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Title

Evaluating big deal journal bundles

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Supplemental Information for Evaluating Big Deal Journal Bundles

Table SI 1: Sample Mean Bundle Prices by Institution Type

Publisher	Research 1	Research 2	Master's
Elsevier	\$1,208,012	\$356,690	\$72,531
Taylor & Francis	\$383,040	\$72,536	n.a.
Wiley	\$361,479	\$106,173	\$42,358
Springer	\$359,176	\$186,721	\$46,494
Sage	\$117,657	\$72,373	\$39,117
Oxford	\$85,024	\$28,648	\$9,559
Amer Chem Soc	\$74,702	\$41,772	\$26,415
Cambridge	\$39,997	\$24,491	\$8,582
Emerald	\$30,996	\$7,590	\$6,706

Table SI 2: Total Costs and Citations

Bundle	Cost to Avg Research 1	Cost to Avg Research 2	Cost to Avg Master's	Number of Citations
Full non-profit sample	\$595,103	\$547,835	\$411,846	589,223
90% of non-profit cites	\$367,415	\$329,431	\$222,843	530,189
75% of non-profit cites	\$245,388	\$205,367	\$155,967	443,693
Elsevier	\$1,160,760	\$369,181	\$70,689	516,558
Springer	\$360,355	\$175,060	\$55,743	124,301
Wiley	\$329,535	\$94,072	\$30,726	63,520
Taylor & Francis	\$295,842	\$72,536	n.a.	27,405
Sage	\$114,015	\$62,378	\$26,586	15,751
Emerald	\$24,462	\$7,209	\$6,661	17,614
Average Serials Budget of institution type	\$5,968,297	\$1,786,316	\$523,700	

Table SI 3: Prices of Bundles from Non-Profit Publishers with Tiered Pricing

Publisher	Res 1	Res 2	Master's	Undergrad
Am Geophys Union	\$13,230	\$8,820	\$5,880	\$2,920
Am Inst Physics	\$25,555	\$22,780	\$20,130	\$20,130
Am Medical Assoc	\$11,795	\$9,570	\$7,415	\$3,425
Am Physical Soc	\$18,310	\$13,950	\$10,905	\$10,905
Am Soc Microbiology	\$7,984	\$6,140	\$3,734	\$3,734
Am Soc Bioch Mol Bio	\$4,635	\$4,075	\$3,685	\$3,685
Am Psychol Assoc	\$26,150	\$19,200	\$14,550	\$3900
Cold Spring Harbor	\$5,035	\$4,617	\$4,617	\$4,617
Company of Biologists	\$8,955	\$8145	\$6,930	\$6,930
Endocrine Soc	\$3,481	\$3,160	\$3,160	\$3,160
Ecological Soc Amer	\$1,530	\$1,440	\$1,385	\$1,385
MIT Press	\$2,700	\$2,430	\$2,160	\$1,890
Proc Natl Acad Scienc	\$3195	\$2,440	\$1,305	\$1,305
Rockefeller U Press	\$6,215	\$5,055	\$4,100	\$4,100
U of Chicago Press	\$21,440	\$ 17,155	\$14,870	\$11,645

Table SI 4: Prices from Non-profit Publishers with Uniform Pricing (2009)

