Articles	%Free
Large: 150-599	5	80%	500	68%
Med.: 60-149	26	77%	1,719	69%
Small: 20-59	138	90%	3,451	91%
Smallest: 0-19	74	91%	808	94%

Category	Journals	%Free	Articles	%Free
Univ/college	152	92%	3,872	86%
Miscellaneous	54	94%	1,381	89%
Open Access	26	50%	584	44%
Society/govt	23	100%	506	100%
Traditional	4	75%	135	91%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	40	15.4%	
Grew 25-49.9%	28	10.8%	26.3%
Grew 10-24.99%	33	12.7%	39.0%
Even, $\pm$ 9.99%	55	21.2%	60.2%
Shrank 10-24.99%	34	13.1%	73.4%
Shrank 25-49.99%	34	13.1%	86.5%
Shrank 50%+	35	13.5%	

### *Comments*

Fairly typical for humanities and social sciences. Mostly free, mostly not large journals (no very large ones), mostly universities and colleges.

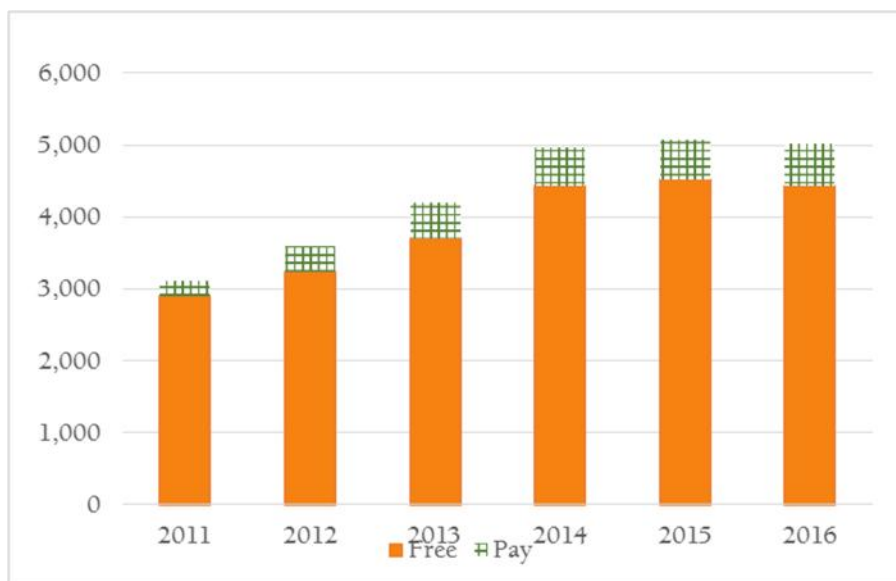
Just slightly more shrinkage than growth.

Also fairly common: Brazil and Spain have the most articles, almost all free. Somewhat atypically, six other nations are ahead of the US and Russia.

Country	Journals	%Free	Articles	%Free
Brazil	26	92%	821	91%
Spain	36	97%	677	95%
Romania	11	73%	476	35%
France	17	100%	398	100%
Turkey	6	83%	396	78%
Poland	15	93%	378	69%
Italy	16	100%	309	100%
Argentina	14	100%	278	100%
United Kingdom	10	30%	267	44%
United States	10	90%	254	94%
Russian Federation	5	100%	246	100%
Indonesia	15	73%	239	69%
APCLand	8	38%	229	54%
Ukraine	3	100%	209	100%
Croatia	7	100%	168	100%
Colombia	6	100%	118	100%
Serbia	3	100%	113	100%
Czech Republic	6	100%	99	100%
Estonia	3	100%	75	100%
Portugal	2	100%	75	100%
Slovenia	3	100%	65	100%
Japan	1	100%	55	100%
Costa Rica	4	100%	52	100%

## Arts & Architecture [p. 114]

	Journals	%Free	Articles	%Free
Large: 150-599	2	100%	220	100%
Med.: 60-149	28	79%	1,729	75%
Small: 20-59	98	94%	2,409	95%
Smallest: 0-19	61	98%	661	97%



Category	Journals	%Free	Articles	%Free
Univ/college	142	94%	3,124	89%
Miscellaneous	48	98%	1,294	94%
Society/govt	10	90%	257	100%
Traditional	4	75%	214	62%
Open Access	9	78%	130	43%

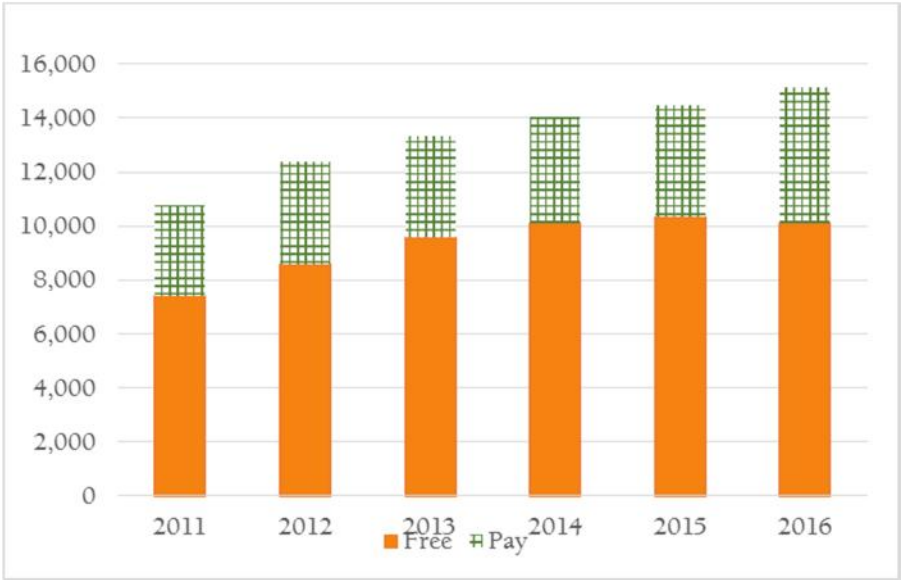
Change 2015-16	Count	Percent	Cum%
Grew 50%+	46	21.6%	
Grew 25-49.9%	22	10.3%	31.9%
Grew 10-24.99%	25	11.7%	43.7%
Even, $\pm$ 9.99%	40	18.8%	62.4%
Shrank 10-24.99%	17	8.0%	70.4%
Shrank 25-49.99%	26	12.2%	82.6%
Shrank 50%+	37	17.4%	

Country	Journals	%Free	Articles	%Free
Brazil	24	96%	853	97%
Spain	31	100%	647	100%
Italy	24	96%	459	85%
United States	16	94%	342	76%
Turkey	6	100%	263	100%
United Kingdom	11	82%	256	60%
Russian Federation	4	75%	232	66%
Portugal	8	88%	205	66%
APCLand	5	80%	192	72%
Colombia	4	100%	181	100%
Romania	5	100%	152	100%
Indonesia	10	60%	137	43%
France	4	100%	116	100%
Germany	3	100%	95	100%
Croatia	5	100%	81	100%
India	2	100%	80	100%
Mexico	3	100%	77	100%
Serbia	5	100%	64	100%
Chile	5	100%	63	100%
Moldova, Republic of	1	100%	62	100%

### *Comments*

More growth than shrinkage; only Indonesia (along countries with 50+ articles) is mostly APC-based; more growth than shrinkage.

