# Federico A. Todeschini

## **Education and training**

Ph.D. in Economics 2010

Universitat Pompeu Fabra, Department of Economics and Business

Suma Cum Laude

Advisor: Sergi Jimenez Mart'n

Fields of interest: Program and Policy Evaluation, Microeconometrics, Public Economics

and Finance

#### M.Sc. in Economics, Finance and Management

2004-2005

Universitat Pompeu Fabra

Licenciated in Economics 1997-2002

Universidad Nacional de Rosario, Facultad de Ciencias Economicas y Estad'stica

#### Other training

Data Wrangling with MongoDB	Udacity	2015
Into to Data Science	Udacity	2015
Data Visualization and Infographics with D3	Knight Center	2015
Pattern Discovery in Data Mining	Udacity	2015
R Programming	Coursera	2015
The Data Scientist's Toolbox	Coursera	2014
Algorithmic Thinking	Coursera	2014
Machine Learning	Coursera	2014
Algorithmic Thinking	Coursera	2014
Introduction to Databases	Standordx	2014
Introduction to Computational Thinking and Data Science	MITx	2014
Learn to Program: Crafting Quality Code	Coursera	2013
Learn to Program: The fundamentals	Coursera	2012

# **Professional Experience**

Ivalua Jun 2011 - Present date

My work at the Catalan Institute of Public Policy evaluation has involved maily the planning and delivery of evaluation projects. Public policies entail a lot of difficulties from the evaluation perspective as the conditions to identify the counterfactual situation are usually too restrictive and as a consequence one needs to be creative withouth losing the necessary rigor. Among the projects I participated, I would highlight the following ones due to the skills developed in order to overcome the obstacles.

#### The water solidarity fund:

Comissioner: Barcelona Water Company (Aigues de Barcelona)

Objective: Assess the inclusion and exclusion errors of a fund designed to help families in financial distresss pay

for the water bill

Obstacles and propossed methodology: the company had basically no data at their disposal so in order to complete the evaluation we run a survey which we complemented with two outside databases that allowed us to construct the ratio of water poors (those households with a ratio of the cost of the normative minimum consumtion of water to income above 3%) at the municipal level and see how different were the people receiving the fund to those marked as water poors in the general population of that city. This was the first time such a methodology was applied to quantify the energy poverty in Catalonia.

#### Repesca evaluation:

Comissioner: Barcelona Education Consortium

Objective: Assess the impact of a summer education program to help high school students studying those subjects they failed during the academic year.

Obstacles and propossed methodology: One innovative feature of this program was the idea to nudge the parents using sms in order to sensitize them such that they would help their kids in the studying process. Unfortunately the Consortium did not have a centralized way to send the sms and neither did the schools separately. Part of the evaluation in this case demanded writing a Python script in order to send SMS from Ivalua's server to the (randomly selected) parents mobile phones. This way we were able to keep the evaluation budget low and to eliminate the human errors of the one-sms-at-a-time alternative.

#### Ex ante evaluation of financial support to SME:

Comissioner: Catalan Department of Economics and Knowledge

Objective: Estimate the SME financial gap and propose some financial instruments to reduce the gap

Obstacles and propossed methodology: Estimating the financial gap required access to information on the number of SME in Catalonia, the ratio that were economically viable, the ratio of those viable firms that were not getting access to external funding and the average amount of exernal finance that a SME would have in their liabilities. However, with the exception of the first one, the remaining variables were unavailable by either official or unofficial sources. In order to complete the project, I had to combine some hacking and econometrics skills. First, I had to write and implement a Python script to scrap the data SABI database (access was legal but the firm did not offer a way to massively export the data from the web). Secondly, in order to estimate the average amount of exernal finance that a SME would ask if they had the chance to access external funding I developed a financial model using the information obtained in the SABI database.