Publisher	Bundle Price	Price per annual article	Price per annual citation	Price per 10 ⁴ eigen-factor	Bundle Discount
Am Economics Assoc	\$665	\$3.7	\$1.1	\$0.5	*
Am Cancer Assoc	\$4,175	\$1.3	\$1.8	\$0.5	0
Am Soc Pharm Exp Th	\$1,397	\$1.1	\$0.3	\$0.8	0
Acad of Management	\$430	\$3.5	\$0.6	\$0.8	0
Annual Reviews	\$6,285	\$8.7	\$0.6	\$1.0	0.13
Am Physiological Soc	\$6,665	\$0.5	\$0.5	\$1.1	0
Am Statistical Assoc	\$1,000	\$3.1	\$1.5	\$1.4	0.10
Am Meteorolog Assoc	\$4,044	\$3.2	\$0.9	\$1.5	0.05
Am Psychiatric Assoc	\$2,763	\$3.7	\$ 0.7	\$1.7	0
Inst Math Statistics	\$1,698	\$4.4	\$2.5	\$1.8	0.21
Geological Soc Am	\$2,050	\$3.9	\$1.1	\$2.1	0
Am Marketing Assoc	\$780	\$5.67	\$1.69	\$2.4	0
Soil Science Soc Am	\$1,938	\$2.1	\$1.2	\$2.6	0.36
IEEE	\$43,995	\$2.3	\$1.0	\$2.6	0.51
INFORMS	\$3,543	\$6.41	\$3.0	\$3.6	0.17
Am Math Soc	\$4,129	\$4.3	\$4.6	\$3.6	0
Entomological Soc Amer	\$1,397	\$1.8	\$1.4	\$3.6	0
Soc Ind App Math	\$5,894	\$5.6	\$3.9	\$4.2	0.20
Soc Gen Microbiology	\$6,150	\$4.1	\$1.7	\$4.3	0
Assoc Computer Machin	\$3,800	\$4.0	\$3.0	\$4.3	0.21
Optical Soc Amer	\$10,945	\$3.8	\$2.3	\$4.5	0
Royal Soc Chem (Pkg A)	\$38,588	\$6.7	\$1.6	\$4.9	0.19
U of Wisc Press	\$718	\$8	\$4.8	\$5.0	0
Royal Soc (London)	\$12,510	\$12.8	\$1.6	\$5.2	0.19
Amer Soc Horticult Sci	\$920	\$1.7	\$2.6	\$6.7	0
SPIE	\$2,535	\$2.8	\$2.7	\$7.5	0
Johns Hopkins U Press	\$2,131	\$5.1	\$6.4	\$7.6	0
Duke U Press	\$2,650	\$11.9	\$11.9	\$8.4	0
Am Soc Mech Engin	\$7,035	\$ 3.2	\$ 4.9	\$8.8	0.37
Am Soc Civil Engin	\$10,590	\$ 5.4	\$ 6.4	\$11.4	0.25
Inst of Physics (Pkg B)	\$61,945	\$9.9	\$5.6	\$11.6	0.15
Am Inst Aero Astro	\$5,888	\$4.9	\$8.5	\$11.7	0
Am Inst Math Sci	\$2,350	\$8.2	\$9.6	\$11.7	0.38
U of Calif Press	\$1,819	\$8.2	\$8.8	\$12.4	0
Amer Fisheries Soc	\$1,242	\$5.0	\$5.0	\$12.4	0
Inst Engin and Tech	\$7,386	\$4.9	\$ 6.6	\$13.0	0.71
Am Nuclear Soc	\$5,245	\$10.5	\$22.9	\$35.3	0

Notes: Bundles are sorted by price per eigenfactor, from low to high. Annual numbers of citations and articles are calculated by dividing the 5-year citation and article counts reported by Thomsen ISI *Journal Citation Reports* by 5.

*The American Economics Association journals are not sold separately.

Table SI 5: Cost of Elsevier Freedom Package (Research 1 and 2 Institutions)

