

# Supplementary Material

2017-08-17

All prices were converted in EUR before the analysis.

The most comprehensive longitudinal per publisher data sets are available from Canada (2014-2016), Chile (2008-2015), Finland (2010-2016), France (2009-2015), Netherlands (2011-2015), and UK (2010-2016). Data for Argentina (2008-2016) is also available but we could not verify the source. In most countries, the data is available only for some of the largest publishers and/or institutions.

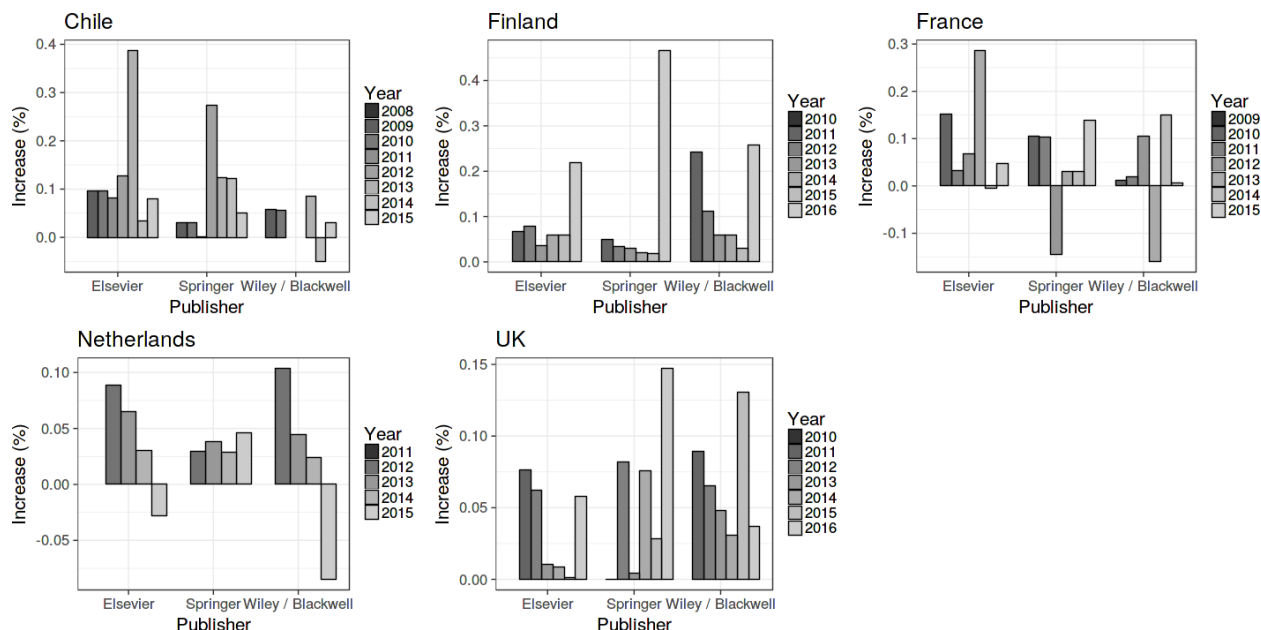
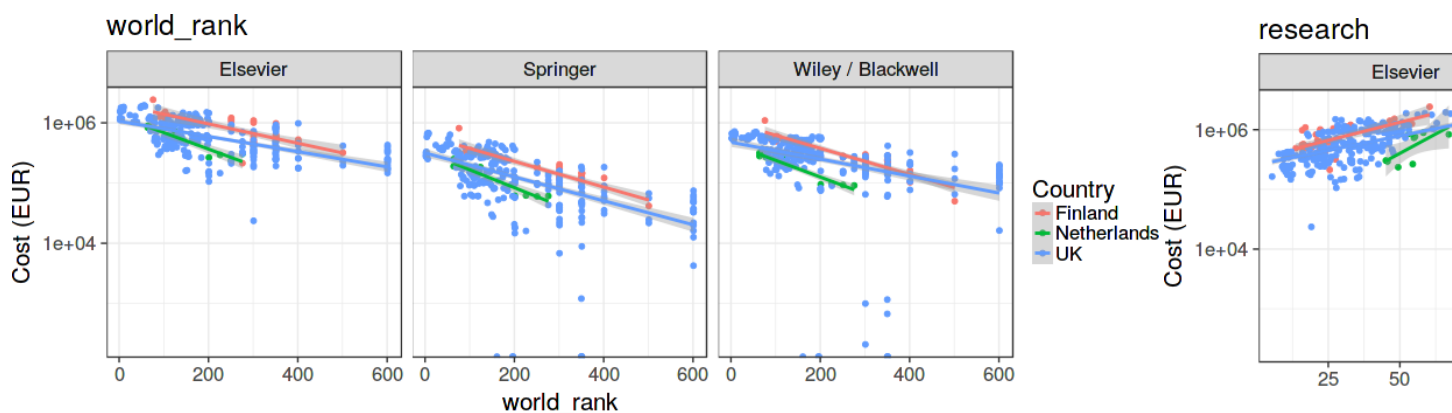


Figure 1: Annual cost increase for Elsevier, Wiley/Blackwell and Springer. In some data sets, the number of included institutions varies notably by year (for instance in Finland 2016 there is notable increase of listed publishers and organizations in the data set 57 vs. 71 organizations 2015-2016; and 200 vs. 258 publishers). However, the observations remain qualitatively similar also when the analysis is limited only to those publishers that have data available for the complete time span..



