

S1. SUPPORTING MATERIALS TO MANUSCRIPT:

Reviewers' ratings and bibliometric indicators: hand in hand when assessing over research proposals?

Álvaro Cabezas-Clavijo^a, Nicolás Robinson-García^a, Manuel Escabias^b,
Evaristo Jiménez-Contreras^a

^aEC3: Evaluación de la Ciencia y la Comunicación Científica, Universidad de Granada, Granada, Spain.
Email address: acabezasclavijo@gmail.com; {elrobin, evaristo}@ugr.es

^bDepartamento de Estadística e Investigación Operativa, Universidad de Granada,
Granada, Spain. Email address: escabias@ugr.es

1. Supporting Materials to subsection 'Description of referees' ratings, bibliometric indicators and granted vs. rejected distribution of grant proposals' in the 'Results' section.

Figures S1-S11 show box plots of the distribution of granted vs. rejected proposals according to bibliometric indicators and referees' ratings. Boxes in red show the distribution of granted proposals. Boxes in blue show the distribution of rejected proposals

Figure S1. Distribution of the research output of PIs for granted and rejected proposals

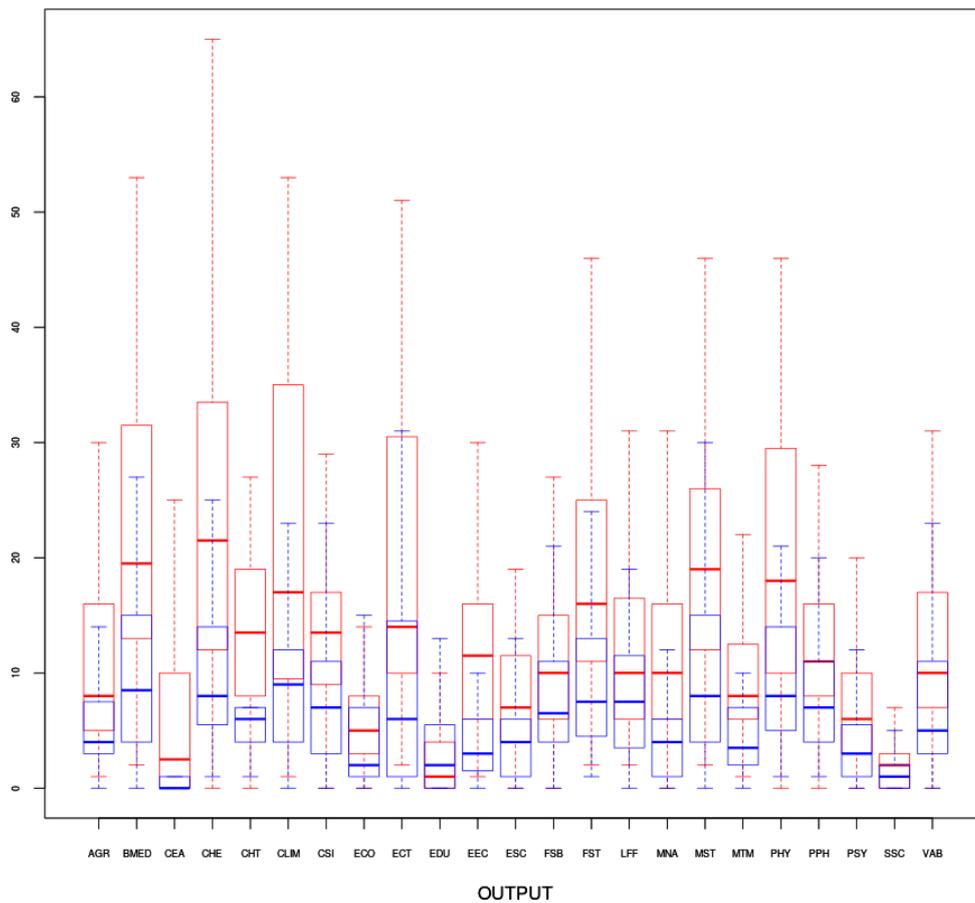


Figure S2. Distribution of the citation average of PIs for granted and rejected proposals