Economics [p. 115]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	1	0%	537	0%
Large: 150-599	17	41%	3,002	34%
Med.: 60-149	61	64%	3,407	62%
Small: 20-59	263	84%	6,655	84%
Smallest: 0-19	135	90%	1,527	90%

Category	Journals	%Free	Articles	%Free
Univ/college	314	89%	8,728	76%
Miscellaneous	86	72%	2,346	63%
Open Access	50	56%	2,259	23%
Society/govt	35	91%	1,233	94%
Traditional	25	80%	562	64%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	72	14.1%	
Grew 25-49.9%	49	9.6%	23.7%
Grew 10-24.99%	58	11.4%	35.1%
Even, $\pm$ 9.99%	154	30.2%	65.3%
Shrank 10-24.99%	44	8.6%	73.9%
Shrank 25-49.99%	58	11.4%	85.3%
Shrank 50%+	75	14.7%	

### *Comments*

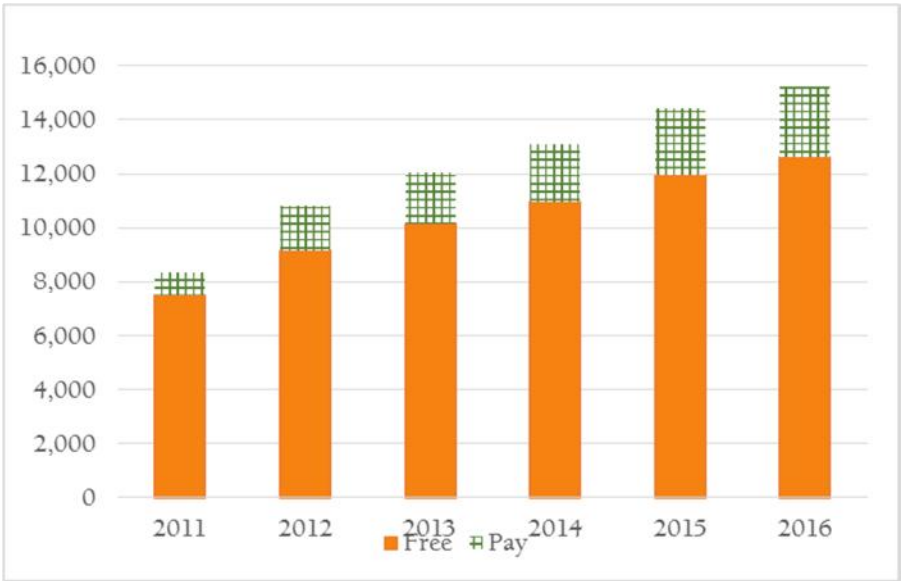
While still mostly free, pay journals play a larger role than in most HSS fields. The very large journal had a peak of more than 600 articles, although it was below that cutoff in 2016.

Growth and shrinkage are almost precisely balanced (35.1% vs. 34.7%).

Romania's prominence is unusual (economics represents a quarter of all Romanian OAWorld output).

Country	Journals	%Free	Articles	%Free
Romania	59	69%	2,101	60%
Brazil	82	100%	1,895	100%
Turkey	18	67%	1,721	25%
Indonesia	48	83%	1,552	86%
Ukraine	11	36%	1,144	14%
Poland	26	88%	740	82%
APCLand	31	71%	602	67%
United States	20	65%	389	61%
Spain	23	100%	355	100%
Canada	8	75%	348	47%
Croatia	12	92%	330	82%
Colombia	17	100%	311	100%
Iran, Islamic Republic of	11	91%	302	87%
Korea, Republic of	4	100%	253	100%
Serbia	10	90%	247	77%
Czech Republic	13	77%	225	87%
Russian Federation	4	100%	225	100%
United Kingdom	7	43%	219	14%
Mexico	9	100%	218	100%
Albania	1	0%	135	0%
Slovenia	6	100%	130	100%
Moldova, Republic of	4	50%	125	54%
United Arab Emirates	2	0%	124	0%
South Africa	4	25%	119	5%
Italy	7	86%	109	81%
India	4	75%	107	100%
Argentina	9	100%	103	100%
France	3	67%	83	81%
Pakistan	3	100%	70	100%
Lithuania	3	67%	65	45%
Montenegro	1	100%	55	100%
Venezuela, Bolivarian Republic of	2	50%	52	79%

# Education [p. 116]



	Journals	%Free	Articles	%Free
Large: 150-599	4	50%	734	15%
Med.: 60-149	64	72%	4,442	75%
Small: 20-59	310	91%	8,438	92%
Smallest: 0-19	149	88%	1,620	88%

Category	Journals	%Free	Articles	%Free
Univ/college	349	91%	10,167	87%
Miscellaneous	116	91%	2,732	83%
Society/govt	43	91%	1,173	83%
Open Access	31	52%	753	48%
Traditional	12	58%	409	36%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	101	18.3%	
Grew 25-49.9%	48	8.7%	27.0%
Grew 10-24.99%	69	12.5%	39.6%
Even, $\pm$ 9.99%	146	26.5%	66.1%
Shrank 10-24.99%	55	10.0%	76.0%
Shrank 25-49.99%	62	11.3%	87.3%
Shrank 50%+	70	12.7%	

### Comments

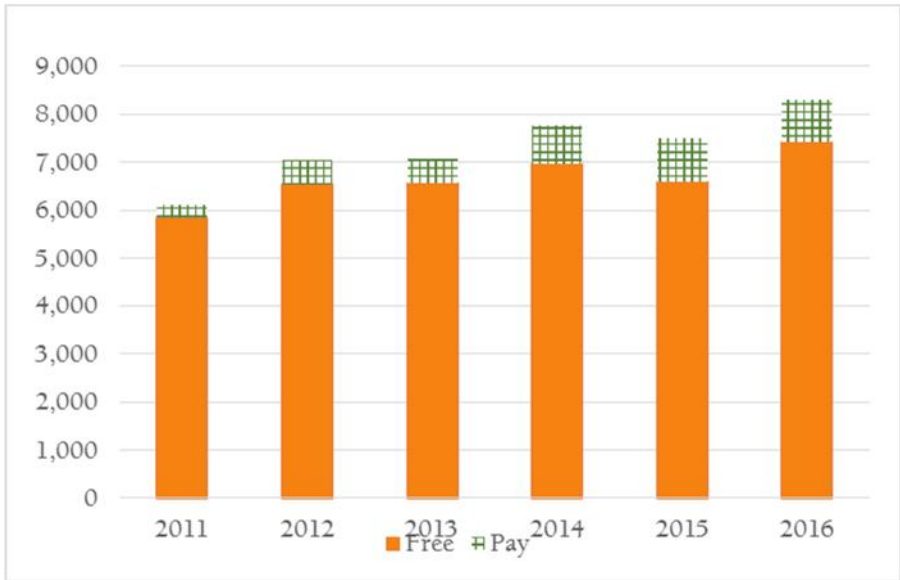
Growing, predominantly free, no very large journals (and APC-based articles dominate large journals), and more growth (39.6%) than shrinkage (33.9%).

As is commonly true for HSS, university-based journals dominate the subject, with two-thirds of the articles in this case.