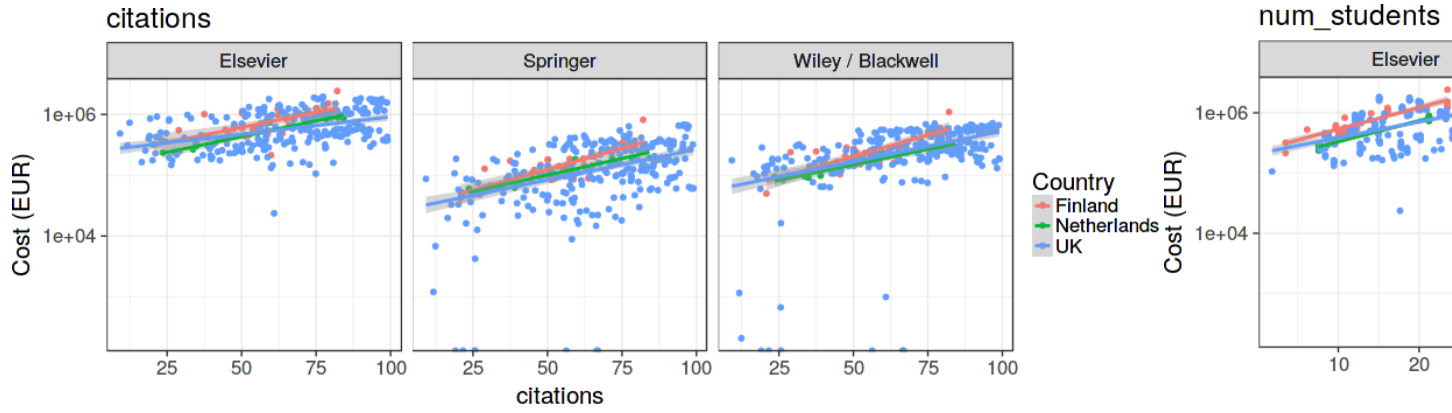


Figure 2: University ranking (Times ranking) variables versus subscription costs with selected publishers.

Variable	world_rank	world_rank	world_rank	world_rank	world_rank	world_rank	world_r
Country	Finland	Finland	Finland	Netherlands	Netherlands	Netherlands	UK
Publisher	Elsevier	Springer	Wiley / Blackwell	Elsevier	Springer	Wiley / Blackwell	Elsevier
slope	-0.001608946	-0.002136420	-0.002167069	-0.002737309	-0.002969980	-0.002774657	-0.00126
padj	7.333735e-08	3.074151e-12	1.621433e-13	2.045848e-06	1.359876e-06	4.361733e-07	1.050839

Table 1: University ranking (Times ranking) variables versus subscription costs with selected publishers. Spearman correlation (rho and p) and linear model (slope and p). The p-values are adjusted for multiple testing with Bonferroni correction.