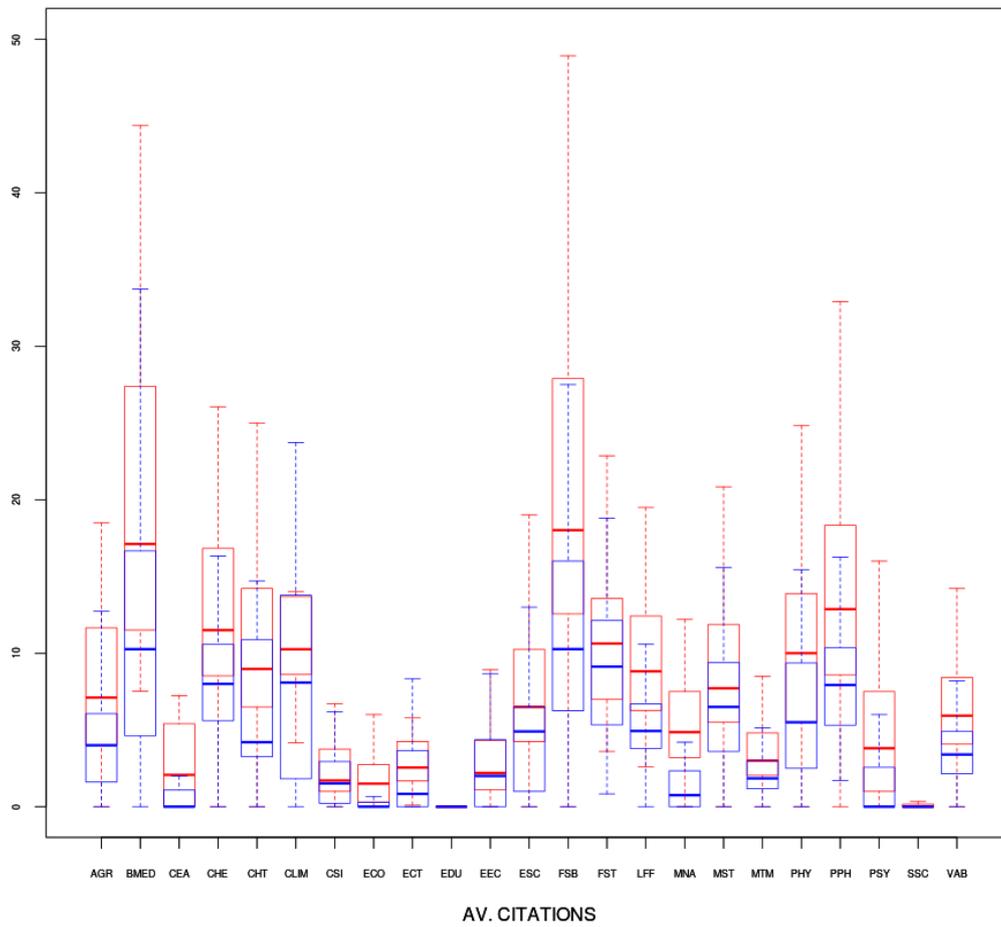


Figure S3. Distribution of the number of citations received by PIs for granted and rejected proposals

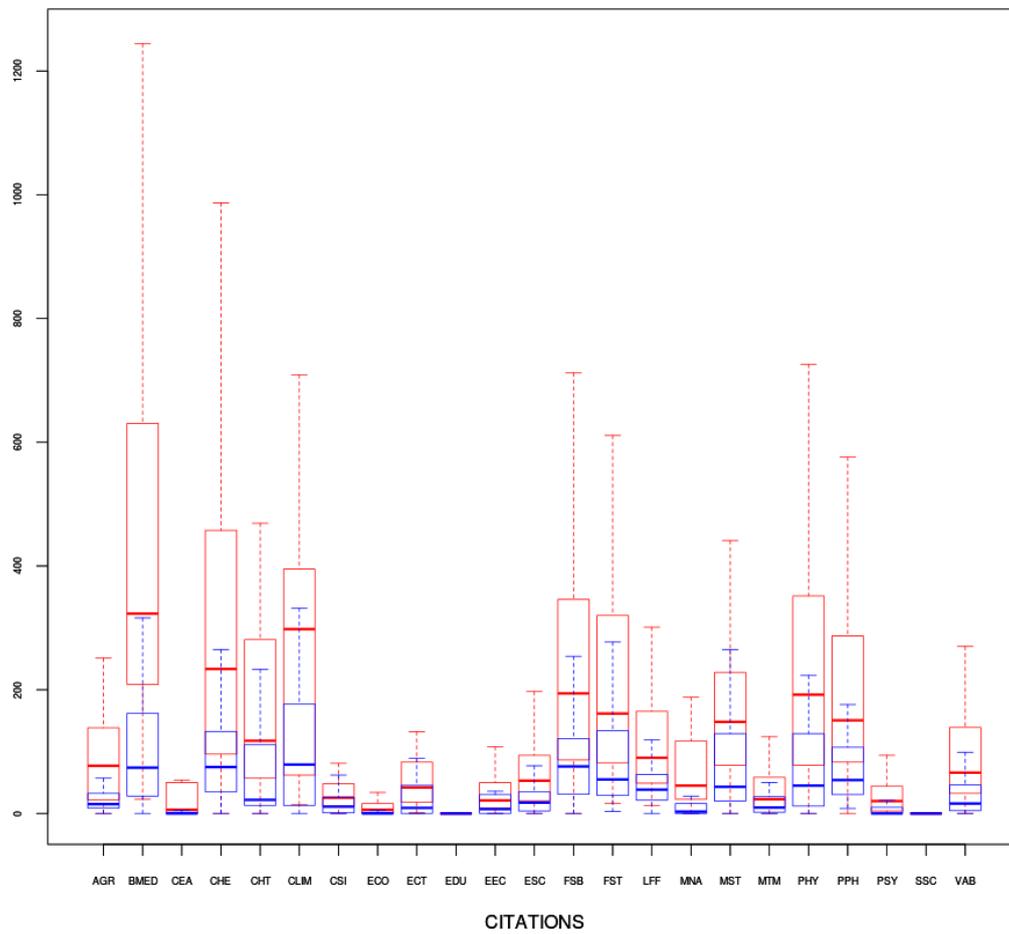


Figure S4. Distribution of the % of papers published in Q1 journals by PIs for granted and rejected proposals

