

This document provides instructions for the replication files accompanying the paper “**Does the Gender Composition of Scientific Committees Matter?**” by Manuel Bagues, Mauro Sylos-Labini, and Natalia Zinovyeva. It also provides a brief description of the data files and a summary of variable definitions. A detailed description of the sources of the data is available in the Data Appendix of the paper.

Instructions

The replication folder includes a master do-file called “Master.do” and three subfolders: “data” (containing 6 .dta files), “do-files” (containing 17 Stata do-files), and “output” (containing one log file and 15 tables, in Excel and text format).

If you want to run the master do-file, note that you need to modify in the do-file the path to the replication folder.

Make sure that you have installed updated versions of the following programs: center, ivreg2, xtivreg2, outreg2. If you are not sure whether these programs are installed on your computer, uncomment the corresponding code in the master do-file. You may now run the program.

The master do-file produces Excel tables for all tables included in the paper and the online appendix, except for descriptive tables C1, C2 and C3, for which the outcome is saved in the log file.

Replication of all tables takes some time. On 3,4 GHz Intel Core i7 processor the approximate time of replication is three hours. This is mostly due to the flexible functional form, in which the control variables are included. You can easily modify the assumptions on the functional form by editing the file controls.do in “do-files” folder.

Data files

data_candidates.dta: Includes data on all applications to the national qualification evaluations in Italy and Spain. It contains information from candidates’ CVs, variables describing the expected and the actual committee composition and the indicator for successful candidates.

data_voting.dta: Contains information on the individual votes of each

evaluator to each candidate in Italy.

data_potential_evaluators_and_candidates_Italy.dta: Includes information on the gender of potential evaluators and candidates in Italy, as well as on connections between them.

data_potential_evaluators_and_candidates_Spain.dta: Includes information on the gender of potential evaluators and candidates in Spain, as well as on connections between them.

data_potential_evaluators_Italy.dta: Includes descriptive information on potential evaluators in Italy.

data_potential_evaluators_Spain.dta: Includes descriptive information on potential evaluators in Spain.

Variable definitions

(1) *data_candidates.dta*

Variables describing committee composition:	
committee_age_f	Av. age of committee members, actual committee (Spain only)
committee_age	Av. age of committee members, initial committee (Spain only)
expected_age	Av. age of committee members, expected committee (Spain only)
committee_tenure_f	Av. length of tenure in the position of full professor, actual committee (Italy only)
committee_tenure	Av. length of tenure in the position of full professor, initial committee (Italy only)
expected_tenure	Av. length of tenure in the position of full professor, expected committee (Italy only)
committee_publ_quality_f	Av. normalized number of evaluators' A-journal articles (SSH) or total AIS (STEMM), actual committee
committee_publ_quality	Av. normalized number of evaluators' A-journal articles (SSH) or total AIS (STEMM), initial committee
expected_publ_quality	Av. normalized number of evaluators' A-journal articles (SSH) or total AIS (STEMM), expected committee
committee_publications_f	Av. normalized number of evaluators' publications, actual committee
committee_publications	Av. normalized number of evaluators' publications, initial committee
expected_publications	Av. normalized number of evaluators' publications, expected committee
committee_research_overlap_f	Av. research overlap between the individual and the evaluators, actual committee (Spain only)
committee_research_overlap	Av. research overlap between the individual and the evaluators, initial committee (Spain only)
expected_research_overlap	Av. research overlap between the individual and the evaluators, expected committee (Spain only)
committee_south_uni_f	Prop. of evaluators who are based in a univ. in the South of the country, actual committee
committee_south_uni	Prop. of evaluators who are based in a univ. in the South of the country, initial