University	Carnegie	Ph.Ds	Enrollment	Cost
Arizona Universities*	Res 1	1,286	123,473	\$2,724,888
Auburn	Res 1	180	22,654	\$1,252,544
Clemson	Res 1	144	16,582	\$1,296,044
Colorado State	Res 1	185	24,409	\$1,319,633
Cornell	Res 1	513	20,340	\$1,969,908
Georgia State	Res 1	131	25,135	\$934,764
Louisiana State	Res 1	213	28,467	\$1,198,237
New York U.	Res 1	341	40,291	\$1,878,962
U of Alabama	Res 1	131	22,971	\$1,018,614
U of California**	Res 1	3,505	218,320	\$8,760,968
U of Colorado	Res 1	285	28,333	\$1,725,023
U of Denver	Res 1	65	10,036	\$467,406
U of Georgia	Res 1	386	33,079	\$1,854,419
U of Idaho	Res 1	56	10,008	\$750,808
Illinois Universities***	Res 1	934	72,751	\$2,319,383
U of Iowa	Res 1	295	27,361	\$1,420,484
U of Maryland	Res 1	475	31,573	\$1,760,173
U of Michigan	Res 1	787	39,447	\$2,164,830
U of Tennessee	Res 1	230	27,635	\$579,815
U of Texas, Arlington	Res 1	124	20,136	\$620,042
U of Texas, Austin	Res 1	647	46,537	\$1,539,380
U of Wisconsin	Res 1	696	35,295	\$1,215,516
U of Wyoming	Res 1	55	10,478	\$497,014
Alabama A&M	Res 2	14	5,742	\$253,057
U of Alaska, Fairbanks	Res 2	33	5,651	\$306,525
North Dakota State	Res 2	61	10,834	\$498,410
U of Alabama, Huntsville	Res 2	32	5,754	\$55,609
U of Montana	Res 2	49	12,727	\$492,206
U of North Dakota	Res 2	20	11,861	\$458,801
U of No. Colorado	Res 2	27	11,814	\$137,109
U of So. Alabama	Res 2	10	12,037	\$471,666
U of Texas, Dallas	Res 2	112	12,089	\$415,417
U of Texas, El Paso	Res 2	30	15,541	\$376,175

*Licensed jointly to consortium including U of Ariz, Ariz State U and Northern Ariz U.

**Licensed jointly to 10 University of California campuses.

***Licensed jointly to U of Illinois campuses at Champaign-Urbana, Chicago, and Springfield.

Table SI 6: Cost of Elsevier Freedom Package (Master's Institutions)

University	Enrollment	Cost
Alabama State	5,113	\$117,319
Auburn at Montgomery	4,153	\$45,015
College of St. Catherine (MN)	4,486	\$48,270
Colorado School of Mines	3,940	\$214,143
Jacksonville State	3,948	\$31,809
Mankato State U	18,423	\$192,454
Regis	7,968	\$23,724
St. Mary's College (MN)	4,486	\$48,270
Tuskegee	3,322	\$56,622
U Colorado, Col Spring	7,159	\$90,305
U of North Alabama	5,904	\$36,952
U of Texas, Brownsville	9,668	\$18,316
U of Texas, San Antonio	22,714	\$252,615
U of Texas, Tyler	4,788	\$22,465
U of Texas, Pan American	15,342	\$16,285
Western Washington U	13,416	\$184,440

Table SI 7: Cost of Springer Journal Collection

University	Carnegie	Ph.D's	Enrollment	Cost
CIC Consortium*	Res 1	4,667	414,652	\$4,174,998
Clemson	Res 1	144	16,582	\$322,680
Colorado State U	Res 1	185	24,409	\$378,709
Georgia Consortium (GETSM)**	Res 1	1,169	102,994	\$727,829
Northern Illinois U	Res 1	59	21,457	\$185,284
Rensselaer Polytechnic U	Res 1	131	6,946	\$31,916
Syracuse	Res 1	116	16,973	\$264,034
Temple	Res 1	164	32,459	\$449,352
Tufts	Res 1	124	10,150	\$360,436
U of California***	Res 1	3,505	218,319	\$3,429,570
U of Kentucky	Res 1	230	23,123	\$525,089
U of Maine	Res 1	51	9,407	\$336,290
U of Mass, Amherst	Res 1	219	24,231	\$168,244
U of Miami	Res 1	155	14,946	\$553,923
U of Tennessee	Res 1	230	27,635	\$379,251
U of Texas, Arlington	Res 1	124	20,136	\$166,209
U of Texas, Austin	Res 1	647	46,537	\$481,932
U of Virginia	Res 1	282	23,838	\$481,932
Vanderbilt	Res 1	248	10,361	\$539,121
Yale	Res 1	381	12,565	\$711,564
Dartmouth	Res 2	77	5804	\$483,488
U of Mass, Lowell	Res 2	37	8193	\$85,633
U of Montana	Res 2	49	12,727	\$145,727
U of Texas, Dallas	Res 2	112	12089	\$100,746
U of Texas, El Paso	Res 2	30	15541	\$118,008
California State System	Masters	30	376,802	\$812,740
Mount Holyoke College	Masters	0	2,296	\$38,093
U of So Maine	Masters	0	7526	\$23,941
U of Texas, Brownsville	Masters	0	9,668	\$18,546
U of Texas, San Antonio	Masters	26	22,714	\$95,347
U of Texas, Tyler	Masters	0	4,788	\$11,697