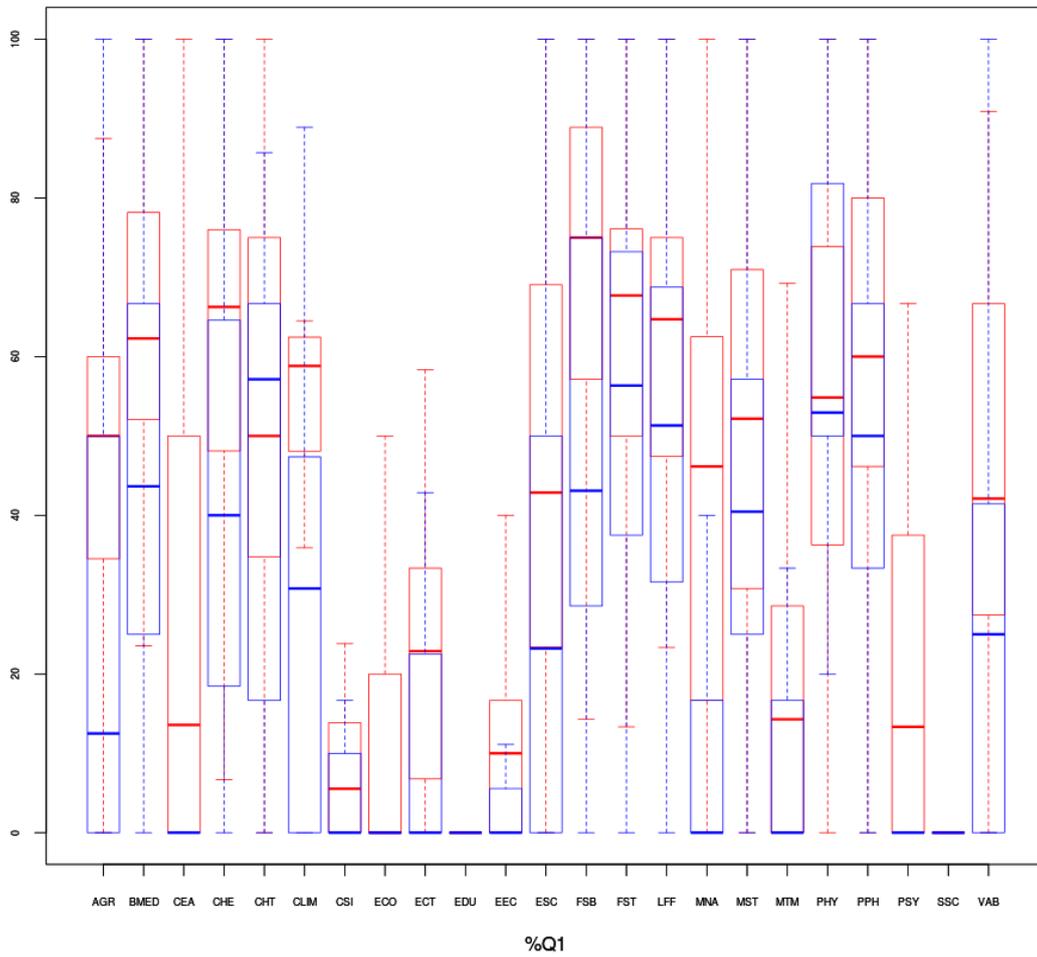


Figure S5. Distribution of the number of Q1 papers published by PIs for granted and rejected proposals