	committee
expected_south_uni	Prop. of evaluators who are based in a univ. in the South of the country, expected committee
committee_coauthors_f	Prop. of evaluators who are coauthors of the candidate, actual committee
committee_coauthors	Prop. of evaluators who are coauthors of the candidate, initial committee
expected_coauthors	Prop. of evaluators who are coauthors of the individual, expected committee
committee_same_uni_f	Prop. of evaluators who are colleagues of the individual, actual committee
committee_same_uni	Prop. of evaluators who are colleagues of the individual, initial committee
expected_same_uni	Prop. of evaluators who are colleagues of the individual, expected committee
committee_strong_tie_f	Prop. of evaluators who are either coauthors or colleagues, actual committee
committee_strong_tie	Prop. of evaluators who are either coauthors or colleagues, initial committee
expected_strong_tie	Prop. of evaluators who are either coauthors or colleagues, expected committee
committee_phd_advisor_f	Prop. of evaluators who are PhD advisors of the individual, actual committee (Spain only)
committee_phd_advisor	Prop. of evaluators who are PhD advisors of the individual, initial committee (Spain only)
expected_phd_advisor	Prop. of evaluators who are PhD advisors of the individual, expected committee (Spain only)
committee_fem_strong_tie_f	Prop. of evaluators who are women and either coauthors or colleagues, actual committee
committee_fem_strong_tie	Prop. of evaluators who are women and either coauthors or colleagues, initial committee
expected_fem_strong_tie	Prop. of evaluators who are women and either coauthors or colleagues, expected committee
committee_same_ssd_f	Prop. of evaluators who have the same specialization as the individual, actual committee (Italy only)
committee_same_ssd	Prop. of evaluators who have the same specialization as the individual, initial committee (Italy only)
expected_same_ssd	Prop. of evaluators who have the same specialization as the individual, expected committee (Italy only)
committee_weak_tie_f	Prop. of evaluators who participated in the same PhD committee, actual committee (Spain only)
committee_weak_tie	Prop. of evaluators who participated in the same PhD committee, initial committee (Spain only)
expected_weak_tie	Prop. of evaluators who participated in the same PhD committee, expected committee (Spain only)
committee_female_f	Prop. of female evaluators, actual committee
committee_female	Prop. of female evaluators, initial committee
expected_female	Prop. of female evaluators, expected committee
expected_female_round	Prop. of female evaluators rounded to two decimal points, expected committee
prob_1_fem_or_more	Probability to have one or more women in the committee
prob_2_fem_or_more	Probability to have two or more women in the committee
prob_3_fem_or_more	Probability to have three or more women in the committee
Exam and field level variables:	
country	Country
discipline	Broad disciplinary group
field	Identifier of the field

exam_type	Level of promotion
exam_type_discipline	Identifier for exam type*discipline
committee	Identifier of the committee
exam	Identifier for country*field*level*round
stemm_field	Indicator of STEM&M fields
tag_field	tag(field)
prop_women_full_prof_field	Proportion of women among full professors in the field
Outcome variables:	
candidate	Indicator for candidates who applied and did not withdraw the application
withdraw	Initially applied, but withdrew the application
qualified	Qualified for promotion
failure	Received a negative evaluation
prop_positive_votes	Proportion of positive votes by committee members
Variables describing candidates:	
female	Female
age	Age
age_sq	Age, squared
z_age	Age, normalized
position	Current position
flag_ssd_applicant	Identifier for non missing specialization (SSD) (Italy only)
regular_position	Regular university position
university	University
same_field	Regular university position in field of the exam
regular_positionXsame_field	Regular university position X position in the field of exam
pages_CV	The length of CV in pages (Italy only)
z_pages_CV	The length of CV in pages, normalized (Italy only)
total_publications	Total number of publications
z_total_publications	Total number of publications, normalized
z_total_publications_after	Total number of publications in the following 5 years (normalized for all candidates, non missing only for qualified candidates)
articles	Number of journal articles
z_articles	Number of journal articles, normalized
books	Number of books
z_books	Number of books, normalized
chapters	Number of chapters in collective volumes
z_chapters	Number of chapters in collective volumes, normalized
conferences	Number of publications in conference proceedings (Italy only)
z_conferences	Number of publications in conference proceedings, normalized (Italy only)
patents	Number of patents
z_patents	Number of patents, normalized