*Licensed jointly to consortium including Michigan State, Penn State, Illinois-Chicago, Illinois-Urbana, Iowa, Minnesota, Michigan, Chicago, Indiana, and Northwestern.

**Licensed jointly to 10 University of California campuses.

***Licensed jointly to consortium including U of Ga, Ga State, Emory, Georgia Tech, U of West Ga, Morehouse, Medical College of Ga .

Table SI 8: Cost of Sage Journal Package (Research 1 and 2)

University	Carnegie	Ph.D's	Enrollment	Cost
Brigham Young	Res 1	409	33,255	\$184,921
Florida State	Res 1	271	29,087	\$136,468
New York U	Res 1	341	40,297	\$176,450
Oklahoma State	Res 1	134	20,323	\$69,484
Rutgers	Res 1	339	32,802	\$175,097
Stanford	Res 1	594	14,212	\$153,815
U of Arizona	Res 1	401	35,044	\$108,487
U of California	Res 1	3,505	218,389	\$930,063
U of Colorado	Res 1	285	28,333	\$130,860
U of Denver	Res 1	65	10,036	\$87,577
U of Kansas	Res 1	212	25,168	\$100,438
U of Massachusetts	Res 1	219	24,231	\$84,688
U of Michigan	Res 1	716	39,447	\$184,635
U of Minnesota	Res 1	587	44,486	\$205,000
U of Missouri	Res1	230	24,903	\$107,825
U of New Mexico	Res 1	183	20,886	\$104,544
U of Rhode Island	Res 1	63	13,539	\$72,830
U of Tennessee	Res 1	230	27,635	\$119,917
U of Utah	Res 1	285	26,764	\$84,298
U of Virginia	Res 1	393	23,838	\$127,792
U of Wyoming	Res 1	55	10,478	\$68,240
Utah State	Res 1	71	17,707	\$57,618
Yale	Res 1	381	12,565	\$176,365
Baylor	Res 2	63	14,184	\$90,073
Calif State, San Diego	Res 2	11	28,835	\$104,185
U of Colorado, Denver	Res 2	27	34,931	\$73,918
U of Montana	Res 2	49	12,727	\$54,215
U of No. Colorado	Res 2	27	11,814	\$66,519
U of Tulsa	Res 2	22	3,831	\$45,028

Table SI 9: Cost of Sage Journal Package (Master's Institutions)

University	Enrollment	Cost
Bryant University	3,508	\$9,176
Cal Poly (San Luis Obispo)	17,913	\$34,421
Cal Poly (Pomona)	19,300	\$31,533
Cal State Bakersfield	7,915	\$40,626
Cal State Chico	16,498	\$24,261
Cal State Dominguez Hills	10,079	\$42,925
Cal State East Bay	13,306	\$34,474
Cal State Fresno	20,384	\$47,915
Cal State Fullerton	28,602	\$74,572
Cal State Long Beach	31,242	\$68,604
Cal State Los Angeles	19,103	\$33,467
Cal State Northridge	29,429	\$48,197
Cal State Sacramento	26,137	\$77,597
Cal State San Bernadino	15,916	\$16,016
Cal State San Francisco	26,773	\$69,178
Cal State San Jose	26,592	\$26,115
Cal State San Marcos	7,920	\$36,189
Cal State Sonoma	8,161	\$14,626
Cal State Stanislaus	7,048	\$49,057
Humboldt State University	7,698	\$18,377
Providence College	4,828	\$49,770
Regis University	7,968	\$29,639
Rhode Island College	6,974	\$29,706
Univ of Colorado, Colorado Springs	7,159	\$32,361