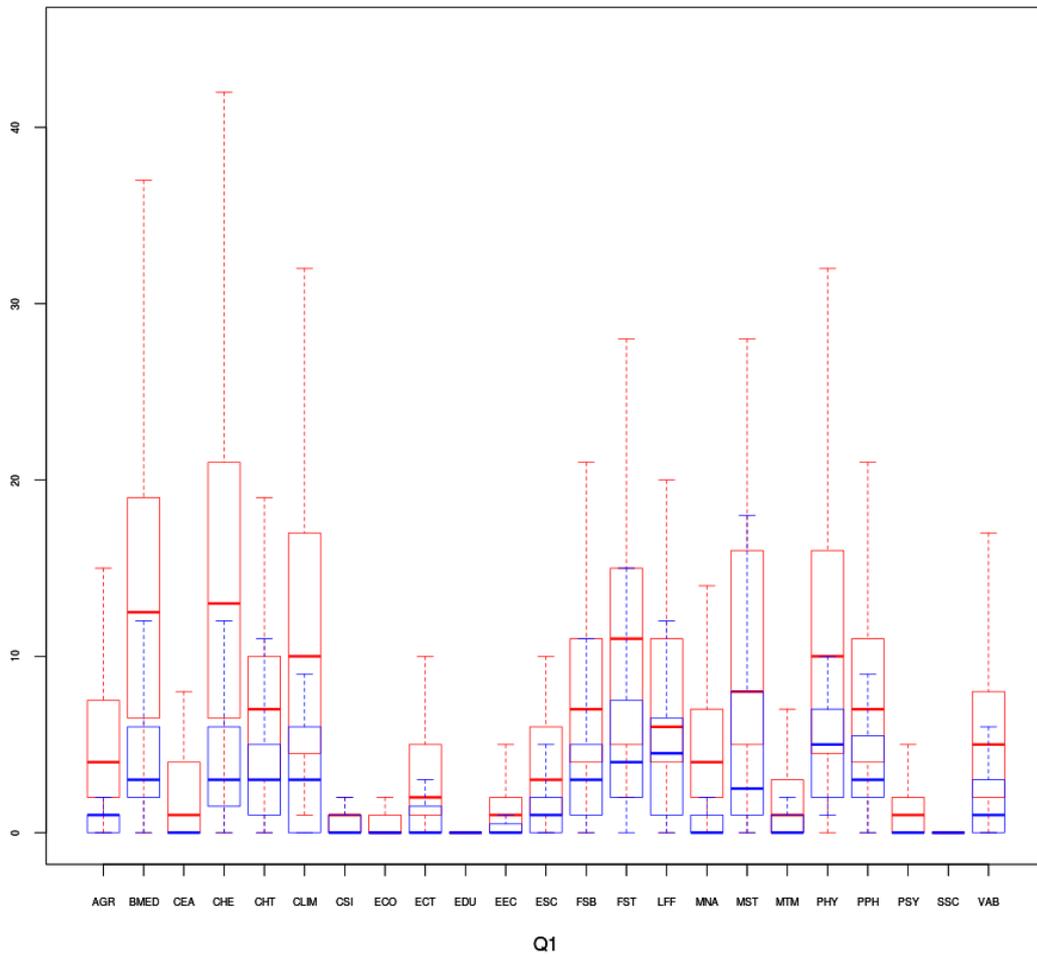


Figure S6. Distribution of the total ratings for granted and rejected proposals

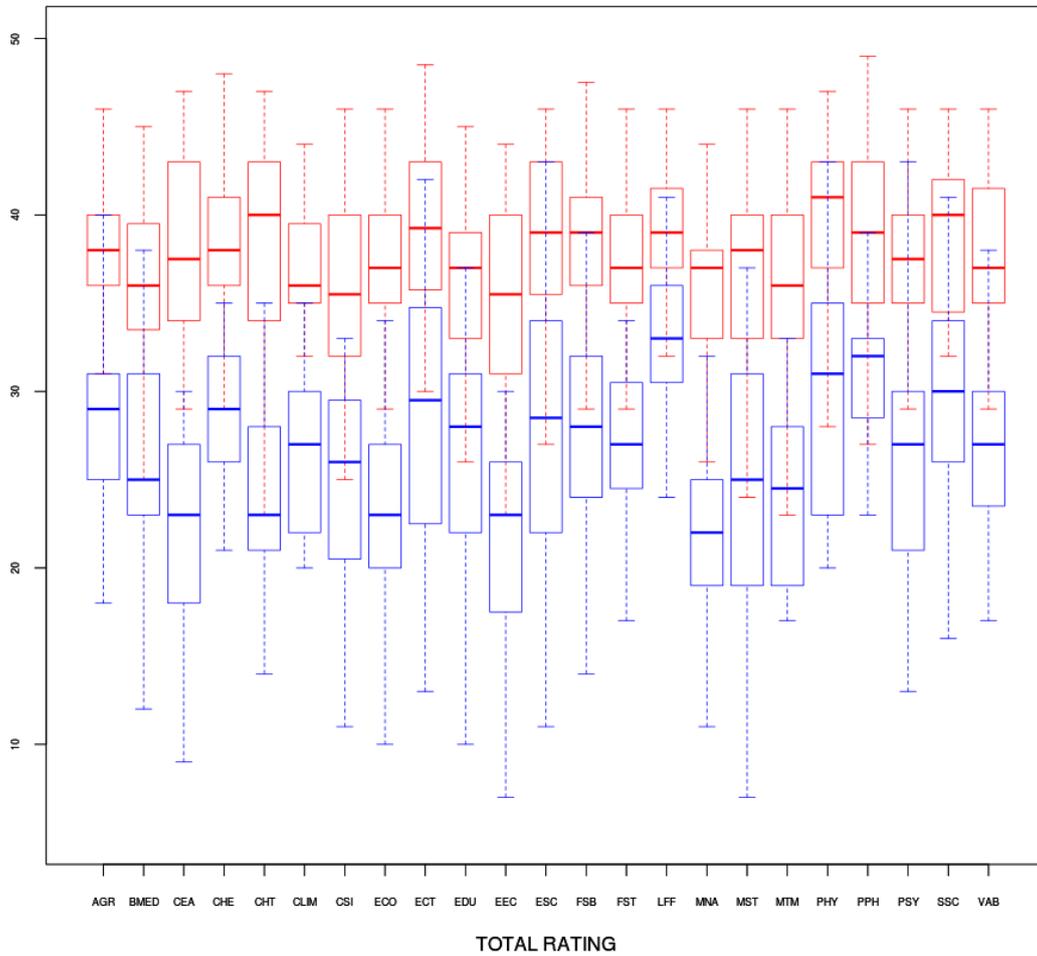