other_publications	Number of other publications (Italy only)
z_other_publications	Number of other publications, normalized (Italy only)
total_AIS	Total Article Influence Score
z_total_AIS	Total Article Influence Score (AIS), normalized
z_total_AIS_after	Total AIS of articles published in the following 5 years (normalized for all candidates, non missing only for qualified candidates)
A_articles	Number of articles in A-journals
z_A_articles	Number of articles in A-journals, normalized
z_A_articles_after	Number of articles in A-journals in the following 5 years (normalized for all candidates, non missing only for qualified candidates)
z_citations	Number of received citations, normalized (only for non withdrawing candidates in Italy)
z_citations_after	Number of received citations to articles published in the following 5 years (normalized for all non withdrawing candidates, non missing only for qualified candidates)
coauthors_pp	Av. number of coauthors per paper
z_coauthors_pp	Av. number of coauthors per paper, normalized
first_authored_pp	Prop. of publication where the individual is the first author
z_first_authored_pp	Prop. of publication where the individual is the first author, normalized
last_authored_pp	Prop. of publication where the individual is the last author
z_last_authored_pp	Prop. of publication where the individual is the last author, normalized
PhD_students	Number of PhD students advised (Spain only)
z_PhD_students	Number of PhD students advised, normalized (Spain only)
z_PhD_students_after	Number of PhD students advised in the following 5 years (normalized for all candidates in Spain, non missing only for qualified candidates)
PhD_committees	Number of PhD committees participated, in which the candidate participated (Spain only)
z_PhD_committees	Number of PhD committees in which the candidate participated, normalized (Spain only)
z_PhD_committees_after	Number of PhD committees in which the candidate participated during the following 5 years (normalized for all candidates in Spain, non missing only for qualified candidates)
satisfies3	Above the median in 3 indicators (only for non withdrawing candidates in Italy)
relative_order_application	Application order, normalized to vary between 0 and 1 within exam
future_evaluation	Qualified to full professorship in a national evaluation by 2013 (Spain only)

(2) *data_voting.dta*

Variables describing evaluators and committee composition:	
female_evaluator	Female evaluator
committee_female_f	Prop. of female evaluators, actual committee
expected_female_j	Prop. of female evaluators, expected committee
Variables at the exam or field level:	
discipline	Broad disciplinary group
exam_type	Level of promotion

exam_type_discipline	Level of exam type X discipline
exam_type_field	Level of exam type X field
field	Indicator for the field of the exam
Variables describing the candidate:	
application_id	Application ID
female	Female candidate
age	Age
age_sq	Age, squared
position	Current position
university	University
same_field	Regular university position in field of the exam
regular_positionXsame_field	Regular university position
z_pages_CV	The length of CV in pages, normalized
z_articles	Journal articles, normalized
z_books	Books, normalized
z_chapters	Chapters in collective volumes, normalized
z_conferences	Publications in conference proceedings, normalized
z_patents	Patents, normalized
z_other_publications	Other publications, normalized
z_total_AIS	Total Article Influence Score (AIS), normalized
z_A_articles	Articles in A-journals, normalized
z_coauthors_pp	Av. number of coauthors per paper, normalized
z_first_authored_pp	Prop. of publication where the individual is the first author, normalized
z_last_authored_pp	Prop. of publication where the individual is the last author, normalized
z_indicator1	STEMM: Articles; SSH: A-journal articles. Past 10 years only. Normalized.
z_indicator2	STEMM: Citations; SSH: Articles and chapters. Past 10 years only. Normalized.
z_indicator3	STEMM: H-index; SSH: Books. Past 10 years only. Normalized.
how_many_satisfies	Which indicators are above the median of researchers of the same rank
relative_order_application	Application order, normalized within exam
Outcome variables:	
vote	Indicator for a positive vote
vote_mod	Indicator for a positive vote, zeros for those who withdrew the application

(3) data_potential_evaluators_and_candidates_Italy.dta

female_cand	Female candidate
female_evaluator	Female evaluator
same_uni	The candidate and the potential evaluator work in the same university
coauthor	The candidate and the potential evaluator are coauthors
same_ssd	The candidate and the potential evaluator have the same specialization

exam_type	Identifier for the level of promotion
field	Identifier for the field of the exam
exam_type_field	Identifier for exam type X field

(4) data_potential_evaluators_and_candidates_Spain.dta

female_cand	Female candidate
female_evaluator	Female evaluator
same_uni	The candidate and the potential evaluator work in the same university
coauthor	The candidate and the potential evaluator are coauthors
phd_advisor	The potential evaluator is the advisor of the candidate
weak_tie	The potential evaluator and the candidate participated in the same PhD committee
research_overlap	Research overlap between the candidate and the potential evaluator
exam_type	Identifier for the level of promotion
field	Identifier for the field of the exam
committee	Identifier of the committee (exam type X field)