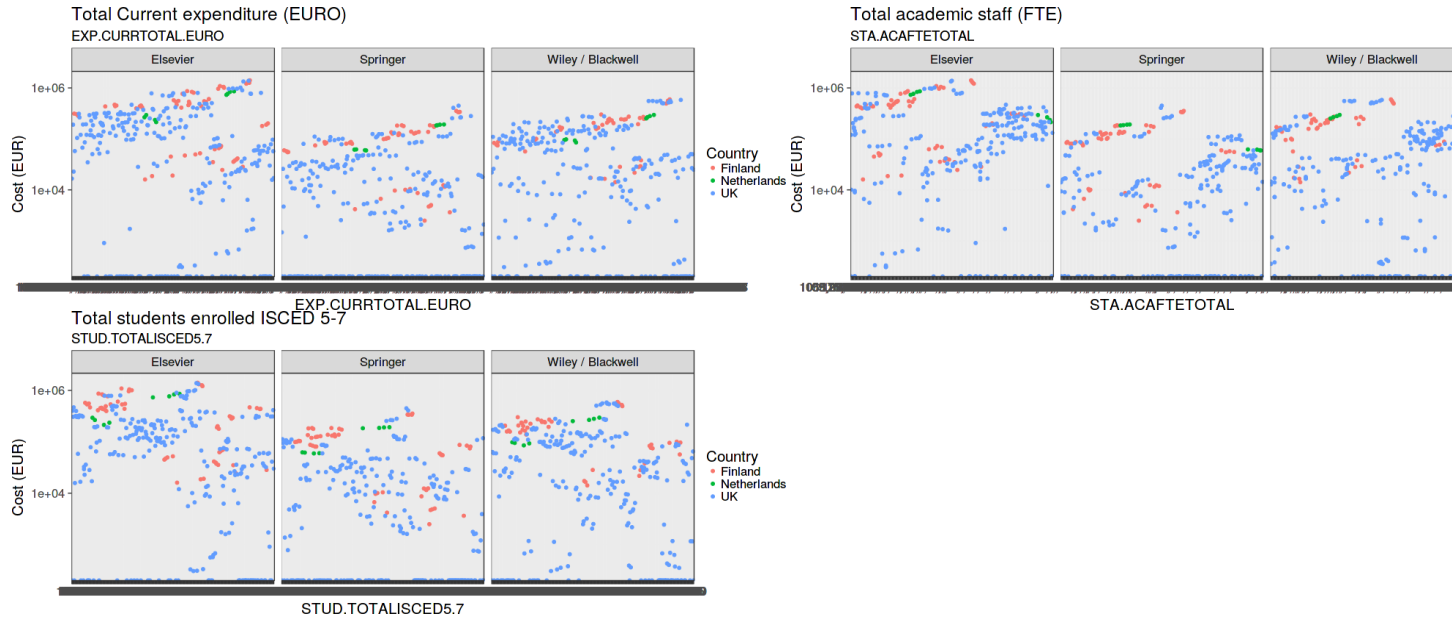


Figure 3: University scoring (ETER) variables versus subscription costs with selected publishers.