Table SI 10: Cost of Wiley Journal Package (Research 1 Institutions)

University	Carnegie	Ph.Ds	Enrollment	Cost
Arizona State	Res 1	428	61,449	\$342,382
Brigham Young	Res 1	68	33,255	\$294,609
Colorado State	Res 1	185	24,409	\$364,848
Emory	Res 1	199	14,515	\$423,285
Georgia Inst of Tech	Res 1	485	18,740	\$386,326
Georgia State	Res 1	131	25,135	\$223,015
Indiana	Res 1	359	36,631	\$266,996
Iowa State	Res 1	285	23,052	\$457,840
Louisiana State	Res 1	213	28,467	\$230,527
Michigan State	Res 1	388	41,689	\$363,681
Mississippi State	Res 1	70	15,278	\$309,100
Northwestern	Res 1	354	17,181	\$451,646
Oklahoma State	Res 1	134	20,323	\$185,795
Old Dominion	Res 1	64	16,469	\$121,031
Pennsylvania State	Res 1	598	75,180	\$683,258
Purdue	Res 1	610	41,275	\$592,391
Rice	Res 1	162	5,486	\$323,354
Southern Illinois	Res 1	112	16,513	\$293,638
Texas A&M	Res 1	518	44,432	\$541,830
UC Berkeley	Res 1	814	35,364	\$455,871
UC Davis	Res 1	471	29,898	\$446,870
UC Irvine	Res 1	391	27,395	\$303,202
UC Los Angeles	Res 1	677	37,962	\$363,483
UC Riverside	Res 1	175	17,066	\$270,089
UC San Diego	Res 1	403	27,514	\$362,280
UC San Francisco	Res 1	131	2,905	\$196,501
UC Santa Barbara	Res 1	308	21,969	\$302,600
UC Santa Cruz	Res 1	135	15,657	\$147,108
U of Arizona	Res 1	401	35,044	\$447,138
U of Arkansas	Res 1	132	15,926	\$289,467
U of Chicago	Res 1	365	14,576	\$371,463
U of Colorado	Res 1	285	28,333	\$433,224
U of Georgia	Res 1	336	33,079	\$536,645
U of Houston	Res 1	176	28,400	\$304,788
U of Idaho	Res 1	56	10,008	\$147,356
U of Illinois, Chicago	Res 1	269	23,572	\$404,123
U of Illinois, Urbana	Res 1	665	45,599	\$422,531
U of Iowa	Res 1	295	27,361	\$378,481
U of Kansas	Res 1	212	25,168	\$268,286
U of Kentucky	Res 1	230	25,168	\$487,679
U of Michigan	Res 1	787	39,447	\$535,536
U of Minnesota	Res 1	587	44,486	\$502,355
U of Missouri	Res 1	230	24,903	\$233,659
U of Nebraska	Res 1	184	17,572	\$318,358
U of Nevada, Reno	Res 1	80	13,134	\$156,672
U of Oklahoma	Res 1	193	21,965	\$500,744
U of Oregon	Res 1	136	19,838	\$285,036
U of Tennessee	Res 1	230	27,635	\$282,575
U of Texas, Arlington	Res 1	124	20,136	\$173,459
U of Texas, Austin	Res 1	647	46,537	\$433,551
U of Virginia	Res 1	282	23,838	\$480,537
U of Washington	Res 1	562	39,432	\$488,120
Virginia Commonwealth	Res 1	117	25,344	\$439,890
Wash U, St. Louis	Res 1	248	11,860	\$541,663
West Virginia	Res 1	125	27,120	\$326,487

Table SI 11: Cost of Wiley Journal Package (Research 2 Institutions)