Figure S7. Distribution of the PIs' CV rating for granted and rejected proposals

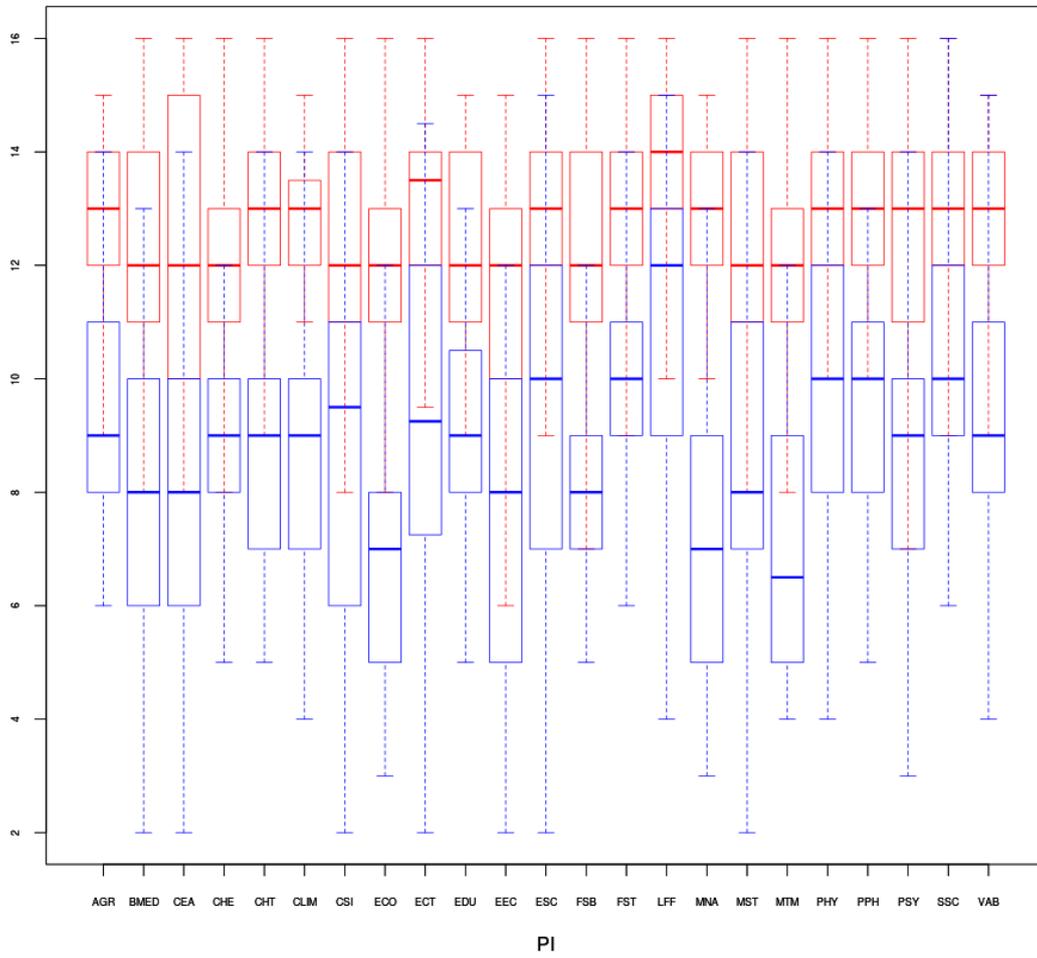


Figure S8. Distribution of the research teams' ratings for granted and rejected proposals

