

ANTONIO RAIOLA

CONTACT INFORMATION

Office 15.1.14, Department of Economics
University Carlos III of Madrid
Calle Madrid 126, 28903 Getafe, Madrid, Spain

araiola@eco.uc3m.es
<https://raiolartw.github.io>

EDUCATION

2020-present	Ph.D. in Economics University Carlos III, Madrid, Spain. Advisor: Miguel Angel Delgado.
2018-2020	M.Res. in Economic Analysis University Carlos III, Madrid, Spain
2015-2017	M.Sc. in Economics and Political Economy Alma Mater Studiorum, Bologna, Italy <i>Summa cum laude</i>
2011-2015	B.Sc. in Economics and Informatics University G. D'Annunzio, Pescara, Italy

REFERENCES

Miguel Angel Delgado (Advisor)
Department of Economics
University Carlos III
delgado@est-econ.uc3m.es
+34 916249804

Carlos Velasco
Department of Economics
University Carlos III
carlos.velasco@uc3m.es
+34 916249646

Juan Carlos Escanciano
Department of Economics
University Carlos III
jescanci@eco.uc3m.es
+34 916246198

RESEARCH FIELD

Primary Research Field: Econometrics and Statistics, Specification Testing, and Counterfactual Analysis.
Secondary Research Field: Labor Economics and Poverty Analysis.

JOB MARKET PAPER

"Chi-squared Testing for Conditional Moment Restrictions"

Abstract: This paper proposes χ^2 tests for assessing the specification of regression models or general conditional moment restrictions (CMR). The data is partitioned based on the explanatory variables into several cells, and the χ^2 tests evaluate whether the difference between the observed average of the dependent variable and its expected value under the model specification, within each cell, arises by chance. In contrast to existing omnibus procedures, χ^2 tests are pivotal and fairly insensitive to the curse of dimensionality. The computation of statistics is straightforward and does not require bootstrapping or smoothing techniques. Importantly, the asymptotic properties of the test are invariant to sample-dependent partitions, which can be chosen to favor certain alternatives. A Monte Carlo study provides evidence of the good performance of χ^2 tests using sample of small or moderate size compared with existing omnibus alternatives, particularly in high-dimensional settings. An empirical application regarding returns to education of black people in the US complements our finite sample study.

WORK IN PROGRESS

"Counterfactual Analysis Based on Grouped Data: Application to Poverty and Material Deprivation", (joint with Minghai Mao, Lianoning University)

”On Nontrivial Power of Panel Slope Homogeneity Tests in the Presence of Grouped Patterns”,
joint with Nazarii Salish (University Carlos III of Madrid)

TEACHING EXPERIENCE

2020-2023	Mathematics, MEDEG Master, UC3M Main Professor
2020	Econometrics, undergraduate, UC3M TA for Professor Miguel Angel Delgado.
2020-2022	Econometrics II, Phd, UC3M TA for Professor Carlos Velasco.
2020	Econometric Techniques, undergraduate, UC3M TA for Professors Jesus Gonzalo and Nazarii Salish.

SEMINAR, WORKSHOP AND CONFERENCE PRESENTATIONS

2023	Seminar, Toulouse School of Economics (Toulouse, France)
2022	IAEE Conference, King’s College (London, England)
2022	Seminar, Mannheim University (Mannheim, Germany)
2021	UC3M Workshop (UC3M, Madrid, Spain)

SCHOLARSHIPS

2020-2023	FPI grant, Ministerio de Ciencia y Innovacion (PRE2020-092876)
2020-2021	PIFP Scholarship
2018-2020	Academic Scholarship University Carlos III of Madrid. Full grant.

PREDOC EXPERIENCE

2017	Junior Analyst, Prometeia Advisor SIM s.p.a.
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OTHER

Languages	Italian (native), English (fluent), Spanish (advanced).
Programming Tools	R, Stata, Matlab, Python, Latex.
Citizenship	Italian.
2019-2021	Economics Department’s TA coordinator, University Carlos III of Madrid