A lot of countries have active education OA programs. These seven countries are omitted from the table: New Zealand (three journals, 71 articles); Malaysia (four & 68); Cyprus (two & 61); Japan (three & 61); Taiwan, Province of China (five & 60); Ecuador (two & 59); Korea, Republic of (one & 57). Except for Taiwan (22% free), none of the education journals in these countries charge APCs.

Country	Journals	%Free	Articles	%Free
Brazil	74	97%	2,923	94%
Spain	53	96%	1,464	92%
Turkey	41	90%	1,310	91%
Indonesia	65	72%	1,150	66%
United States	53	92%	1,097	86%
Iraq	3	67%	553	18%
United Kingdom	16	75%	365	40%
Cuba	4	100%	364	100%
Mexico	10	90%	358	83%
Canada	16	100%	349	100%
Germany	10	70%	321	53%
Italy	12	100%	315	100%
Colombia	18	100%	307	100%
Russian Federation	4	100%	284	100%
Iran, Islamic Republic of	11	91%	277	82%
APCLand	11	55%	225	57%
Poland	7	100%	221	100%
Sweden	11	82%	219	64%
India	2	0%	200	0%
Australia	11	91%	193	77%
Costa Rica	5	100%	192	100%
Norway	10	80%	192	86%
Ukraine	3	67%	173	80%
Romania	9	89%	165	85%
South Africa	6	50%	153	41%
Czech Republic	7	86%	152	88%
Portugal	5	100%	125	100%
Serbia	3	100%	116	100%
Austria	3	67%	115	88%
France	5	100%	94	100%
Lithuania	3	67%	88	93%
Slovenia	4	100%	84	100%
Argentina	5	100%	80	100%
Chile	3	100%	73	100%

## History [p. 117]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	2	100%	1,368	100%
Large: 150-599	5	80%	980	48%
Med.: 60-149	18	89%	999	80%
Small: 20-59	160	98%	4,211	97%
Smallest: 0-19	70	94%	731	93%

Category	Journals	%Free	Articles	%Free
Univ/college	195	97%	4,776	94%
Miscellaneous	48	98%	2,792	82%
Society/govt	22	100%	566	100%
Open Access	11	73%	133	72%
Traditional	1	0%	22	0%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	49	17.7%	
Grew 25-49.9%	25	9.0%	26.7%
Grew 10-24.99%	30	10.8%	37.5%
Even, $\pm$ 9.99%	72	26.0%	63.5%
Shrank 10-24.99%	34	12.3%	75.8%
Shrank 25-49.99%	26	9.4%	85.2%
Shrank 50%+	41	14.8%	

### Comments

Free journals are more dominant than in most HSS fields (but four other subjects have even higher free percentages).

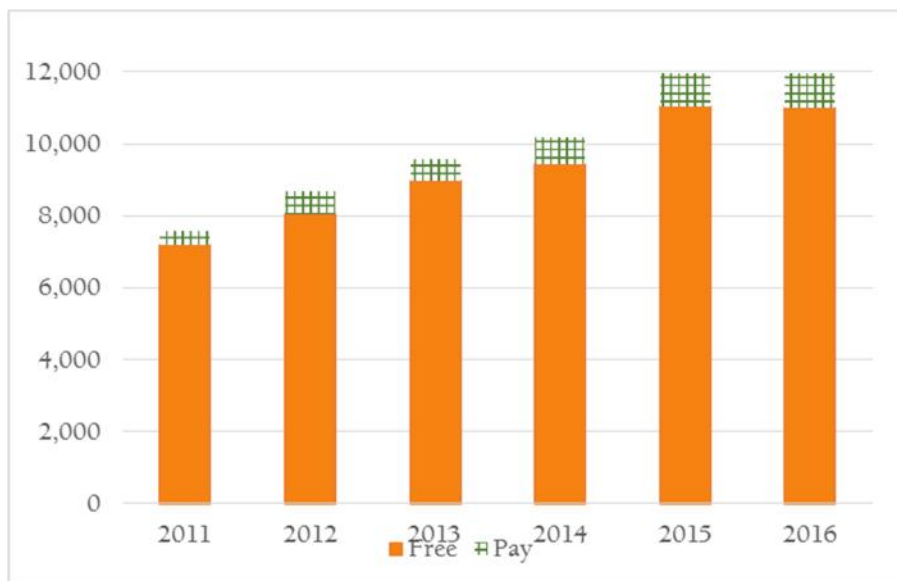
Somewhat unusually, the largest journals are free and most articles are in small journals.

Growth *slightly* exceeds shrinkage, 37.5% to 36.5%.

Perhaps interesting that the four most prolific countries have no APC-based history journals, but that's also true for 17 of the top 20, with Russia, the UK and Romania standing out (especially Russia, the *only* country in the top 20 where most articles appear in APC-based journals).

Country	Journals	%Free	Articles	%Free
United States	23	100%	1,163	100%
Brazil	31	100%	956	100%
Germany	8	100%	906	100%
Spain	42	100%	872	100%
Russian Federation	9	67%	803	17%
France	19	100%	432	100%
Italy	19	100%	395	100%
Colombia	11	100%	329	100%
Argentina	14	100%	323	100%
United Kingdom	9	78%	302	90%
Netherlands	4	100%	156	100%
Chile	7	100%	134	100%
Romania	10	90%	128	87%
Portugal	6	100%	112	100%
Mexico	6	100%	111	100%
Turkey	6	100%	104	100%
Hungary	2	100%	100	100%
Croatia	3	100%	86	100%
Finland	3	100%	83	100%
Slovakia	1	100%	72	100%
Indonesia	4	25%	68	0%
Austria	2	100%	58	100%
Poland	4	100%	57	100%
Australia	8	100%	56	100%
Canada	5	100%	54	100%
Iraq	1	0%	53	0%
Denmark	1	100%	51	100%

## Language & Literature [p. 118]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	1	100%	858	100%
Large: 150-599	7	86%	940	77%
Med.: 60-149	40	88%	2,383	86%
Small: 20-59	241	95%	6,307	95%
Smallest: 0-19	141	95%	1,479	94%

Category	Journals	%Free	Articles	%Free
Univ/college	336	96%	7,774	94%
Miscellaneous	69	96%	2,487	94%
Open Access	37	89%	966	67%
Society/govt	26	100%	687	100%
Traditional	6	17%	53	11%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	79	16.7%	
Grew 25-49.9%	54	11.4%	28.1%
Grew 10-24.99%	60	12.7%	40.7%
Even, $\pm$ 9.99%	94	19.8%	60.5%
Shrank 10-24.99%	43	9.1%	69.6%
Shrank 25-49.99%	72	15.2%	84.8%
Shrank 50%+	72	15.2%	

### Comments

Even higher free-article percentage, and free articles dominate in all journal size categories. Starting dates peak earlier than in most fields but stay strong through 2014.