University	Carnegie	Ph.Ds	Enrollment	Cost
Baylor	Res 2	63	14,184	\$174,087
George Mason	Res 2	168	22,640	\$155,066
Indiana U, Indianapolis	Res 2	0	23,664	\$269,104
North Dakota State	Res 2	61	10,834	\$147,839
Northern Arizona	Res 2	29	26,980	\$42,718
South Dakota State	Res 2	21	9,544	\$46,004
U of Alaska, Fairbanks	Res 2	0	5,651	\$54,395
U of Montana	Res 2	49	12,727	\$63,502
U of Nevada, Las Vegas	Res 2	58	23,762	\$117,525
U of North Dakota	Res 2	29	11,814	\$143,155
U of South Dakota	Res 2	25	6,915	\$82,566
U of Texas, Dallas	Res 2	112	12,089	\$78,574
U of Texas, El Paso	Res 2	30	15,541	\$91,027
U of Tulsa	Res 2	22	3,831	\$94,475
Wichita State	Res 2	0	10,717	\$115,997

Table SI 12: Cost of Wiley Journal Package (Master's Institutions)

University	Enrollment	Cost
Boise State University	15,007	\$75,325
Indiana University Fort Wayne	8,639	\$22,339
Indiana University Northwest	3,666	\$3,833
Indiana University South Bend	5,113	\$9,649
Indiana University Southeast	4,604	\$18,053
James Madison University	17,151	\$52,093
Marshall University	13,207	\$70,948
Radford University	8,881	\$25,643
University of Michigan Dearborn	6,256	\$9,341
University of Michigan Flint	5,219	\$13,914
University of Minnesota Duluth	9,913	\$72,505
University of Texas Brownsville	9,668	\$7,763
University of Texas Pan American	15,342	\$62,974
University of Texas Permian Basin	2,946	\$3,244
University of Texas San Antonio	22,714	\$194,802
University of Texas Tyler	4,788	\$35,348

Table SI 13: Cost of Taylor & Francis Journal Package

University	Carnegie	Ph.Ds	Enrollment	Cost
New York U	Res 1	341	40,297	\$488,725
U of California	Res 1	3,505	218,389	\$2,133,680
U of Virginia	Res 1	393	23,838	\$314,971
U of Minnesota*	Res 1	587	44,486	\$430,000
U of New Mexico*	Res 1	183	20,886	\$315,852
U of Montana	Res 2	49	12,727	\$72,536

*U of Minnesota has access to 500 selected journals. U of New Mexico has the STM collection. All others have the "full collection" of Taylor & Francis journals.

Table SI 14: Cost of Emerald Journal Package

University	Carnegie	Ph. Ds	Enrollment	Cost
Arizona State	Res 1	428	61,449	\$108,350
Auburn	Res 1	180	22,654	\$25,104
Clemson	Res 1	144	16,582	\$16,400
Cornell	Res 1	513	20,340	\$27,434
Florida State	Res 1	271	29,087	\$31,196
Purdue	Res 1	610	41,275	\$56,691
U of Arizona	Res 1	401	35,044	\$34,560
U of Colorado	Res 1	285	28,333	\$35,750
U of Georgia	Res 1	386	33,079	\$10,614
U of Kentucky	Res 1	230	23,123	\$30,000
U of Michigan	Res 1	787	39,447	\$44,995
U of Minnesota	Res 1	690	44,486	\$25,787
U of New Mexico	Res 1	183	20,886	\$5,845
U of Oklahoma	Res 1	193	21,965	\$32,000
U of Texas	Res 1	647	46,537	\$23,000
U of Virginia	Res 1	282	23,838	\$14,359
Washington State U	Res 1	168	22,249	\$12,843
Cal State, San Diego	Res 2	11	28,835	\$2,967
U of Montana	Res 2	49	12,727	\$7,209
U of North Dakota	Res 2	20	11,861	\$7,970
Cal Poly, San Luis Obispo	Masters	0	17,913	\$12,714
Cal Poly, Pomona	Masters	0	19,300	\$14,725
Cal State, Chico	Masters	0	16,498	\$3,164
Cal State, Dominguez Hills	Masters	0	10,079	\$2,253
Cal State, East Bay	Masters	0	13,306	\$3,154
Cal State, Fresno	Masters	0	20,384	\$3,390
Cal State, Fullerton	Masters	0	28,602	\$7,419
Cal State, Long Beach	Masters	0	31,242	\$1,591
Cal State, Northridge	Masters	0	29,429	\$2,205
Cal State, Sacramento	Masters	0	26,137	\$5,151
Cal State, San Bernadino	Masters	0	15,916	\$8,702
Cal State, San Francisco	Masters	4	26,773	\$12,154
Cal State, San Jose	Masters	4	26,592	\$17,404
Cal State, San Marcos	Masters	0	7,920	\$3,785
Cal State, Stanislaus	Masters	0	7,048	\$6,511

