

PERSONAL INFORMATIONS

DAVIDE BIANCALANA

BORN IN ROME ON 20/02/1987

ITALIAN NATIONALITY

✉ davide.biancalana@uniroma1.it

ACADEMIC POSITION HELD

1/09/2015- ONGOING

Researcher of type A at Sapienza University-Rome, Department of Statistics

ACADEMIC EXPERIENCE

UNIVERSITARY COURSES

FROM Y. 2017/2018

TO Y. 2019/2020

Lecturer of "actuarial mathematics for life insurance"- *University of Sannio - Benevento*

A.A. 2019/2020

Lecturer of "actuarial mathematics for pensions"- *Sapienza University - Rome*
Department of Economy

A.A. 2021/2022

Lecturer of "Risk Theory"- *Sapienza University – Rome* Department of Statistics

LECTURER FOR MASTER, PHD OR OTHER LESSONS

FROM Y. 2014/2015

TO Y.2016/2017

Lecturer of "Generalized Linear Models for ratemaking", for the P.H.D "Scuola di Dottorato in Scienze Statistiche",
Sapienza University-Rome

FROM Y.2018/2019

TO Y.2020/2021

Seminar of "simulation approaches for the fair value of a life participating policy".
Seminar in english
Univeristy of Pisa

Y.2019/2020

Y.2020/2021

Lecturer of " Mathematical methods for valuations in life" in Master "Banking and Finance".
Sapienza University-Rome

OTHER SUPPORTS AS LECTURER

Y. 2017/2018

Y.2018/2019

Assistant professor of "Actuarial mathematics for pension funds" Prof. Paolo De Angelis
Sapienza University Rome

Y 2017 /2018

Assistant professor of " Actuarial mathematics for life insurance" Prof. Fabio Baione
Cattolica University Milan

Y. 2017/2018 Assistant professor of "Actuarial mathematics" Prof. Paolo De Angelis
ONGOING *Sapienza University Rome*

*Assistant professor of "Financial mathematics" Prof. Paolo De Angelis
Sapienza University Rome*

RESEARCH INTERESTS

- Actuarial mathematic for life, non-life, health and pension funds
- Quantile regression for ratemaking
- Capital requirement calculation for insurance company , pension funds and health funds
- Dynamic Policyholder Behaviour dependent on static and financial variables
- Multivariate regression model in actuarial context
- Health insurance

EDUCATION AND TRAINING

FEBRUARY 2017 PHD in actuarial and financial mathematics

Sapienza University - Rome

JULY 2012 Master degree in Actuarial and Financial mathematics

Sapienza University - Rome

DECEMBER 2009 *First degree in Finance and Insurance Statistic*

Sapienza University - Rome

PUBBLICATIONS

1. Biancalana D., "Un approccio quantile regression per la tariffazione danni, basato su un modello a due parti", PhD Thesis (2017).
2. Baione F., Biancalana D., De Angelis P., Granito I. (2018) Dynamic Policyholder Behavior and Surrender Option Evaluation for Life Insurance. In: Corazza M., Durbán M., Grané A., Perna C., Sibillo M. (eds) *Mathematical and Statistical Methods for Actuarial Sciences and Finance*. Springer (DE), Cham. https://doi.org/10.1007/978-3-319-89824-7_14
3. Baione F., Biancalana D., De Angelis P., Granito I. (2018) Classification Ratemaking via Quantile Regression and a Comparison with Generalized Linear Models. In: Corazza M., Durbán M., Grané A., Perna C., Sibillo M. (eds) *Mathematical and Statistical Methods for Actuarial Sciences and Finance*. Springer (DE), Cham. https://doi.org/10.1007/978-3-319-89824-7_15
4. Baione F. & Biancalana D. (2019) An Individual Risk Model for Premium Calculation Based on Quantile: A Comparison between Generalized Linear Models and Quantile Regression, *North American Actuarial Journal*, 23:4, 573-590, Taylor and Francis (UK) DOI: 10.1080/10920277.2019.1604238