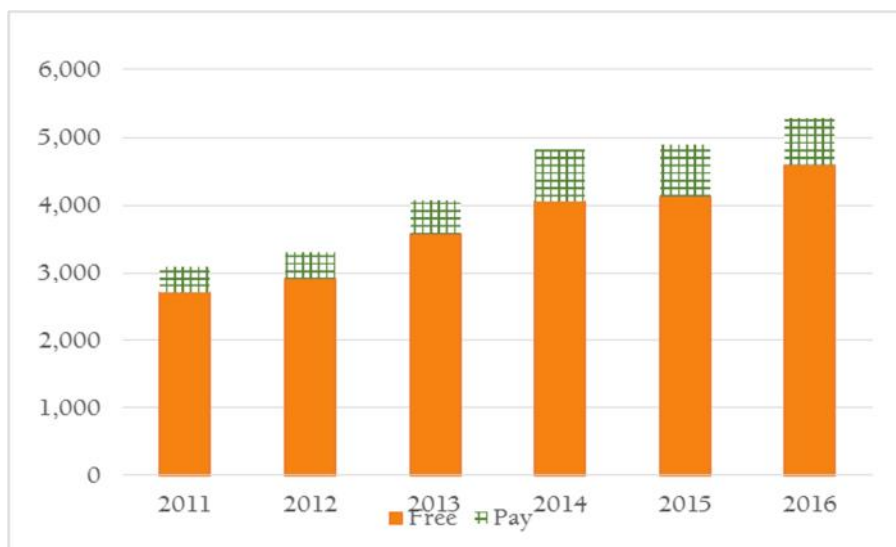
Slightly more growing (40.7%) than shrinking (39.5%).

This time, Australia is the most prolific country that's not entirely free and that's not mostly free.

A note about copyfitting: I've moved tables around and, in some cases, shrunk table row spacing slightly when it would allow cutting a page. While history had few enough countries with 50 or more articles that I could have squeezed in the journal-size table and subject heading on that page (by reducing row height slightly), there are too many 50+ countries for language & literature for that to have made a difference. Indeed, I had to reduce row height to fit the full set of countries on the page.

Country	Journals	%Free	Articles	%Free
Brazil	54	100%	1,884	100%
Spain	62	100%	1,236	100%
Turkey	5	100%	1,062	100%
United States	37	100%	808	100%
Italy	28	100%	806	100%
France	36	100%	702	100%
Australia	7	71%	481	48%
Poland	21	100%	429	100%
Russian Federation	10	80%	421	54%
Romania	9	78%	310	94%
Germany	11	100%	269	100%
United Kingdom	15	87%	252	75%
Indonesia	19	79%	224	63%
Colombia	7	100%	207	100%
Chile	6	100%	188	100%
Slovenia	9	100%	184	100%
South Africa	5	20%	171	27%
Portugal	9	100%	165	100%
Canada	11	91%	152	100%
Belgium	6	100%	148	100%
Mexico	5	100%	129	100%
Argentina	5	100%	121	100%
Malaysia	4	50%	113	26%
Ecuador	1	100%	94	100%
Croatia	3	100%	92	100%
Slovakia	4	75%	90	59%
Sweden	4	100%	85	100%
Lithuania	7	100%	84	100%
Philippines	2	100%	83	100%
Norway	9	100%	78	100%
Iran, Islamic Republic of	3	33%	76	17%
Estonia	4	100%	71	100%
Netherlands	7	100%	70	100%
Czech Republic	4	100%	61	100%
Hungary	4	100%	55	100%

## Law [p. 119]



	Journals	%Free	Articles	%Free
Large: 150-599	3	33%	544	41%
Med.: 60-149	17	76%	1,240	81%
Small: 20-59	110	95%	2,877	95%
Smallest: 0-19	58	98%	631	98%

Category	Journals	%Free	Articles	%Free
Univ/college	141	96%	3,236	93%
Miscellaneous	38	92%	1,650	75%
Open Access	13	69%	202	68%
Society/govt	6	100%	120	100%
Traditional	5	80%	84	100%

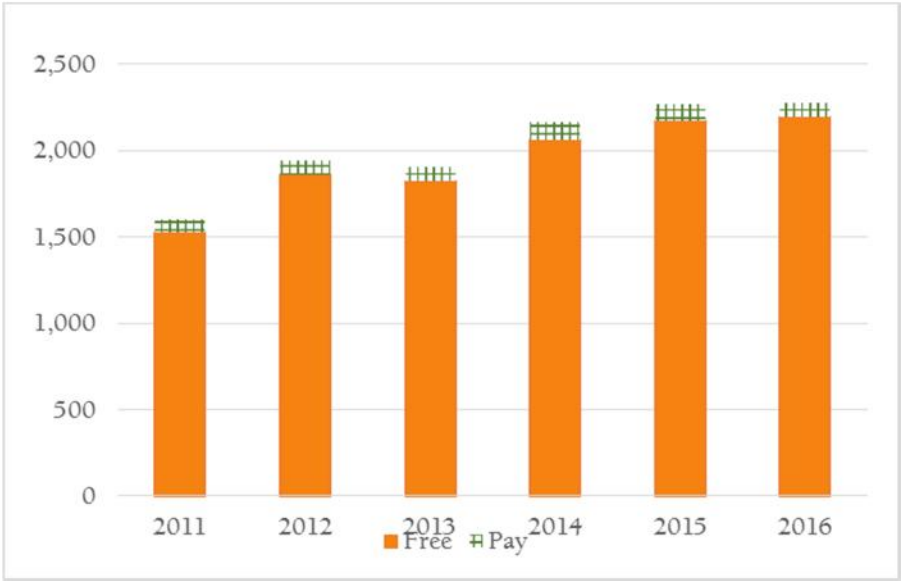
Change 2015-16	Count	Percent	Cum%
Grew 50%+	33	16.3%	
Grew 25-49.9%	18	8.9%	25.1%
Grew 10-24.99%	23	11.3%	36.5%
Even, $\pm$ 9.99%	50	24.6%	61.1%
Shrank 10-24.99%	23	11.3%	72.4%
Shrank 25-49.99%	28	13.8%	86.2%
Shrank 50%+	28	13.8%	

Country	Journals	%Free	Articles	%Free
Brazil	43	100%	1,475	100%
Russian Federation	10	80%	459	62%
Spain	18	100%	457	100%
Italy	8	100%	385	100%
Indonesia	15	73%	331	58%
Colombia	20	100%	304	100%
Hong Kong	1	0%	239	0%
APCLand	7	71%	220	80%
Romania	6	100%	207	100%
Norway	7	86%	142	93%
Croatia	4	100%	114	100%
France	4	100%	89	100%
South Africa	2	50%	80	31%
Chile	3	100%	75	100%
Poland	5	100%	71	100%
Canada	4	100%	68	100%
United States	8	88%	66	100%
Costa Rica	2	100%	54	100%

Comments

Predominantly free, growing, no very large journals (in terms of *number* of articles), mostly university-based—and more shrinkage than growth.