Table SI 15: Cost of American Chemical Society Journal Bundle

University	Carnegie	Ph.D's	Enrollment	Cost
Colorado State	Res 1	148	24,409	\$55,495
New York U	Res 1	409	40,297	\$91,989
U of Michigan	Res 1	716	39,447	\$84,372
U of Minnesota	Res 1	587	44,486	\$88,939
U of So. Carolina	Res 1	213	24,449	\$84,317
U of Washington	Res 1	562	39,432	\$65,666
U of Montana	Res 2	49	12,727	\$53,354
Cal State Consortium*	Masters	19	355,555	\$505,662

*Consortium includes 19 California State institutions.

Table SI 16: Cost of Oxford University Press Journal Package

University	Carnegie	Ph. Ds	Enrollment	Cost
U of Colorado	Res 1	285	28,333	\$1,725,023
U of Iowa	Res 1	295	27,361	\$120,510
U of Minnesota	Res 1	587	44,486	\$105,469
U of New Mexico	Res 1	183	20,886	\$52,515
U of Utah	Res 1	285	26,764	\$77,605
U of Washington	Res 1	574	39,432	\$106,042
Cal State, San Diego	Res 2	11	28,835	\$25,334
U of Montana	Res 2	49	12,727	\$31,962
Cal Poly, Pomona	Masters	0	19,300	\$9,749
Cal Poly, San Luis Obispo	Masters	0	17,913	\$4,054
Cal State, Bakersfield	Masters	0	7,915	\$6,427
Cal State, Chico	Masters	0	16,498	\$8,187
Cal State, Dominguez Hills	Masters	0	10,079	\$5,603
Cal State, Fresno	Masters	0	20,384	\$16,028
Cal State, Fullerton	Masters	0	28,602	\$11,310
Cal State, Humboldt	Masters	0	7,698	\$5,567
Cal State, Long Beach	Masters	0	31,242	\$14,111
Cal State, Los Angeles	Masters	0	19,103	\$7,643
Cal State, Northridge	Masters	0	29,429	\$19,897
Cal State, Sacramento	Masters	0	26,137	\$18,748
Cal State, San Bernardino	Masters	0	15,916	\$5,483
Cal State, San Francisco	Masters	4	26,773	\$18,423
Cal State, San Jose	Masters	4	26,592	\$7,027
Cal State, San Marcos	Masters	0	7,920	\$5,295
Cal State, Stanislaus	Masters	0	7,048	\$3,783

Table SI 17: Cost of Cambridge University Press Journal Package

University	Carnegie	Ph. Ds	Enrollment	Cost
U of Oregon	Res 1	146	19,838	\$39,216
U of Virginia	Res 1	282	23,838	\$31,694
U of Washington	Res 1	562	39,432	\$55,882
U of Wyoming	Res 1	55	10,478	\$33,195
U of Montana	Res 2	49	12,727	\$24,039
Portland State	Res 2	0	18,741	\$24,944
Eastern Oregon	Masters	0	2,448	\$3,699
Eastern Washington	Masters	0	9,995	\$10,485
George Fox	Masters	0	2,889	\$7,601
Pacific U	Masters	0	2,642	\$0,086
Seattle U	Masters	0	7,467	\$9,854
Walla Walla Col	Masters	0	1,811	\$1,618
Western Washington	Masters	0	13,416	\$14,704
Whitman Col	Masters	0	1,398	\$11,610