#### **Job Search and Training Service:**

Comissioner: Barcelona Activa

Objective: Assess the impact of the job search and training service

Obstacles and propossed methodology: Unemployed people that uses job search services usually have less qualification than people that don't. Thus, in order to correctly identify the impact we needed to create some external variation such that would isolate the decision to not use the job search due to different unobservable attitudes and qualification. One such variable that can generate that variation is the distance to the training center. People that lived far away would have, conditionally on other characteristics, a lower probability to use the service and people closer a higher probability, and thus we could match participants and the control group using that probability. In order to measure the distance I wrote a Python script to use Google Maps API in order to calculate the time that it would take for each person in the database to go by public transport to the training center.

ACCIO Feb 09 - Jul 09

Responsible for planning and writing part of the 2009 annual report on Innovation and R+D in Catalonia

### **Inter-American Development Bank**

Jun 08 - Aug 08

Responsible for building a database to be used to estimate the productivity and factor accumulation in Latin America and the Caribbean

### Jefatura de Gabinete de Ministros

Jun 06 - Dec 06

Responsible for providing advice to the Deputy Chief of Staff on the financial situation of Argentinean Provinces

## Academic experience and research

#### **Academic experience**

Universitat d'Alacant 2009

**Lecturer of Introductory Economics** 

#### **Universitat Pompeu Fabra**

2006-2009 and 2015

Lecturer of Econometrics I, Financial Management I and Econometrics II

#### Universidad de San Andres

2003-2004

Lecturer of Topics in Microeconomics and Research Assistant of Roberto Cortes Conde (http://amzn.to/1JLZ9ei)

#### **Published research**

Kolev, Pina and Todeschini(2015). Decision Making and Underperformance in Competitive Environments: Evidence from the National Hockey League. *Kyklos*, 68(1)65-80, February 2015.

Alegre, Casado, Sanz and Todeschini(2015). The impact of training-intensive labour market policies on labour and educational prospects of NEETs: evidence from Catalonia (Spain). *Educational Research* 57(2), April 2015.

Alegre and Todeschini(2014). The most vulnerable NEETs in Spain tend to come from families with the lowest levels of education. LSE Blog. http://bit.ly/19dfp43

Alegre and Todeschini(2014). Jovenes NiNi: la medida del problema. Eldiario.es, http://bit.ly/1MK94Tx

Alegre, M. A. i Todeschini, F.(2013). "Joves Ni-Ni: Caracter\*stiques i respostes efectives". Chapter in *L'estat de l'educacio a Catalunya: Anuari 2013*. Martinez Martin and Albaiges Blasi (editors).

Sanchez-Martin, Robalino and Todeschini(2012). Labor Income and the design of default portfolios in mandatory pension systems: an application to Chile. In *Social Insurance and Labor Markets: How to protect workers while creating good jobs*, edited by Robalino et al. IZA conference volume, Oxford University Press.

Moreno, Navas and Todeschini(2009). Land valuation using real options. *Real Academia de Ciencias, Serie Matematica*, 103(2)405-420

Navarro, Romero and Todeschini(2009). Informe Anual de l'R+D i la Innovacio a Catalunya 2009. Departament dInnovacio, Universitats i Empresa. ACCIO

Todeschini (2004). El BCRA y el IAPI en la pol<sup>\*</sup>tica economica peronista. *Investigaciones y Ensayos*, vol 53, 2004.

### Skills

#### **Computer skills**

Statistics and econometrics: Stata, R, Python, Eviews, SPSS

Data Visualization: D3JS, R, Tableau

Databases: SQL, NoSQL (MongoDB), Access

Other: Latex, Git, Javascript

Languages: Spanish (native), English (fluent), Catalan (fluent)

## Other

Scholarships: ING Bank "Rolf Mantel" scholarship, UPF teaching assistant scholarship

Refeering: Revista de Econom`a Aplicada, European Review of Economic History and Cogent Economics & Finance

D3 visualization of Vote CiU and BComu vote shares by quarter

D3 visualization of unemployment by Comarcas in Catalonia