Library Science [p. 120]



	Journals	%Free	Articles	%Free
Med.: 60-149	8	100%	469	100%
Small: 20-59	59	97%	1,447	95%
Smallest: 0-19	39	95%	360	96%

Category	Journals	%Free	Articles	%Free
Univ/college	65	98%	1,340	99%
Miscellaneous	21	90%	411	84%
Society/govt	19	100%	367	100%
Open Access	6	83%	158	97%

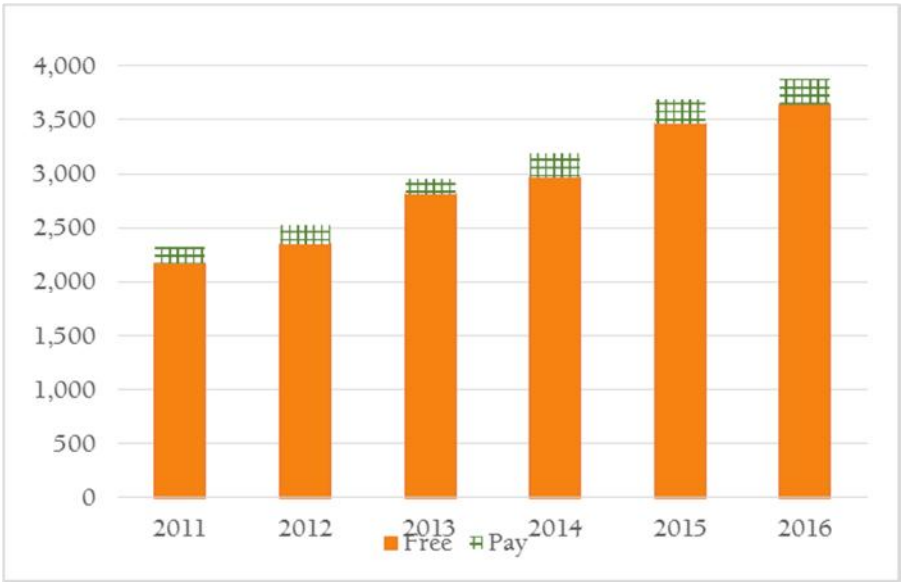
Change 2015-16	Count	Percent	Cum%
Grew 50%+	19	17.1%	
Grew 25-49.9%	9	8.1%	25.2%
Grew 10-24.99%	17	15.3%	40.5%
Even, $\pm$ 9.99%	21	18.9%	59.5%
Shrank 10-24.99%	16	14.4%	73.9%
Shrank 25-49.99%	17	15.3%	89.2%
Shrank 50%+	12	10.8%	

Country	Journals	%Free	Articles	%Free
United States	26	100%	415	100%
Brazil	13	100%	306	100%
United Kingdom	8	75%	222	87%
Spain	9	100%	174	100%
Canada	3	100%	149	100%
Germany	5	100%	89	100%
India	2	50%	85	48%
Poland	4	100%	76	100%
Iran, Islamic Republic of	3	100%	74	100%
Cuba	3	100%	65	100%
Portugal	3	100%	65	100%
Italy	2	100%	55	100%
Turkey	3	100%	54	100%
Taiwan, Province of China	3	100%	50	100%

Comments

Like Law, but even higher free percentage—and the smallest output of any subject, with no large journals. India stands out for APC charges, but that’s only one journal and 44 articles.

Media & Communications [p. 121]



	Journals	%Free	Articles	%Free
Large: 150-599	2	100%	374	100%
Med.: 60-149	12	100%	807	100%
Small: 20-59	89	90%	2,364	90%
Smallest: 0-19	29	100%	339	100%

Category	Journals	%Free	Articles	%Free
Univ/college	90	99%	2,716	100%
Miscellaneous	25	92%	594	88%
Society/govt	11	82%	309	80%
Open Access	9	67%	151	56%
Traditional	2	50%	114	74%

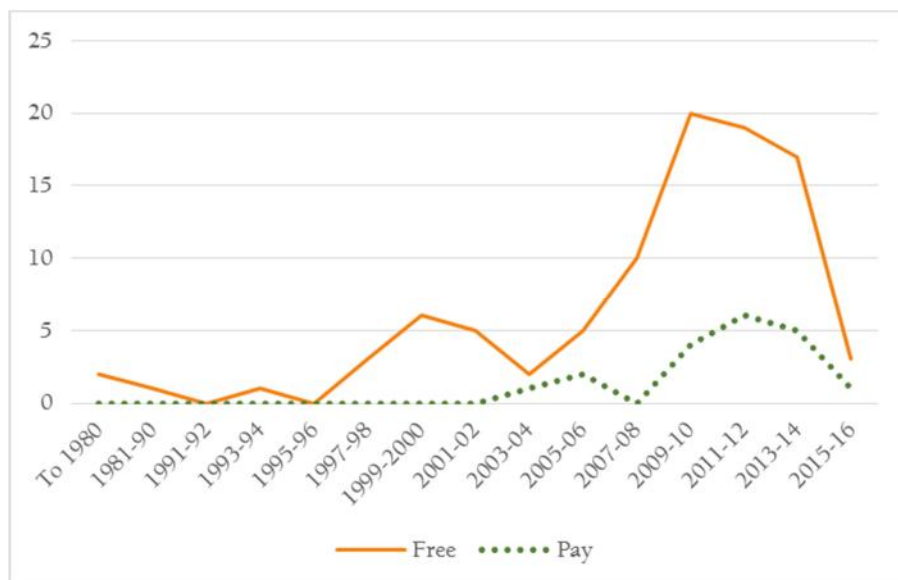
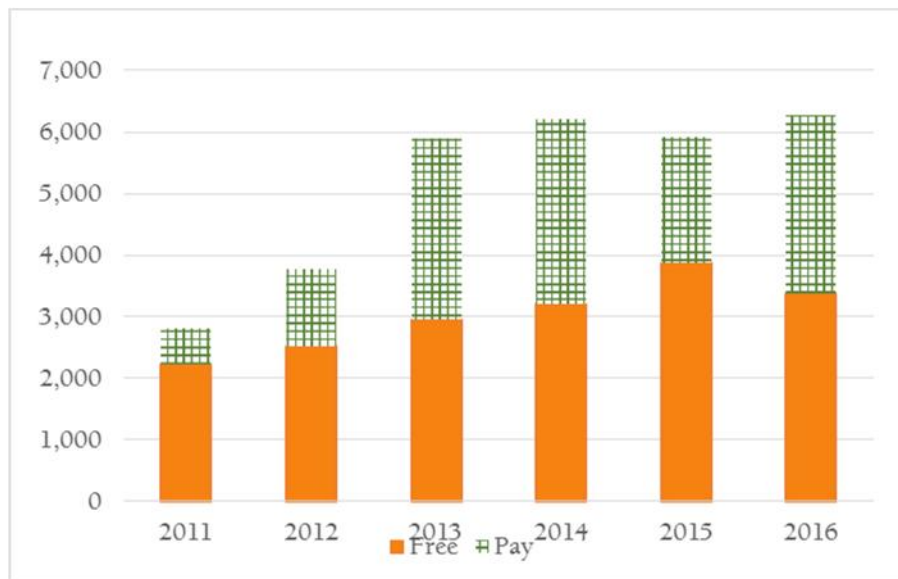
Change 2015-16	Count	Percent	Cum%
Grew 50%+	26	19.0%	
Grew 25-49.9%	13	9.5%	28.5%
Grew 10-24.99%	17	12.4%	40.9%
Even, $\pm$ 9.99%	29	21.2%	62.0%
Shrank 10-24.99%	18	13.1%	75.2%
Shrank 25-49.99%	19	13.9%	89.1%
Shrank 50%+	15	10.9%	

Country	Journals	%Free	Articles	%Free
Brazil	28	100%	879	100%
Spain	17	94%	498	91%
United States	10	100%	496	100%
Portugal	7	86%	244	79%
Argentina	5	100%	211	100%
Italy	8	100%	164	100%
Australia	6	100%	134	100%
Canada	3	100%	124	100%
APCLand	3	33%	117	72%
United Kingdom	6	100%	92	100%
Chile	4	100%	88	100%
Turkey	2	100%	77	100%
Colombia	3	100%	75	100%
Austria	1	100%	70	100%
Denmark	2	100%	58	100%

## Comments

Omitted for space: France, four journals, 54 articles, 63% free. More growth than shrinkage, otherwise similar to Law and Library Science.