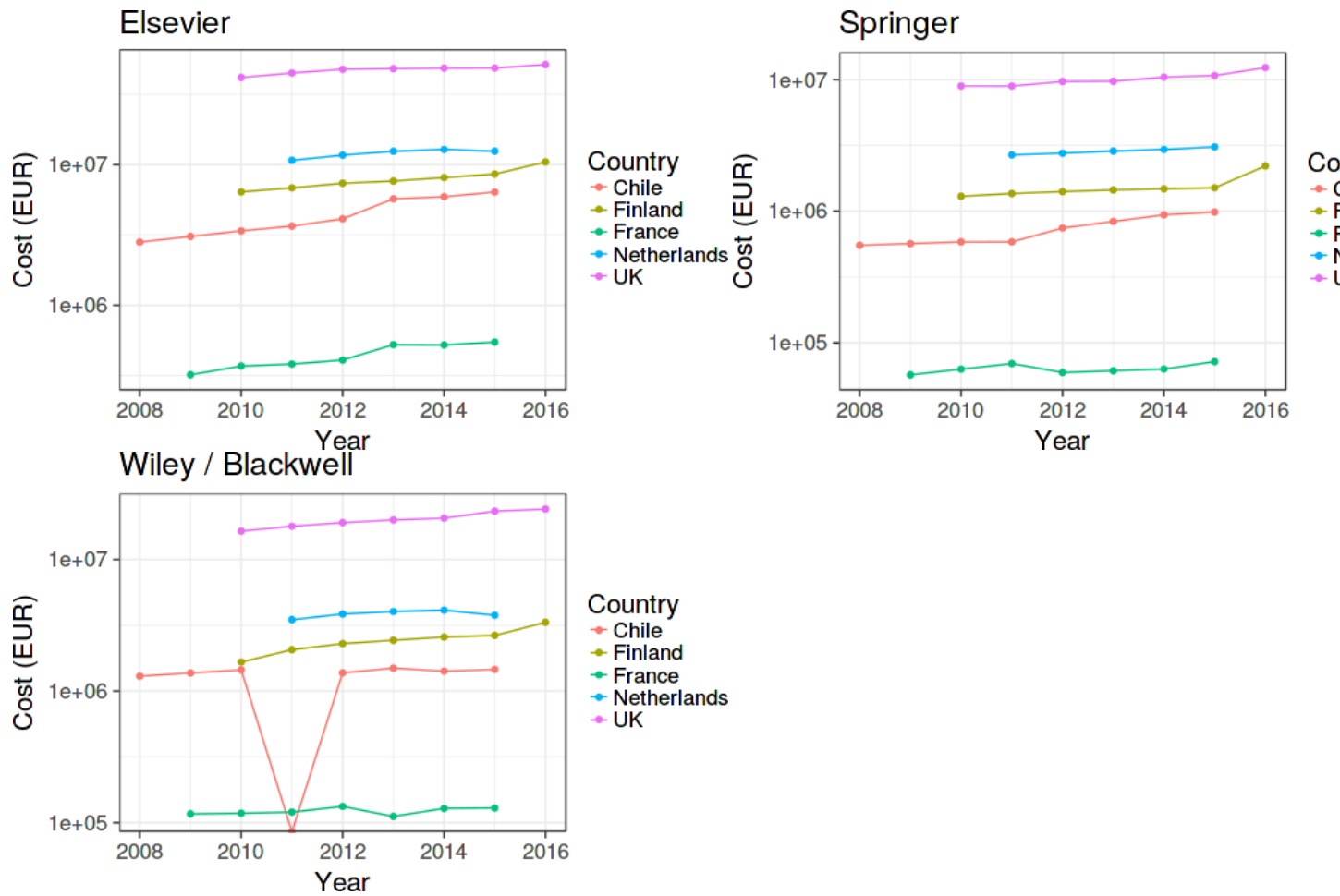


Figure 4: Cost timelines for selected publishers.

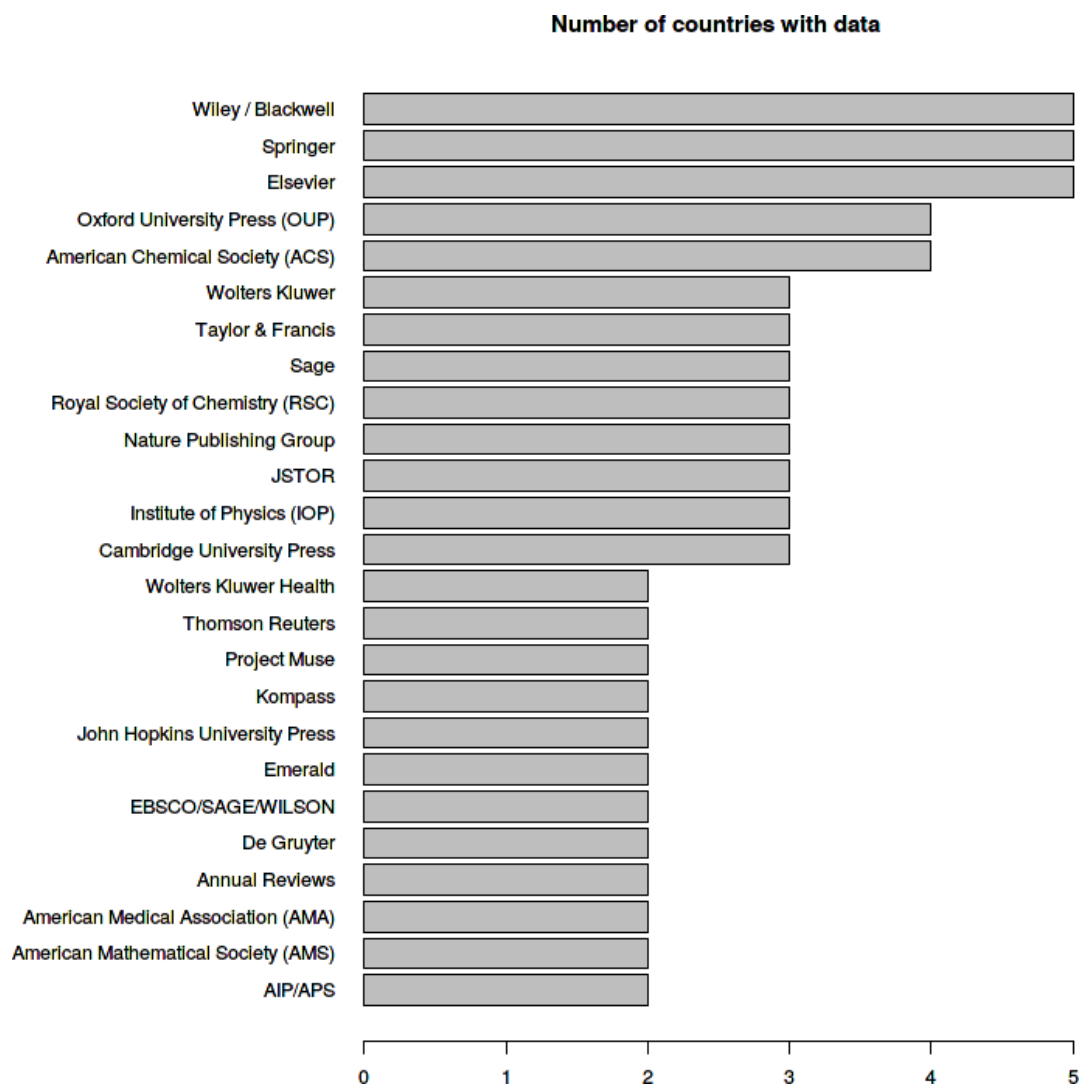


Figure 5: Number of countries with data for at least one year. Publishers with more than one country are shown.