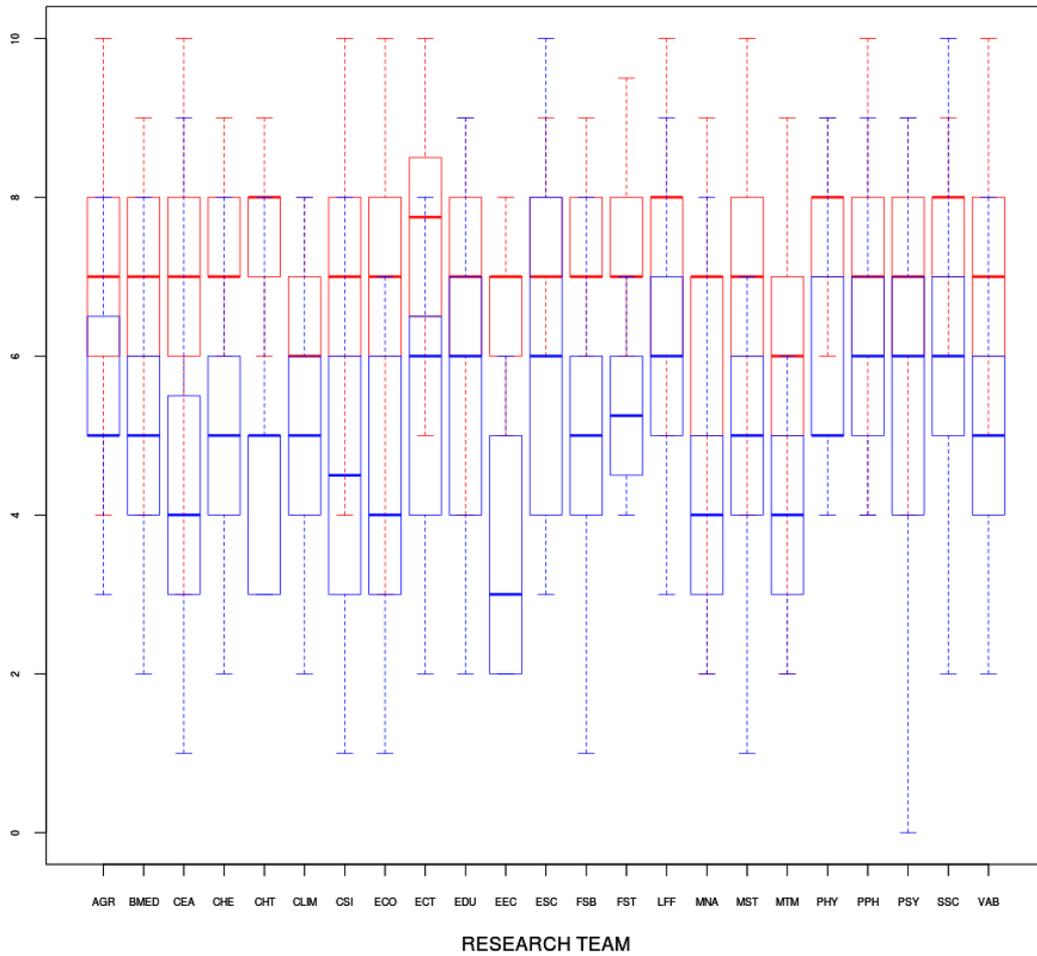


Figure S9. Distribution of the goals' ratings for granted and rejected proposals

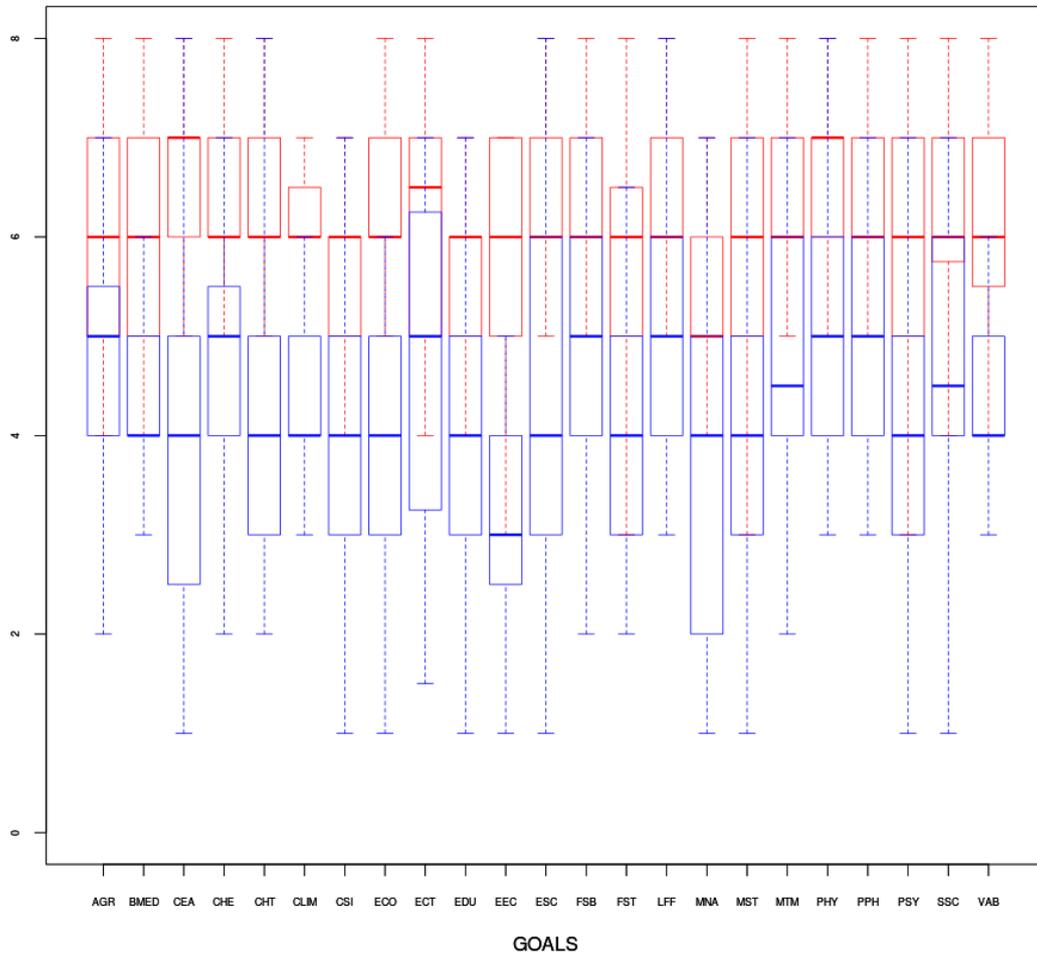


Figure S10. Distribution of the relevance's ratings for granted and rejected proposals