## Miscellany [p. 122]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	2	50%	2,207	3%
Large: 150-599	9	67%	1,208	81%
Med.: 60-149	20	65%	1,184	67%
Small: 20-59	61	90%	1,476	91%
Smallest: 0-19	18	89%	195	91%

Category	Journals	%Free	Articles	%Free
Miscellaneous	23	65%	3,053	22%
Univ/college	78	95%	2,694	94%
Open Access	10	40%	373	27%
Traditional	2	50%	150	47%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	25	22.1%	
Grew 25-49.9%	11	9.7%	31.9%
Grew 10-24.99%	17	15.0%	46.9%
Even, $\pm$ 9.99%	20	17.7%	64.6%
Shrank 10-24.99%	10	8.8%	73.5%
Shrank 25-49.99%	17	15.0%	88.5%
Shrank 50%+	13	11.5%	

### Comments

The lowest free percentage of any HSS area, and that's hardly surprising since "International Journals of Whatever" are included here: journals that appear to cover all disciplines inside and outside of STEM and biomed. \

That also explains the existence of very large journals (only one of which was very large in 2016).

Considerably more growth (46.9%) than shrinkage (35.4%), and a high percentage of *fast* growth (50%+).

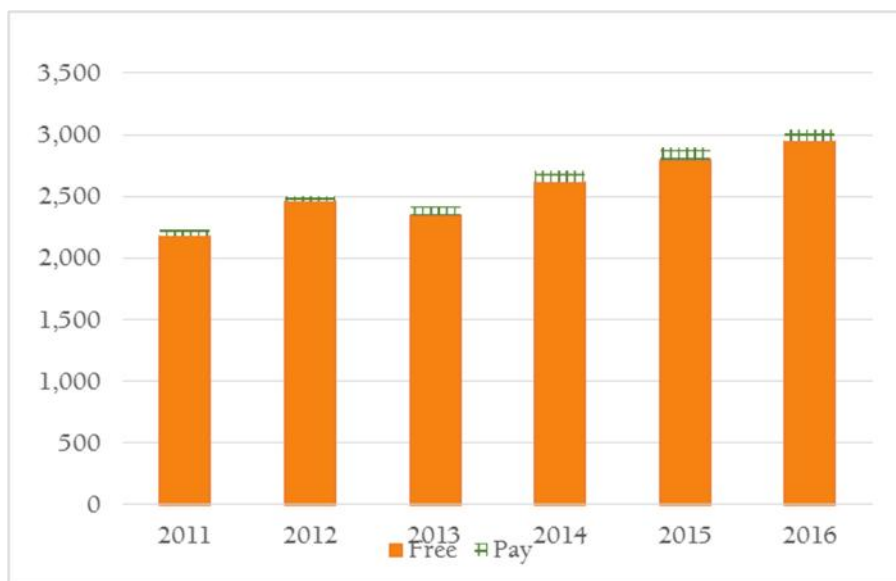
Russia leads the pack in this catchall category, with 40% of all articles.

Country	Journals	%Free	Articles	%Free
Russian Federation	6	67%	2,520	13%
Brazil	24	100%	796	100%
Venezuela, Bolivarian Republic of	1	100%	430	100%
Turkey	4	100%	263	100%
Romania	5	60%	246	47%
Ukraine	3	67%	193	78%
Spain	8	88%	190	72%
APCLand	4	50%	178	34%
India	3	0%	125	0%
Mexico	5	100%	111	100%
Cuba	1	100%	110	100%
United Kingdom	2	50%	103	22%
Philippines	1	0%	97	0%
Colombia	5	100%	96	100%
Indonesia	4	75%	96	79%
Netherlands	3	100%	93	100%
United States	6	67%	91	95%
Bulgaria	2	50%	72	79%
Poland	2	100%	60	100%

## Philosophy [p. 123]

	Journals	%Free	Articles	%Free
Med.: 60-149	11	100%	589	100%
Small: 20-59	83	96%	2,123	97%
Smallest: 0-19	31	90%	333	91%

Category	Journals	%Free	Articles	%Free
Univ/college	88	98%	2,100	98%
Miscellaneous	26	92%	449	94%
Society/govt	15	100%	331	100%
Open Access	5	80%	131	93%
Traditional	2	50%	34	35%



### Comments

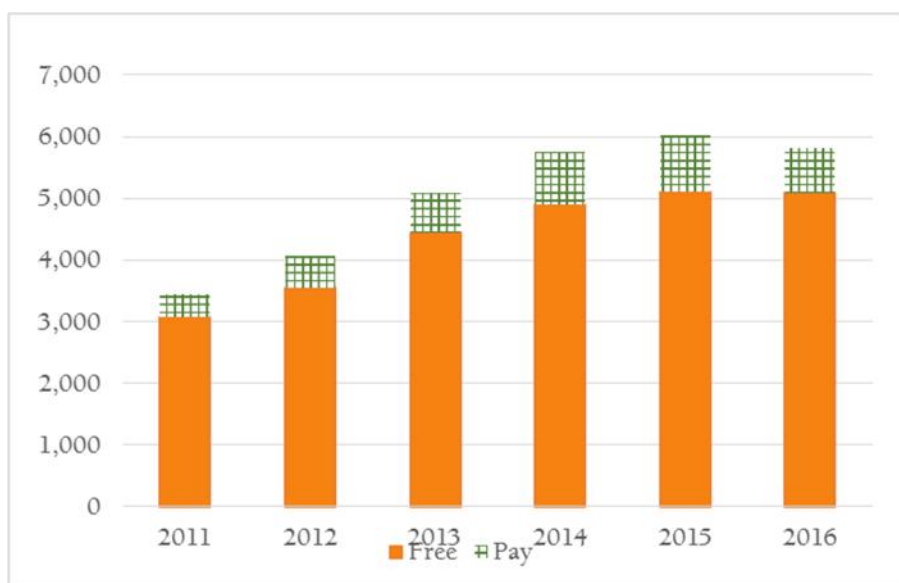
The highest free-article percentage and the second smallest group of articles in HSS. No large journals and dominated by university journals.

Considerably more growth (46.3%) than shrinkage (35.3%).

Too few articles for the table, but only APCLand (three journals, 43 articles, 28% free) isn't predominantly free.

