

APPENDIX TABLE 5-40 
S&E articles in social sciences, by region, country, or economy: 2003–16

(Number)

Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
World	45,782.0	49,293.0	53,975.0	57,627.0	63,319.0	70,460.0	79,167.0	88,162.0	97,400.0	105,265.0	114,848.0	121,263.0	121,957.0	122,483.0
North America	20,294.2	21,463.1	23,329.4	24,159.4	25,506.6	27,122.4	29,581.3	31,956.8	33,231.3	34,021.6	35,346.8	36,861.0	36,591.1	34,806.8
Canada	2,283.8	2,469.4	2,700.3	2,910.6	3,138.6	3,308.2	3,531.0	4,075.3	4,053.7	4,039.4	4,447.6	4,427.9	4,623.8	4,356.4
Greenland	1.0	0.0	1.0	0.3	0.3	0.0	1.0	1.8	0.3	3.0	2.4	2.0	4.5	2.7
Mexico	169.8	174.1	213.3	230.0	258.1	345.7	430.4	406.9	478.3	636.2	694.2	877.0	866.4	838.7
United States	17,839.6	18,819.5	20,414.7	21,018.5	22,109.6	23,468.5	25,618.8	27,472.8	28,699.0	29,343.0	30,202.5	31,554.1	31,096.5	29,609.0
Central America and Caribbean	62.9	62.0	61.7	86.6	98.4	115.6	115.1	110.7	122.0	132.0	171.3	148.3	132.5	168.7
Antigua and Barbuda	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.6	1.1	0.1
Bahamas, The	1.0	0.0	1.0	0.0	0.0	1.5	0.7	1.0	0.0	0.6	0.7	0.2	0.8	2.5
Barbados	4.8	2.8	5.5	8.3	8.1	8.2	9.3	10.0	8.5	11.2	16.5	10.5	12.6	7.8
Belize	1.6	0.0	0.0	0.7	0.3	0.0	1.8	1.2	1.1	0.3	1.9	0.4	0.7	1.3
Costa Rica	6.5	7.8	11.4	10.7	8.3	14.0	11.4	15.6	16.1	24.1	23.8	25.6	26.3	35.1
Cuba	9.4	6.8	11.5	9.5	12.4	10.1	18.2	10.1	19.3	11.2	27.4	24.6	14.9	21.3
Dominica	1.0	0.3	2.0	2.1	1.5	3.0	3.5	2.3	1.0	1.0	0.5	2.3	1.3	0.3
Dominican Republic	1.5	1.1	0.5	1.5	1.5	1.9	0.2	2.3	2.0	4.6	7.3	5.4	3.6	3.3
El Salvador	0.0	0.5	1.9	2.8	0.0	0.0	0.0	1.8	0.5	1.2	0.8	1.0	0.9	2.6



Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Grenada	1.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	1.7	0.9	0.3	1.0	1.0	0.0
Guatemala	1.7	2.7	2.0	3.6	4.1	3.6	7.5	4.5	3.7	5.9	12.3	10.2	11.7	13.0
Haiti	0.0	1.2	0.5	3.0	0.0	0.0	0.8	1.2	1.0	1.1	1.0	1.9	2.3	0.5
Honduras	0.4	2.0	0.5	0.9	0.0	1.4	0.3	2.2	3.8	3.1	1.8	4.8	1.0	2.3
Jamaica	8.0	15.6	8.7	14.8	26.1	29.1	15.6	18.8	20.0	19.8	14.6	12.8	17.3	19.3
Nicaragua	2.5	2.5	1.5	2.5	4.9	3.1	1.5	5.6	2.7	4.1	2.9	3.7	3.5	2.8
Panama	2.3	1.3	3.9	2.0	3.9	0.8	1.5	3.6	2.6	4.0	4.5	2.0	4.1	10.0
Puerto Rico	16.0	10.2	5.3	13.2	15.4	21.4	23.1	16.0	14.2	15.9	25.5	25.0	18.5	24.5
Saint Kitts and Nevis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.5	0.0
Saint Lucia	0.7	0.0	0.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.2
Saint Vincent and the Grenadines	1.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trinidad and Tobago	3.7	7.3	5.0	10.1	11.2	17.5	19.6	14.8	23.0	23.0	28.2	15.3	10.3	21.8
South America	462.9	627.5	611.9	826.9	1,459.3	1,801.0	2,230.8	2,681.6	3,009.0	3,591.0	4,023.1	4,668.1	4,913.6	5,540.9
Argentina	124.1	131.1	122.1	120.5	181.6	257.1	345.3	376.4	466.7	582.6	604.9	828.2	839.0	793.1
Bolivia	1.6	7.5	4.0	5.0	5.1	8.4	9.4	8.1	11.6	10.7	13.1	7.0	8.1	13.7
Brazil	177.5	251.4	267.2	462.5	804.2	929.7	1,131.6	1,442.9	1,557.2	1,886.4	2,017.8	2,342.6	2,364.1	2,929.4
Chile	70.0	154.8	108.9	143.8	278.2	374.6	405.8	457.7	570.0	597.6	736.2	780.6	945.5	944.5
Colombia	32.5	26.1	31.2	38.3	77.2	87.6	184.2	212.6	234.1	297.5	414.1	448.5	485.0	574.3
Ecuador	1.7	6.0	6.3	4.7	1.9	6.2	11.8	7.5	10.1	14.0	28.5	39.3	67.4	93.2



Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Guyana	0.5	1.8	1.3	0.0	1.5	3.5	1.8	4.7	2.1	2.0	2.3	1.2	1.9	0.0
Paraguay	1.0	2.0	0.0	1.0	1.0	1.0	0.8	3.2	3.3	7.8	4.3	1.0	4.8	1.2
Peru	8.7	14.7	16.1	15.9	20.2	17.1	24.5	30.4	53.1	56.1	63.5	74.1	71.9	76.4
Suriname	0.0	0.3	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.1	0.7	2.2	0.0
Uruguay	13.8	10.6	8.5	11.3	16.4	23.6	26.6	25.5	37.3	42.2	44.4	62.0	52.4	67.1
Venezuela	31.6	21.3	45.3	24.0	71.9	92.2	89.1	112.5	62.4	94.0	92.9	83.0	71.3	47.9
Europe	18,448.1	20,010.1	21,977.7	23,538.7	26,289.4	29,288.0	33,935.4	38,016.0	44,062.8	48,417.9	53,301.3	55,406.2	56,179.7	56,761.6
EU	17,263.5	18,676.7	20,384.4	21,865.4	24,284.0	26,970.4	31,193.5	34,667.4	40,078.3	43,910.7	47,438.1	48,953.5	48,874.8	49,245.8
Austria	234.4	301.7	283.3	339.5	343.6	443.0	492.8	533.0	600.0	724.1	786.9	815.4	836.1	888.7
Belgium	513.7	577.1	607.8	617.3	688.0	752.1	921.8	1,067.9	1,218.6	1,335.9	1,531.8	1,474.0	1,381.0	1,365.1
Bulgaria	19.2	14.6	12.2	21.4	27.0	31.4	51.9	45.4	58.5	52.2	72.1	76.3	67.2	107.4
Croatia	207.2	190.4	241.5	261.2	381.6	506.9	549.6	680.9	740.5	632.4	788.5	683.2	696.0	677.0
Cyprus	20.8	22.6	21.5	25.8	31.1	48.7	52.8	52.3	82.1	77.3	105.2	95.7	109.4	106.8
Czech Republic	234.2	227.5	232.5	267.9	319.6	380.7	445.2	530.9	700.2	816.9	952.8	1,146.9	1,431.7	1,305.7
Denmark	285.0	312.6	363.2	354.4	408.0	471.0	557.6	597.8	812.3	818.9	847.9	904.1	1,032.5	997.7
Estonia	34.5	38.0	35.9	39.4	40.0	67.0	96.2	134.0	127.6	114.9	189.6	185.6	229.0	206.3
Finland	295.0	286.7	331.0	322.7	357.7	449.8	491.9	532.9	608.7	657.8	694.9	817.3	787.1	876.9
France	2,541.6	2,808.2	2,795.4	2,936.0	3,216.7	3,429.0	4,044.4	4,359.9	4,707.9	4,955.9	5,179.7	5,113.2	4,995.5	4,990.9
Germany	1,978.2	2,184.4	2,379.3	2,624.3	2,735.7	2,958.3	3,533.8	3,857.2	4,483.0	4,942.8	5,265.8	5,759.9	5,847.9	5,866.7



Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Greece	258.1	283.8	306.3	327.3	332.8	417.7	469.2	524.2	563.6	566.1	630.8	641.6	535.6	594.3
Hungary	139.2	137.2	110.9	162.9	275.1	339.4	335.5	314.8	403.5	472.6	454.3	517.6	496.7	447.3
Ireland	190.8	234.5	242.9	288.8	353.7	370.1	429.2	518.6	603.5	565.8	611.1	637.5	606.2	649.1
Italy	814.9	937.6	996.1	1,062.7	1,272.9	1,521.3	1,861.2	2,167.9	2,501.2	3,114.1	3,532.7	3,919.5	4,022.5	4,216.1
Latvia	4.3	6.4	7.7	12.5	30.4	22.8	13.0	35.5	32.4	46.6	41.5	65.4	65.9	83.7
Lithuania	18.1	45.0	141.1	168.1	173.9	411.5	379.3	470.7	443.6	421.3	386.1	500.4	363.2	413.0
Luxembourg	4.5	10.2	10.0	20.6	19.8	13.2	33.5	40.3	51.0	50.0	68.7	77.6	67.7	97.3
Malta	7.0	8.6	10.8	12.5	12.8	15.5	12.3	17.6	19.6	28.7	21.5	27.8	29.9	30.6
Netherlands	971.2	1,089.3	1,147.0	1,295.9	1,542.5	1,661.4	1,881.2	2,106.8	2,182.1	2,455.8	2,509.0	2,660.5	2,554.9	2,558.0
Poland	149.5	187.3	175.2	262.0	242.4	334.3	451.4	496.7	611.1	655.6	835.0	1,090.4	1,133.3	1,356.5
Portugal	140.1	157.0	195.7	232.2	293.8	330.6	354.3	428.2	592.3	693.3	775.9	837.4	817.2	969.5
Romania	54.3	33.9	43.4	87.0	73.0	318.6	705.4	805.3	1,305.9	1,263.6	1,467.7	1,301.8	1,338.8	1,024.6
Slovakia	165.7	168.8	153.0	158.0	166.0	206.5	208.9	223.9	219.3	267.3	377.9	414.3	449.9	590.9
Slovenia	150.3	150.5	181.2	193.2	280.8	301.0	353.2	401.9	546.6	596.0	598.2	723.5	554.2	597.8
Spain	878.1	978.4	1,031.1	1,193.3	1,373.8	1,671.5	2,072.7	2,290.9	3,076.9	3,822.3	4,248.0	4,607.0	4,199.5	4,396.7
Sweden	502.5	509.9	605.4	668.7	712.2	875.1	905.7	1,003.3	1,154.3	1,332.1	1,442.3	1,515.5	1,523.6	1,468.8
United Kingdom	6,451.2	6,774.8	7,722.9	7,909.8	8,579.2	8,621.9	9,489.3	10,428.6	11,631.8	12,430.3	13,022.2	12,344.2	12,702.5	12,362.3
Other Europe	1,184.5	1,333.5	1,593.3	1,673.3	2,005.5	2,317.6	2,741.9	3,348.6	3,984.5	4,507.2	5,863.3	6,452.7	7,304.9	7,515.8
Albania	5.0	3.5	2.3	4.6	1.3	3.8	6.0	11.9	20.1	43.8	187.7	188.8	105.7	19.0



Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Andorra	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.9	1.7	0.3	0.4
Belarus	2.5	6.4	4.8	7.7	7.4	11.1	7.3	12.3	5.0	7.3	8.0	16.9	16.8	12.4
Bosnia and Herzegovina	2.3	5.7	12.2	11.4	14.3	15.5	32.2	43.4	30.0	29.3	46.3	39.0	41.2	43.7
Holy See (Vatican City)	0.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	0.0	1.0	2.7	1.0	1.5	0.0
Iceland	20.6	16.0	15.0	16.5	23.9	26.4	31.4	34.9	54.0	50.8	49.3	36.6	52.6	49.7
Kosovo	0.0	0.0	0.0	0.0	0.0	0.3	2.8	2.3	5.8	5.2	7.6	8.1	9.9	6.7
Liechtenstein	0.0	0.0	1.5	0.5	0.3	1.0	1.3	1.8	2.0	1.0	1.0	1.8	1.3	3.1
Macedonia	1.2	2.1	3.3	3.9	4.8	7.4	17.3	5.7	20.9	28.9	42.3	36.3	35.8	46.4
Moldova	1.0	0.5	1.5	3.1	4.2	3.0	10.0	2.6	10.3	15.0	24.7	32.6	8.1	22.3
Monaco	0.0	0.3	1.0	0.0	1.5	0.1	1.0	0.0	1.1	0.8	2.3	2.0	0.0	1.2
Montenegro ^a	na	na	na	na	2.8	2.5	1.0	2.8	2.9	3.0	12.5	32.8	15.8	40.6
Norway	339.2	392.3	471.1	514.3	575.8	639.6	685.6	776.1	947.7	934.5	962.4	1,028.2	1,047.1	1,016.8
Russia	158.3	157.7	179.3	212.5	218.2	257.9	328.2	392.7	568.9	862.1	1,645.8	1,968.8	2,737.9	3,082.8
San Marino	0.0	0.0	0.0	0.0	0.0	1.3	0.5	0.7	0.0	2.5	0.6	0.5	1.0	0.0
Serbia ^a	na	na	na	na	53.3	62.6	87.7	118.4	179.3	192.5	215.6	283.8	280.7	290.9
Serbia and Montenegro ^b	11.0	16.6	12.9	17.7	na	na	na	na	na	na	na	na	na	na
Switzerland	385.0	420.9	497.2	489.6	606.1	710.3	785.9	938.6	998.1	1,123.5	1,117.7	1,273.6	1,294.1	1,285.4
Turkey	244.1	267.5	366.5	359.1	472.8	549.5	704.9	961.9	1,080.1	1,135.8	1,205.9	1,177.1	1,284.4	1,359.5
Ukraine	14.3	44.0	24.7	32.5	19.0	24.3	36.8	42.6	58.2	70.4	330.2	323.2	370.5	235.0



Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Middle East	673.2	765.2	747.2	857.2	924.2	1,083.7	1,290.5	1,412.4	2,023.5	2,254.7	2,454.7	2,110.5	2,450.7	2,414.1
Armenia	8.3	8.1	7.5	16.8	18.7	4.3	20.8	13.5	19.0	17.5	24.8	19.5	18.9	40.2
Azerbaijan	2.0	1.0	2.7	1.0	2.5	3.0	1.2	7.7	5.9	11.3	18.7	18.9	27.4	18.1
Bahrain	1.5	2.9	2.0	6.3	1.0	5.2	4.5	6.5	9.0	8.3	10.7	12.3	9.1	11.4
Gaza Strip	0.0	0.5	0.0	1.0	2.0	1.5	0.7	1.4	2.8	2.0	0.7	4.3	0.0	2.3
Georgia	10.6	3.9	8.5	9.3	5.5	16.4	15.1	15.9	14.3	16.0	22.1	20.4	22.0	29.4
Iran	18.1	34.8	37.1	49.4	72.7	84.7	132.4	191.3	653.9	786.8	800.6	408.2	623.5	420.5
Iraq	0.5	4.5	3.3	3.9	3.3	8.0	9.2	4.4	9.2	10.7	15.1	14.2	21.4	14.3
Israel	535.1	593.7	548.3	635.5	671.1	753.9	874.0	888.5	924.9	983.0	1,029.6	1,077.1	1,157.0	1,176.4
Jordan	20.8	18.8	20.9	20.1	30.9	32.1	38.8	53.9	76.2	74.9	81.4	78.5	76.4	75.7
Kuwait	9.4	20.3	11.6	17.7	20.3	25.0	22.4	24.5	26.3	28.9	31.7	33.4	28.3	42.3
Lebanon	33.2	28.4	26.7	29.0	23.6	40.8	44.0	52.8	49.8	60.6	80.7	90.1	93.6	79.8
Oman	5.2	2.5	4.5	5.1	3.1	8.0	15.5	14.6	20.8	13.5	25.9	27.2	47.2	83.5
Qatar	0.0	2.3	3.9	2.3	7.9	5.5	10.7	14.0	28.3	31.9	50.0	57.9	61.0	79.3
Saudi Arabia	9.5	19.3	16.8	14.0	21.5	14.7	31.4	37.2	65.4	101.0	137.9	131.0	108.6	152.8
Syria	0.8	1.9	4.2	3.0	3.4	3.5	4.5	8.9	10.4	7.3	12.7	1.6	11.3	9.4
United Arab Emirates	15.6	18.1	40.9	38.9	31.8	65.8	56.2	70.7	99.6	87.3	98.8	104.2	137.2	167.6
West Bank	2.5	2.6	6.8	3.0	4.5	9.4	7.0	4.1	6.3	10.4	7.9	7.5	4.5	9.2
Yemen	0.0	1.5	1.5	1.0	0.5	2.0	2.1	2.5	1.4	3.5	5.5	4.1	3.2	2.0



Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Africa	779.9	994.1	1,043.4	1,084.5	1,133.3	1,431.1	1,540.6	1,887.3	2,206.7	2,512.4	3,368.0	4,733.1	3,361.3	3,311.0
Algeria	4.0	10.8	8.4	10.4	13.2	17.3	18.9	11.6	26.8	29.5	40.9	43.1	45.3	49.0
Angola	0.0	2.0	2.7	1.5	1.8	0.0	0.0	2.5	0.0	0.9	2.0	3.5	2.9	4.5
Benin	3.5	6.4	0.9	1.6	5.2	5.3	5.0	7.5	3.6	6.7	7.8	4.8	14.9	7.1
Botswana	21.2	20.9	23.8	31.0	19.0	26.6	18.2	24.4	34.9	29.6	32.4	28.8	28.9	16.1
Burkina Faso	5.8	7.5	5.2	5.9	9.4	3.3	3.9	7.1	12.2	12.0	7.7	7.1	9.5	15.5
Burundi	0.0	1.0	0.0	1.8	1.0	0.6	0.5	1.8	2.1	1.5	2.2	3.4	0.7	0.2
Cameroon	10.2	17.6	23.0	26.1	31.8	24.7	24.8	12.1	40.7	29.8	42.7	51.0	37.0	41.6
Cape Verde	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.5	0.0	2.9	0.2	1.3	0.0
Central African Republic	0.0	0.0	1.2	0.0	1.0	0.8	2.0	0.1	1.2	0.0	0.7	1.7	2.0	0.8
Chad	1.0	0.0	0.7	0.0	0.0	0.3	1.0	0.3	1.3	0.0	0.0	0.2	0.8	1.0
Comoros	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.3
Congo, Democratic Republic of the	0.0	0.8	0.5	1.4	1.0	1.7	3.4	4.8	1.6	3.9	6.2	6.1	5.9	8.5
Congo, Republic of the	0.0	0.0	2.5	1.0	1.5	4.5	0.2	4.3	3.3	2.0	2.8	1.3	5.6	3.6
Côte d'Ivoire	3.8	2.2	2.3	5.7	5.5	3.0	4.3	10.8	8.3	12.7	9.0	5.0	15.6	16.7
Djibouti	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
Egypt	24.0	24.6	32.4	26.6	42.1	46.2	59.7	81.0	138.8	168.4	283.1	205.5	148.3	161.5
Equatorial Guinea	0.0	0.3	0.0	0.0	0.3	0.0	1.0	1.5	0.0	0.0	0.0	0.0	0.3	3.0
Eritrea	3.0	1.6	2.7	1.2	4.6	2.3	1.2	1.5	2.0	1.0	2.1	1.3	0.0	1.6



Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Ethiopia	15.0	18.7	11.2	21.6	22.4	34.9	35.1	37.8	37.8	41.6	66.0	73.3	58.5	72.8
Gabon	1.3	1.0	2.0	1.4	1.2	4.9	1.0	1.6	1.2	1.7	0.0	0.0	2.3	0.3
Gambia, The	0.2	2.3	1.5	1.6	1.0	0.5	1.0	2.4	0.3	0.7	0.4	2.1	1.4	0.0
Ghana	13.9	35.3	29.3	24.0	46.2	40.3	41.4	48.0	64.6	85.7	117.5	125.7	127.8	153.6
Guinea	0.0	0.2	0.0	0.5	0.3	0.5	0.2	0.0	0.0	0.5	0.9	0.3	0.2	0.3
Guinea-Bissau	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.1	0.0	0.2	0.5
Kenya	36.4	33.2	49.5	39.8	53.2	69.8	66.4	72.6	85.0	86.4	114.3	136.8	105.0	86.1
Lesotho	2.0	2.5	0.7	4.5	3.0	4.0	2.0	2.0	1.7	5.7	3.8	2.4	6.4	11.1
Liberia	0.0	0.0	0.0	1.4	1.0	1.5	2.0	0.0	0.3	3.0	1.6	3.8	2.9	2.6
Libya	2.0	0.5	4.0	3.5	5.7	5.2	1.3	2.5	6.0	4.7	5.8	5.3	1.0	3.4
Madagascar	1.5	5.6	3.0	3.6	0.8	1.9	1.8	2.8	3.1	2.8	4.6	6.9	4.7	4.0
Malawi	5.2	7.5	8.8	7.2	18.4	11.1	13.2	12.0	15.1	17.4	19.8	21.7	24.2	14.8
Mali	3.4	3.3	1.8	2.8	1.5	1.6	3.5	6.7	6.4	4.3	6.5	4.5	4.5	4.1
Mauritania	0.0	0.0	0.6	0.0	0.0	0.0	1.5	0.0	1.0	3.0	1.5	1.4	0.4	0.0
Mauritius	2.8	7.5	3.2	3.5	5.5	7.9	15.8	9.2	8.5	14.3	11.2	12.5	10.8	16.7
Morocco	9.6	15.7	16.6	17.3	6.7	22.4	29.0	17.6	27.6	33.0	55.2	50.2	57.8	66.4
Mozambique	1.5	3.9	0.6	6.1	2.3	7.4	7.3	7.6	7.0	4.3	8.0	6.1	10.7	9.1
Namibia	1.7	2.5	3.0	0.7	2.2	4.8	2.6	3.4	2.5	7.8	5.6	5.5	8.0	8.3
Niger	1.5	7.0	2.8	1.0	1.6	1.4	7.3	7.5	3.0	2.4	2.3	5.6	4.2	2.6



Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Nigeria	54.1	75.9	79.8	76.9	93.9	115.5	174.2	223.3	273.3	306.9	522.0	475.4	320.2	239.7
Rwanda	0.0	0.3	1.4	2.8	0.0	0.8	1.8	7.2	5.8	6.5	5.6	7.9	7.1	10.7
São Tomé and Príncipe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Senegal	13.7	10.8	18.6	9.6	13.1	10.6	12.9	9.4	14.2	29.8	17.0	24.0	20.2	14.3
Seychelles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.3	0.0	0.1	0.5	1.5
Sierra Leone	1.0	0.5	2.0	1.0	0.5	1.5	0.0	0.0	0.6	0.8	3.6	1.8	1.3	6.6
Somalia	0.3	1.0	0.0	0.0	0.0	0.5	1.0	0.5	0.8	0.2	2.5	3.0	1.0	1.0
South Africa	467.9	600.2	571.6	652.0	623.7	827.0	842.1	1,043.9	1,150.9	1,289.2	1,644.6	3,001.3	1,916.3	1,874.8
South Sudan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.5	1.3	2.0	0.0
Sudan	0.0	0.3	1.5	3.7	3.8	5.1	12.0	10.6	9.1	6.6	15.2	14.6	15.1	15.2
Swaziland	1.3	2.5	3.3	1.0	0.5	2.1	2.9	5.0	9.2	4.3	3.7	11.5	8.0	8.1
Tanzania	14.7	13.4	23.4	15.7	18.6	30.3	24.7	37.4	27.6	31.6	25.1	51.1	37.0	43.8
Togo	2.0	1.0	0.0	2.3	1.1	1.1	1.0	3.5	1.0	1.0	2.0	5.1	1.7	3.6
Tunisia	14.0	13.6	25.8	22.2	31.5	41.6	59.9	77.4	97.0	129.8	143.6	181.7	157.8	165.8
Uganda	12.8	13.8	53.3	20.4	18.0	18.0	18.9	33.6	32.3	43.8	49.5	47.1	52.3	55.5
Western Sahara	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Zambia	4.9	4.5	7.3	4.3	3.2	9.7	3.2	4.4	8.4	8.4	12.9	17.5	14.8	24.3
Zimbabwe	18.1	13.5	10.5	17.5	15.2	9.7	9.6	25.7	28.3	34.2	49.4	62.7	52.6	58.5
Asia	2,583.8	2,813.2	3,323.7	3,900.2	4,502.0	5,444.4	6,278.4	7,489.8	8,131.6	9,193.4	10,740.7	11,605.9	12,388.4	13,814.6



Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Afghanistan	1.5	0.2	5.2	1.4	6.3	1.8	9.4	11.0	11.6	4.8	4.2	7.7	4.7	2.3
Bangladesh	37.1	31.9	33.8	35.6	37.9	42.9	61.3	56.2	79.3	83.2	98.4	94.1	96.8	85.6
Bhutan	0.0	2.0	1.0	0.0	1.7	1.1	0.3	4.3	2.4	0.0	1.2	2.6	2.6	3.0
Brunei	1.2	1.0	2.5	5.3	1.5	1.3	6.0	2.5	6.5	8.0	11.5	18.4	23.0	16.3
Burma	0.0	0.7	1.1	0.5	5.2	1.4	0.0	0.0	0.3	4.4	4.5	4.8	3.9	5.0
Cambodia	4.6	3.4	4.0	7.6	5.0	5.3	2.6	6.3	7.9	5.9	9.5	9.7	8.4	8.9
China	442.6	571.5	744.1	1,026.9	1,306.1	1,518.6	1,804.6	2,111.2	2,246.2	2,406.5	2,843.0	3,272.9	3,380.4	4,057.8
India	499.3	536.7	501.1	590.8	734.6	1,033.6	1,186.3	1,333.5	1,464.0	1,678.7	1,864.6	2,280.4	2,300.4	2,612.7
Indonesia	27.9	28.1	41.7	42.7	47.3	33.4	61.3	84.4	93.9	116.8	155.5	217.5	442.2	695.5
Japan	752.8	680.6	868.2	818.2	924.1	942.5	1,003.8	1,254.6	1,163.9	1,275.6	1,365.4	1,286.6	1,316.3	1,457.5
Kazakhstan	3.1	4.0	5.7	5.2	4.7	8.3	10.0	12.0	15.4	53.9	249.0	174.2	188.9	239.2
Kyrgyzstan	4.0	0.5	1.0	2.4	1.2	5.0	2.5	3.3	3.3	5.3	12.0	6.0	9.3	12.9
Laos	1.6	2.9	2.2	2.8	0.8	1.8	4.5	3.3	6.3	6.1	8.8	8.0	9.7	13.0
Malaysia	57.9	42.8	65.9	108.7	141.7	223.8	316.8	402.0	676.9	695.5	997.1	950.1	1,261.3	1,027.4
Maldives	0.0	0.7	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.3	2.3	0.0	0.0
Mongolia	4.7	3.0	2.2	3.5	4.5	7.1	2.3	2.2	3.4	9.0	5.8	10.3	6.2	6.3
Nepal	10.7	11.0	9.7	6.1	12.1	12.1	17.5	12.8	17.8	21.2	20.6	34.0	28.1	35.9
North Korea	1.0	0.3	0.8	1.3	0.5	2.0	1.6	0.0	0.0	0.0	0.0	0.3	1.0	0.5
Pakistan	48.7	52.1	67.2	102.5	122.6	94.1	105.7	131.7	212.1	301.0	404.0	349.3	231.2	201.5



Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Papua New Guinea	2.5	2.8	6.4	5.0	2.3	7.2	1.9	5.7	2.9	6.5	3.5	5.3	4.4	2.9
Philippines	43.3	31.5	50.6	56.7	54.3	69.5	105.1	125.7	118.6	164.6	158.9	136.3	174.7	214.6
Singapore	213.6	214.9	252.2	269.5	245.1	263.5	308.7	352.6	333.5	416.0	412.3	436.9	513.0	535.4
South Korea	194.6	272.8	253.0	300.6	324.2	454.7	525.5	708.9	720.1	837.6	942.2	1,065.6	1,242.9	1,319.5
Sri Lanka	17.9	23.8	18.4	24.2	17.7	27.6	38.0	36.4	26.4	26.5	46.3	30.1	38.2	37.2
Taiwan	167.3	229.2	315.3	384.1	412.4	566.2	581.0	679.6	747.7	853.3	895.9	931.8	780.8	820.3
Tajikistan	1.0	0.0	2.0	1.5	1.8	0.0	0.0	3.1	3.8	4.0	10.3	0.9	6.2	2.4
Thailand	34.8	50.4	50.7	77.1	63.5	80.3	92.4	111.1	127.3	151.9	171.7	212.7	234.5	286.2
Timor-Leste	0.0	0.0	0.0	0.0	1.0	0.5	1.0	0.0	0.3	0.3	1.3	1.8	1.9	0.3
Turkmenistan	0.0	0.5	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0
Uzbekistan	1.7	1.8	4.1	2.6	5.2	2.2	1.8	5.2	3.6	22.0	9.7	7.0	11.4	10.2
Vietnam	8.5	12.2	14.0	16.8	16.8	36.7	25.5	29.7	36.1	33.7	32.4	48.6	66.2	104.1
Australia and Oceania	2,023.4	2,171.5	2,377.0	2,566.5	2,752.8	3,433.2	3,778.2	4,313.6	4,321.0	4,836.2	5,140.6	5,426.6	5,680.2	5,425.5
Australia	1,671.0	1,838.8	1,975.6	2,129.3	2,275.6	2,913.5	3,208.9	3,658.4	3,656.2	4,122.8	4,479.2	4,671.0	4,919.6	4,651.0
Cook Islands	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fiji	12.5	24.5	12.2	19.3	30.1	21.6	20.9	17.6	8.2	12.7	17.9	29.0	18.2	23.7
Kiribati	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Marshall Islands	0.0	0.1	0.0	0.0	0.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
Micronesia, Federated States of	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.0	0.2



Region, country, or economy	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Nauru	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
New Zealand	338.3	305.6	386.9	412.6	443.2	495.6	545.2	632.0	654.5	698.7	640.9	723.0	736.0	747.8
Niue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Palau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.3	0.0	1.0	0.0
Samoa	0.5	0.5	1.5	1.3	0.2	0.0	0.3	1.5	1.1	0.4	1.2	1.7	0.4	0.1
Solomon Islands	1.0	0.5	0.0	1.0	1.5	0.3	1.2	2.0	0.1	0.7	0.0	0.0	0.6	0.4
Tonga	0.0	0.0	0.5	1.2	1.0	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.5	0.3
Tuvalu	0.0	0.0	0.0	0.0	0.3	0.3	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0
Vanuatu	0.0	1.5	0.3	0.3	0.3	0.8	1.0	0.0	0.7	1.0	1.0	1.3	2.4	2.0
Unassigned	453.6	386.2	503.1	607.2	653.1	740.6	416.9	293.8	292.0	305.9	301.5	303.2	259.5	239.7

na = not applicable; country data do not exist.

EU = European Union.

^a Beginning in 2006, Serbia and Montenegro represented individual countries.

^b Serbia and Montenegro represented a single country for data purposes from 1992 to 2006.

Note(s)

Article counts refer to publications from a selection of journals, books, and conference proceedings in S&E from Scopus. Articles are classified by their year of publication and are assigned to a region, country, or economy on the basis of the institutional address(es) listed in the article. Articles are credited on a fractional-count basis. The sum of the regions, countries, or economies may not add to the world total because of rounding. Some publications have incomplete address information for coauthored publications in the Scopus database. The unassigned category count is the sum of fractional counts for publications that cannot be assigned to a region, country, or economy.

Source(s)

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