(5) data_potential_evaluators_Italy.dta

Variables describing the evaluator:	
evaluator	Indicator for professors initially drawn to sit in a committee
evaluator_final	Indicator for members of actual evaluation committees
female	Female
Italian_university	Professor based in an Italian university
south_uni	Indicator for professors based in a university in the South of Italy
z_eval_south_uni	Indicator for professors based in a university in the South of Italy, normalized
tenure	Length of tenure in the position of full professor
z_eval_tenure	Length of tenure in the position of full professor, normalized
total_publications	Total number of publications
z_eval_total_publications	Total number of publications, normalized
total_publications_10ys	Total number of publications. Past 10 years only.
z_eval_total_publications_10ys	Total number of publications. Past 10 years only. Normalized.
articles	Journal articles
z_eval_articles	Journal articles, normalized
books	Books
z_eval_books	Books, normalized
chapters	Chapters in collective volumes
z_eval_chapters	Chapters in collective volumes, normalized
conferences	Publications in conference proceedings
z_eval_conferences	Publications in conference proceedings, normalized
patents	Patents
z_eval_patents	Patents, normalized

other_publications	Other publications
z_eval_other_publications	Other publications, normalized
total_AIS	Total Article Influence Score
z_eval_total_AIS	Total Article Influence Score (AIS), normalized
total_AIS_10ys	Total Article Influence Score. Past 10 years only.
z_eval_total_AIS_10ys	Total Article Influence Score (AIS). Past 10 years only. Normalized.
A_articles	Articles in A-journals
z_eval_A_articles	Articles in A-journals, normalized
A_articles_10ys	Articles in A-journals. Past 10 years only.
z_eval_A_articles_10ys	Articles in A-journals. Past 10 years only. Normalized.
Variables at the committee level:	
committee_female	Proportion of women in the initially drawn committee
expected_female_j	Expected proportion of women in the committee, if the individual is selected
field	Identifier of the field of the exam
stemm_field	Indicator for STEM&M fields

(6) data_potential_evaluators_Spain.dta

Variables describing the evaluator:	
evaluator	Indicator for professors initially drawn to sit in a committee
evaluator_final	Indicator for members of actual evaluation committees
female	Female
researcher	Researcher in the National Research Council (CSIC)
emeritus	Emeritus professor
position	Current position
south_uni	Indicator for professors based in a university in the South of Italy
z_eval_south_uni	Indicator for professors based in a university in the South of Italy, normalized
age	Approximate age
z_eval_age	Approximate age, normalized
tenure	Length of tenure in the position of full professor
z_eval_tenure	Length of tenure in the position of full professor, normalized
total_publications	Total number of publications
z_eval_total_publications	Total number of publications, normalized
total_publications_10ys	Total number of publications. Past 10 years only.
z_eval_total_publications_10ys	Total number of publications. Past 10 years only. Normalized.
articles	Journal articles
z_eval_articles	Journal articles, normalized
books	Books
z_eval_books	Books, normalized
chapters	Chapters in collective volumes
z_eval_chapters	Chapters in collective volumes, normalized
patents	Patents

z_eval_patents	Patents, normalized
total_AIS	Total Article Influence Score
z_eval_total_AIS	Total Article Influence Score (AIS), normalized
total_AIS_10ys	Total Article Influence Score. Past 10 years only.
z_eval_total_AIS_10ys	Total Article Influence Score (AIS). Past 10 years only. Normalized.
A_articles	Articles in A-journals
z_eval_A_articles	Articles in A-journals, normalized
A_articles_10ys	Articles in A-journals. Past 10 years only.
z_eval_A_articles_10ys	Articles in A-journals. Past 10 years only. Normalized.
PhD_students	PhD students advised
z_eval_PhD_students	PhD students advised, normalized
PhD_committees	PhD committees participated in
z_eval_PhD_committees	PhD committees participated in, normalized
Variables at the committee level:	
committee	Indicator for committee (exam type X field)
stemm_field	Indicator for STEM&M fields