Country	Journals	%Free	Articles	%Free
Brazil	24	100%	583	100%
Spain	10	100%	371	100%
Italy	16	94%	314	97%
United States	11	100%	245	100%
Poland	8	100%	204	100%
Colombia	6	100%	163	100%
Ukraine	3	100%	155	100%
Romania	7	86%	149	79%
Canada	7	100%	112	100%
France	4	100%	85	100%
Croatia	3	100%	78	100%

## Political Science [p. 124]



	Journals	%Free	Articles	%Free
Large: 150-599	3	33%	831	54%
Med.: 60-149	22	86%	1,138	91%
Small: 20-59	126	95%	3,262	94%
Smallest: 0-19	53	89%	577	91%



Category	Journals	%Free	Articles	%Free
Univ/college	141	94%	3,461	89%
Miscellaneous	35	97%	1,217	99%
Open Access	22	73%	635	47%
Society/govt	12	100%	294	100%
Traditional	7	71%	201	91%

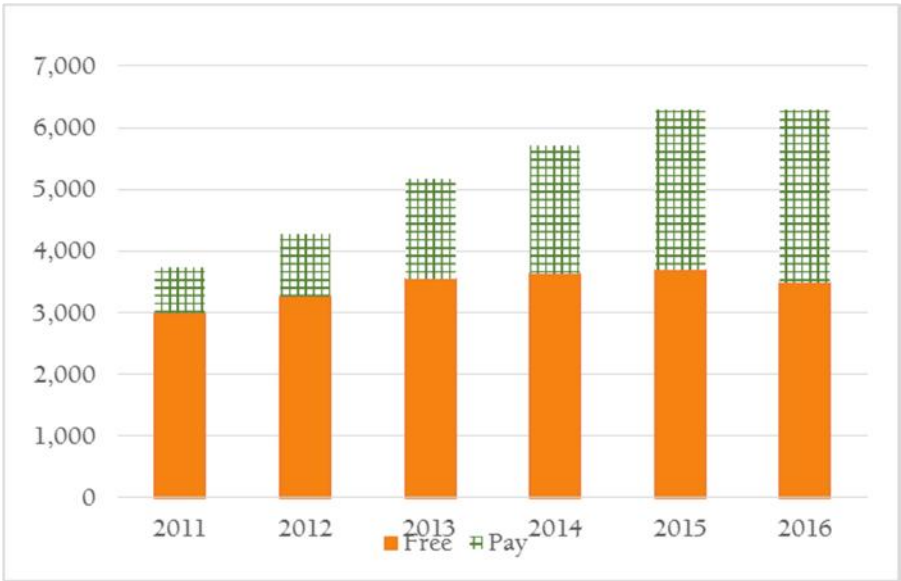
Change 2015-16	Count	Percent	Cum%
Grew 50%+	33	15.2%	
Grew 25-49.9%	16	7.4%	22.6%
Grew 10-24.99%	28	12.9%	35.5%
Even, $\pm 9.99\%$	53	24.4%	59.9%
Shrank 10-24.99%	21	9.7%	69.6%
Shrank 25-49.99%	33	15.2%	84.8%
Shrank 50%+	33	15.2%	

### Comments

Typical HSS in most ways: predominantly free, no very large journals, university-based journals dominate. Significantly more shrinkage (40.1%) than growth (33.5%). Somewhat unusual for Romania to have the most output—and for Russia's output to be entirely free.

Country	Journals	%Free	Articles	%Free
Romania	22	95%	723	76%
Brazil	29	100%	715	100%
Russian Federation	6	100%	613	100%
Spain	16	100%	373	100%
Poland	10	100%	330	100%
United States	12	83%	231	90%
Hong Kong	1	0%	202	0%
Colombia	8	100%	192	100%
Chile	7	100%	190	100%
APCLand	5	100%	182	100%
Mexico	6	83%	153	95%
Germany	8	100%	144	100%
Indonesia	6	67%	141	65%
Ukraine	3	100%	128	100%
Canada	5	100%	116	100%
France	6	100%	113	100%
Italy	7	100%	100	100%
Iceland	2	100%	90	100%
India	1	100%	88	100%
Pakistan	2	100%	87	100%
Netherlands	3	33%	77	18%
United Kingdom	7	57%	77	65%
Portugal	3	67%	75	25%
Sweden	4	75%	67	75%
Turkey	4	100%	63	100%
Austria	5	100%	59	100%
Australia	3	100%	53	100%
South Africa	2	100%	52	100%
Czech Republic	4	100%	51	100%

# Psychology [p. 125]



Article Volume	Journals	%Free	Articles	%Free
Largest: 600+	1	0%	2,128	0%
Large: 150-599	2	100%	203	100%
Med.: 60-149	22	82%	1,391	79%
Small: 20-59	85	87%	2,199	86%
Smallest: 0-19	37	81%	361	82%

Category	Journals	%Free	Articles	%Free
Open Access	16	38%	2,601	11%
Univ/college	89	97%	2,441	94%
Miscellaneous	19	89%	474	96%
Traditional	15	47%	455	41%
Society/govt	13	92%	311	91%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	15	9.9%	
Grew 25-49.9%	19	12.5%	22.4%
Grew 10-24.99%	13	8.6%	30.9%
Even, $\pm$ 9.99%	51	33.6%	64.5%
Shrank 10-24.99%	17	11.2%	75.7%
Shrank 25-49.99%	22	14.5%	90.1%
Shrank 50%+	15	9.9%	

### *Comments*

Some of these journals may be more psychiatry than psychology—or be predominantly concerned with clinical psychology. That would make them a better fit in biomed than in HSS, and the patterns are somewhere in between the two.

Still mostly free, but not by much. The single very large journal is very large and charges APCs. APCLand journals, almost all charging APCs, produce 40% of all the papers.

Significantly more shrinkage (35.5%) than growth (30.9%).

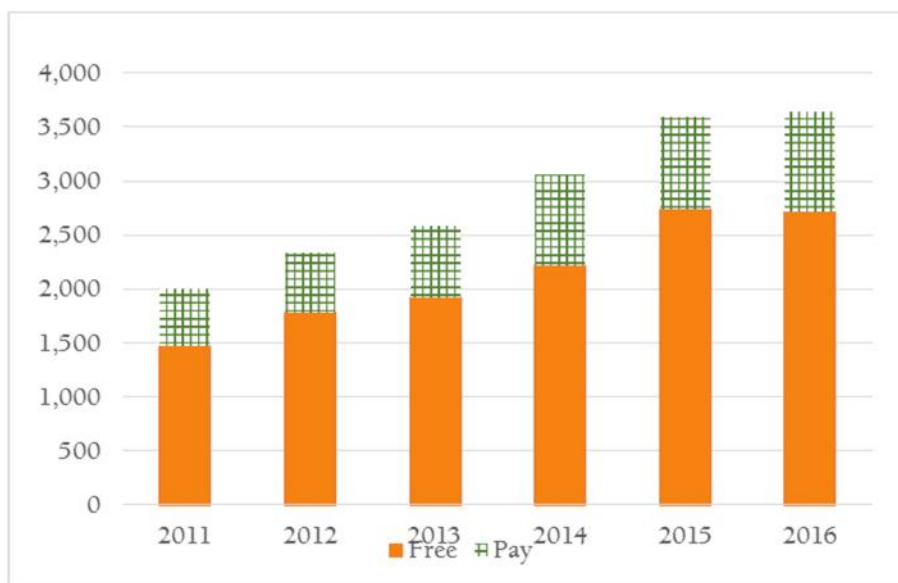
Country	Journals	%Free	Articles	%Free
APCLand	13	46%	2,486	6%
Brazil	22	100%	920	100%
Spain	16	88%	513	71%
Russian Federation	8	100%	344	100%
Colombia	13	92%	297	93%
United States	10	60%	170	64%
Germany	7	86%	167	94%
Poland	5	100%	153	100%
United Kingdom	6	33%	149	28%
India	1	100%	127	100%
Italy	6	83%	106	92%
Indonesia	6	100%	76	100%
Moldova, Republic of	1	100%	75	100%
Canada	3	33%	74	28%
Georgia	1	100%	66	100%
Peru	3	100%	63	100%
Mexico	2	100%	52	100%
Uruguay	2	100%	52	100%