Table SI 18: Bundle Cost-Effectiveness Comparisons

Library Type	Publisher	Cost per citation	Cost per 10 ⁴ eigenfactor	Cost per article
Res 1	Full non-profit sample	\$1.01	\$2.13	\$3.35
Res 1	90% non-profit sample	\$0.69	\$1.48	\$2.63
Res 1	75% non-profit sample	\$0.55	\$1.17	\$2.20
Res 1	Elsevier	\$2.25	\$5.68	\$4.82
Res 1	Springer	\$2.90	\$6.76	\$3.44
Res 1	Wiley	\$5.19	\$12.58	\$10.76
Res 1	Emerald	\$6.94	\$57.99	\$5.20
Res 1	Sage	\$7.24	\$17.39	\$9.60
Res 1	Taylor & Francis	\$10.80	\$29.37	\$8.44
Res 2	Full non-profit sample	\$0.93	\$1.96	\$3.08
Res 2	90% non-profit sample	\$0.62	\$1.32	\$2.47
Res 2	75% non-profit sample	\$0.46	\$1.00	\$1.95
Res 2	Elsevier	\$0.71	\$1.81	\$1.53
Res 2	Springer	\$1.41	\$3.28	\$1.67
Res 2	Wiley	\$1.48	\$3.59	\$3.07
Res 2	Emerald	\$2.05	\$17.09	\$2.05
Res 2	Sage	\$3.90	\$9.36	\$5.17
Res 2	Taylor & Francis	\$2.65	\$7.20	\$2.07
Master's	Full non-profit sample	\$0.70	\$1.48	\$2.29
Master's	90% non-profit sample	\$0.42	\$0.85	\$1.64
Master's	75% non-profit sample	\$0.33	\$0.55	\$1.10
Master's	Elsevier	\$0.14	\$0.34	\$0.29
Master's	Springer	\$0.45	\$1.05	\$0.53
Master's	Wiley	\$0.48	\$1.17	\$1.00
Master's	Emerald	\$1.89	\$15.80	\$1.42
Master's	Sage	\$1.69	\$4.06	\$2.24
Master's	Taylor & Francis	\$2.65	\$7.20	\$2.07

Table SI 19: Regression Results

(dependent variable: Payment2009)"

	Elsevier	Wiley	Springer	Sage	Emerald	ACS
Enrollment	-1.508 -5.168 (0.996)	2.585* (0.996)	1.816*** (0.375)	1.449*** (0.316)	0.777** (0.279)	0.352 (0.286)
Phds in 2009	2290.0*** -333.2 (70.76)	272.2*** (70.76)	673.1*** (41.60)	163.8*** (20.59)	13.44 (21.43)	-8.776 (33.60)
HasMedSchool	15382.6 -122152.4 (21906.3)	52447.4* (21906.3)	62342.4 (71645.3)	-16153.6 (11505.6)	-13046.5 (8305.9)	19605.6 (13227.9)
HasHospital	59994 -142376.6 (24743.1)	-2260.1 (24743.1)	256037.6** (85018.1)	2359.2 (11917.4)	315.7 (8109.0)	10393.3 (16621.2)
Research2	-314757.6* -125717.1 (26531.4)	-131379.5** (26531.4)	44363.5 (71625.2)	-8902.5 (12045.4)	-19515.0 (11514.7)	-8618.4 (13525.6)
UnderMaster	-500152.3** -108983.5 (27910.1)	-162216.4** (27910.1)	-27716.5 (61123.2)	-32574.5*** (8710.8)	-19289.1* (9263.2)	-23308.6 (11870.2)
Constant	598746.5*** (105460.5)	176822.8*** (25532.2)	69084.4 (43853.7)	50124.5*** (8772.0)	11373.3 (10290.5)	43340.8** (12966.1)
Observations	54	92	36	60	36	27
Adjusted R-squared	0.950	0.809	0.975	0.966	0.553	0.803

Standard errors in parentheses

=** p<0.05

** p<0.01

*** p<0.001"