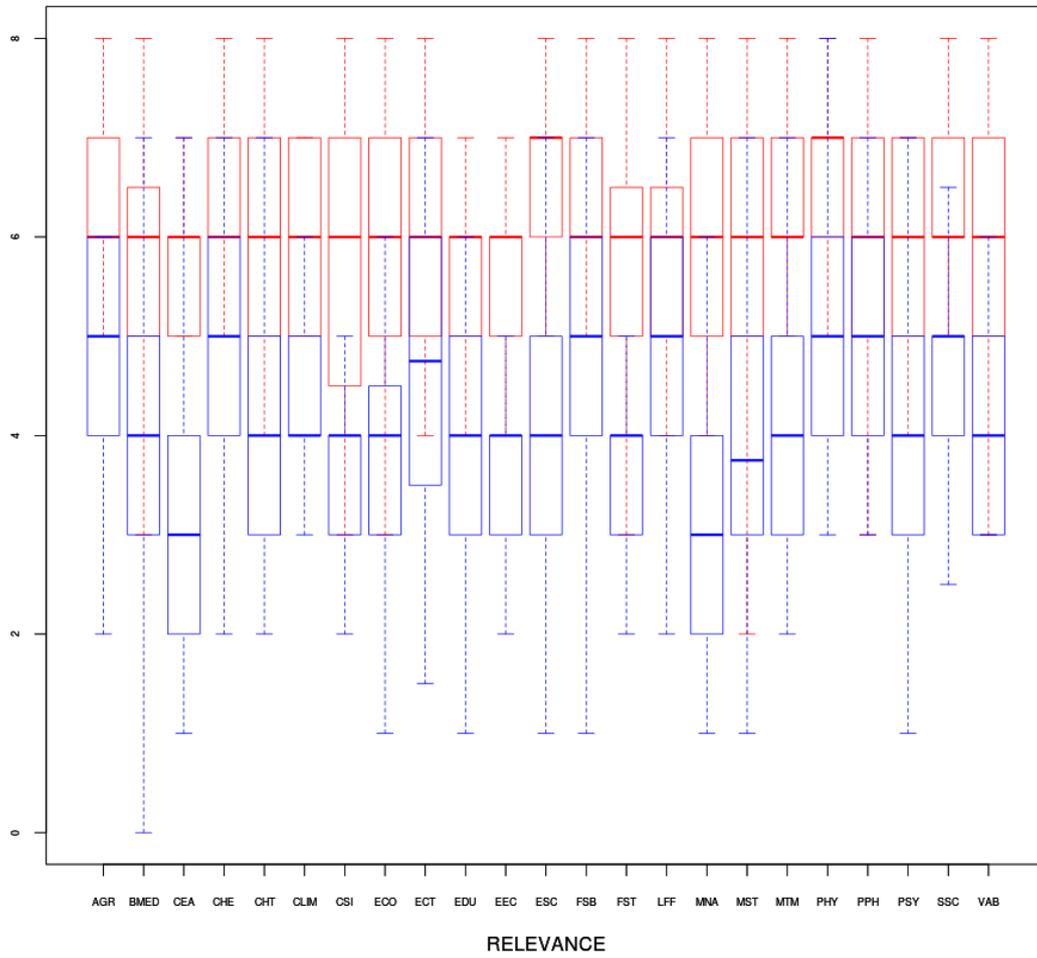
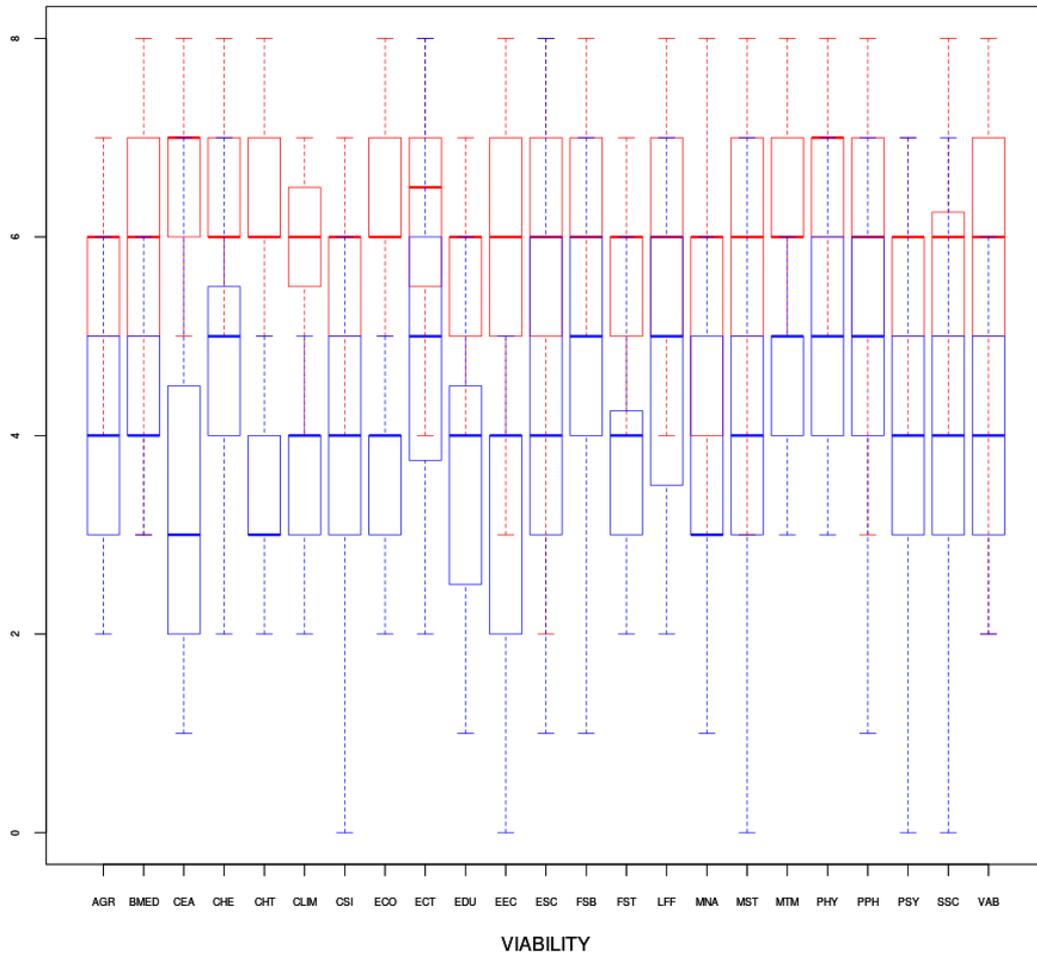


Figure S11. Distribution of the viability's ratings for granted and rejected proposals



2. Supporting Materials to Table 3 in section 'Description of referees' ratings, bibliometric indicators and granted vs. rejected distribution of grant proposals'

Table S1. Fits of the linear regression analysis to predict the concession of research proposals according to ratings to each of the sections reviewed by referees. Variables selected by the stepwise method. The area under the ROC curve, the Correct Classification Rate and the coefficient of determination (R2) are included