## Religion [p. 126]

	Journals	%Free	Articles	%Free
Large: 150-599	3	33%	467	10%
Med.: 60-149	13	77%	895	74%
Small: 20-59	82	85%	1,943	87%
Smallest: 0-19	30	97%	334	97%

Category	Journals	%Free	Articles	%Free
Univ/college	81	89%	1,921	90%
Open Access	10	40%	738	14%
Miscellaneous	37	92%	700	88%
Traditional	3	100%	154	100%
Society/govt	5	100%	126	100%

Change 2015-16		Count	Percent	Cum%
Grew 50%+	26	19.1%		
Grew 25-49.9%	14	10.3%		29.4%
Grew 10-24.99%	11	8.1%		37.5%
Even, $\pm 9.99\%$	38	27.9%		65.4%
Shrank 10-24.99%	9	6.6%		72.1%
Shrank 25-49.99%	19	14.0%		86.0%
Shrank 50%+	19	14.0%		



### Comments

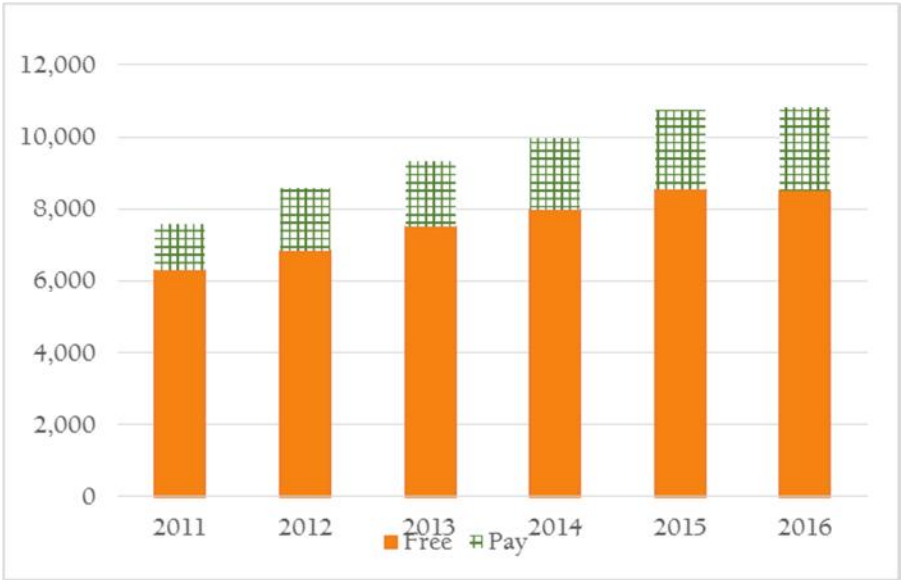
Mostly free, mostly small, mostly university-based: all fairly typical. Slightly more growth than shrinkage.

The two top countries are unusual (as is the fact that there were no articles in free religious journals in South Africa for 2016).



Country	Journals	%Free	Articles	%Free
Indonesia	44	89%	648	84%
South Africa	7	14%	535	0%
Brazil	15	93%	487	92%
United States	12	100%	262	100%
Spain	4	100%	176	100%
APCLand	2	50%	166	9%
Poland	6	100%	165	100%
Netherlands	2	50%	156	89%
Germany	6	100%	126	100%
Italy	2	100%	111	100%
Malaysia	3	33%	82	48%
Russian Federation	1	100%	75	100%
Sweden	2	100%	61	100%
Chile	2	100%	56	100%
Turkey	3	100%	53	100%

Sociology [p. 127]



	Journals	%Free	Articles	%Free
Large: 150-599	9	56%	1,811	42%
Med.: 60-149	39	79%	2,445	80%
Small: 20-59	209	89%	5,562	88%
Smallest: 0-19	90	88%	991	91%

Category	Journals	%Free	Articles	%Free
Univ/college	240	95%	6,768	95%
Miscellaneous	71	87%	1,921	60%
Traditional	19	32%	913	23%
Open Access	25	52%	819	38%
Society/govt	20	100%	388	100%

Change 2015-16	Count	Percent	Cum%
Grew 50%+	67	17.9%	
Grew 25-49.9%	34	9.1%	26.9%
Grew 10-24.99%	45	12.0%	38.9%
Even, $\pm$ 9.99%	97	25.9%	64.8%
Shrank 10-24.99%	40	10.7%	75.5%
Shrank 25-49.99%	39	10.4%	85.9%
Shrank 50%+	53	14.1%	

### *Comments*

Still growing (albeit slowly) and with more growth than shrinkage.

No very large journals. Mostly university-based. All in all, fairly typical HSS patterns.

Country	Journals	%Free	Articles	%Free
Brazil	47	100%	1,476	100%
United States	34	88%	1,073	65%
Spain	32	91%	753	92%
Turkey	12	92%	728	35%
APCLand	17	35%	684	26%
United Kingdom	15	60%	645	51%
Colombia	24	100%	614	100%
Poland	9	100%	526	100%
France	15	100%	398	100%
Mexico	13	100%	355	100%
Romania	10	90%	289	96%
Argentina	16	100%	280	100%
Portugal	8	75%	249	63%
Russian Federation	5	80%	226	68%
Canada	9	100%	216	100%
Netherlands	4	100%	211	100%
Australia	7	100%	160	100%
Indonesia	7	71%	155	85%
Ecuador	4	100%	148	100%
Germany	6	83%	148	100%
Croatia	5	100%	142	100%
Italy	6	100%	130	100%
Iran, Islamic Republic of	3	0%	121	0%
Chile	5	100%	98	100%
Ukraine	3	100%	66	100%
South Africa	3	0%	64	0%
Venezuela, Bolivarian Republic of	3	100%	63	100%
Sweden	6	67%	61	93%
Moldova, Republic of	1	0%	56	0%
Lithuania	5	60%	55	71%
India	3	67%	53	28%

## Feedback Invited

I'd love to get feedback on how the whole *GOAJ* presentation could be done better, in case the series continues. That applies not only to changes in subject handling but to all aspects of the presentation (and even the data gathering).

Are there tables that could be presented more clearly? Are there tables that don't seem to be useful? Are the two graphs worthwhile? Should I add commentary to the discussions of individual countries—or drop them from subject discussions? Is the level of commentary in the general book appropriate?

For that matter, should I drop the distinction between APCLand and OAWorld?

I can't promise that I'll use your suggestions. I can promise that I'll give them serious consideration, especially those that are feasible.

Comments should go to [waltcrawford@gmail.com](mailto:waltcrawford@gmail.com).

This marks the end of *GOAJ* 2011-2016. It's certainly not the end of open access coverage for this year: in fact, there's a major economics-and-access roundup that's been hanging fire since mid-April, gathering new citations along the way...

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## Masthead

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