Area	Selected Variables	ROC	R2	CCR
AGR	I=2.47E-06, Viability=3.50, PI=1.82	0.93	0.68	0.88
BMED	I=6.81E-08, PI=2.43 Viability=2.13 Goals=1.80	0.95	0.73	0.85
CEA	I=2.24E-04, Viability=5.02	0.94	0.75	0.92
CHE	I=5.48E-09, PI=2.13, Research team=2.78, Goals=2.72	0.96	0.75	0.89
CHT	I=1.30E-04, Viability=10.85, Goals=0.18, Relevance=4.41	0.96	0.76	0.91
CLIM	*	*	*	*
CSI	I=5.24E-08, PI=2.10, Goals=3.54, Research team=1.68	0.95	0.72	0.88
ECO	I=5.81E-10, PI=3.03, Goals=3.68 Viability=2.11	0.98	0.86	0.93
ECT	I=1.95E-05, PI=1.49, Research team=1.99	0.87	0.55	0.79
EDU	I=1.28E-05, Relevance=1.85, PI=1.63, Viability=1.76	0.91	0.61	0.81
EEC	I=3.68E-09, Viability=11.020, Research team=2.2317, PI=1.7350	0.98	0.84	0.93
ESC	I=7.07E-05, Relevance=1.92, PI=1.45, Research team=1.47	0.89	0.56	0.80
FSB	I=1.38E-07, PI=2.25, Goals=1.85, Research team=1.57, Viability=1.46	0.95	0.71	0.88
FST	I=2.80E-09, PI=2.10, Goals=3.25, Research team=2.52	0.96	0.77	0.86
LFF	I=5.47E-08, PI=2.03., Viability=2.10, Research team=1.82	0.88	0.56	0.78
MNA	I=2.82E-03, Relevance=2.13, PI=1.34	0.93	0.63	0.84
MST	I=1.21E-05, Research team=3.86, PI=1.49	0.93	0.65	0.86
MTM	I=1.56E-07, PI=1.93, Research team=1.71, Goals=4.40	0.96	0.73	0.90
PHY	I=3.56E-03, PI=1.39, Research team=1.67	0.87	0.41	0.83
PPH	I=2.01E-06, PI=2.38, Relevance=2.11	0.93	0.61	0.84
PSY	I=1.13E-06, PI=1.98, Viability=3.50	0.95	0.73	0.89
SSC	I=1.59E-06, Relevance=2.65, PI=1.55, Research team=1.50	0.91	0.60	0.83
VAB	I=2.65E-08, Relevance=1.79, PI=1.87, Research team=2.47, Viability=1.61	0.94	0.72	0.90

* The logistic model does not apply to the data

S1 SUPPORTING MATERIALS: Reviewers' ratings and bibliometric indicators: hand in hand when assessing over research proposals?

3. Supporting Materials to Table 6 in section '*Influence of bibliometric indicators on peers' ratings*'

Table S2. Fits of the linear regression analysis to predict the PIs' ratings according to the bibliometric indicators. Variables selected by the stepwise method. The coefficient of determination (R2) is included

Area	Selected variables	R2
AGR	I=10.28, Q1=0.17, %Q1=0.01	0.2300119
BMED	I=7.46, Q1=0.10, %Q1=0.03	0.2521384
CEA	I=9.03, OUTPUT=0.25	0.2071898
CHE	I=8.19, Q1=0.07, AV CITATIONS=0.13, CITATIONS=-0.003, OUTPUT=0.06	0.4214612
CHT	I=9.64, OUTPUT=0.15, %Q1=0.02, CITATIONS=-0.003	0.2668563
CLIM	I=7.12, Q1=0.18, %Q1=0.04	0.5279744
CSI	I=9.15, OUTPUT=0.12	0.1983169
ECO	I=7.81, CITATIONS=0.10, %Q1=0.03, OUTPUT=0.09	0.2832918
ECT	I=9.63, OUTPUT=0.12, %Q1=0.05, AV CITATIONS=-0.20	0.3169063
EDU	I=10.20	0.0000000
EEC	I=7.32, OUTPUT=0.23, %Q1=0.06	0.5119366
EST	I=9.43, OUTPUT=0.27, AV CITATIONS=0.17, CITATIONS=-0.01	0.2395585
FSB	I=9.99, Q1=0.39, OUTPUT=-0.13	0.2534194
FST	I=6.58, OUTPUT=0.27, %Q1=0.05, Q1=-0.29, CITATIONS=0.003	0.4561903
LFF	I=11.22, CITATIONS=0.01	0.3038341
MNA	I=7.29, OUTPUT=0.21, %Q1=0.05	0.5387693
MST	I=7.29, OUTPUT=0.17, %Q1=0.05, Q1=-0.16	0.3603444
MTM	I=8.21, OUTPUT=0.17, Q1=0.45	0.3690643
PHY	I=9.81, AV CITATIONS=0.16, OUTPUT=0.09, CITATIONS=-0.004	0.2761185
PPH	I=9.84, Q1=0.18, AV CITATIONS=0.06	0.2769550
PSY	I=8.41, AV CITATIONS=0.37, OUTPUT=0.20, %Q1=0.02, CITATIONS=-0.01	0.3735310
SSC	I=11.37, AV CITATIONS=0.52	0.0728664
VAB	I=9.54, CITATIONS=0.01, %Q1=0.03, OUTPUT=0.10, Q1=-0.16	0.2675128