5. Baione, F., Biancalana, D. & De Angelis, P. A Quantile Regression approach for the analysis of the diversification in non-life premium risk. *Soft Computing* 24, 8523–8534 (2020), Springer (DE). <https://doi.org/10.1007/s00500-019-04291-x>
6. Baione, F., Biancalana, D. & De Angelis, P. An application of Sigmoid and Double-Sigmoid functions for dynamic policyholder behaviour. *Decisions in Economics and Finance* (2020), Springer(DE). <https://doi.org/10.1007/s10203-020-00279-7>
7. Baione, F., Biancalana, D. “An application of parametric quantile regression to extend the two-stage quantile regression for ratemaking”, *Scandinavian Actuarial Journal* (2020), Taylor and Francis (UK), DOI: 10.1080/03461238.2020.1820372.
8. Baione F., Biancalana D., De Angelis P. (2020) “A Risk Based approach for the Solvency Capital requirement for Health Plans”. In *Mathematical and Statistical Methods for Actuarial Sciences and Finance*. Springer (DE).
9. Baione F., Biancalana D., De Angelis P. (2020) “An application of Zero-One Inflated Beta regression models for predicting health insurance reimbursement”. In *Mathematical and Statistical Methods for Actuarial Sciences and Finance*. Springer (DE).

AWARDS AND PRICES

1. MIUR scholarship for PHD in actuarial and financial mathematics, Facoltà di Scienze Statistiche, Sapienza University. From 01-11-2013 to 31-10-2016.
2. Winner of the “Individual grant competition 2020” called by the “Society of Actuaries” (SOA). Project: “A Risk Based Approach for the Solvency Capital Assessment for Private Group Health Plans” (co-autore Fabio Baione). 7-4-2020
3. Winner of the “Individual grant competition 2021” called by the “Society of Actuaries” (SOA). Project: “A Three Part Regression Model for the Assessment of the Solvency Capital Requirement of a Private Group Health Plan” (co-autore Fabio Baione). Award of 12.000 \$.8-3-2021

PARTICIPATION IN CONFERENCES

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|-------------------------|--|
| 18,22,25 SEPTEMBER 2020 | Mathematical and Statistical Methods for Actuarial Sciences and Finance – MAF 2020 Ginevra:
“An application of zero-one inflated beta regression models for predicting health insurance reimbursement”. |
| 18,22,25 SEPTEMBER 2020 | Mathematical and Statistical Methods for Actuarial Sciences and Finance – MAF 2020 Ginevra:
“A risk-based approach for the solvency capital requirement for health plans”. |
| 9-11 SEPTEMBER 2019 | XLIII Convegno AMASES, Perugia. Paper: “A Beta regression two-part model for partial and total surrender cash flows.”
http://amases2019.unipg.it/files/TentativeProgram_Tuesday10.pdf |
| 21-23 MAY 2019 | AFIR-ERM COLLOQUIUM 2019 Firenze:
“An individual risk model for premium calculation based on quantile: a comparison between Generalized Linear Models and Quantile Regression”. |

- 21-23 MAY 2019 AFIR-ERM COLLOQUIUM 2019 Firenze:
“Double-Sigmoid approach for dynamic policyholder behavior”.
- 9-12 OCTOBER 2018 Dynamics of Social and Economic Systems (DYSES). Sorbonne, Paris, paper: “A dynamic policyholder behavior model for lapse risk assessment in a participating life insurance portfolio” .
- 4-6 APRIL 2018 Mathematical and Statistical Methods for Actuarial Sciences and Finance – MAF 2018 MADRID. “Dynamic policyholder behavior and surrender option evaluation for life insurance”.
- 4-6 APRIL 2018 Mathematical and Statistical Methods for Actuarial Sciences and Finance – MAF 2018 MADRID. “Classification ratemaking via Quantile Regression and a comparison with Generalized Linear Models”.
- 10-12 SEPTEMBER 2015 XXV Convegno AMASES, Padova. Paper: “An individual premium risk valuation in a non-life insurance: a quantile regression approach”.

OTHER INFORMATIONS

FIRST LANGUAGE ITALIAN

OTHER LANGUAGES

	UNDERSTANDING		SPEAKING		WRITING
	LISTENING	READING	INTERACTION	ORAL PRODUCTION	
English	B2	B2	B2	B2	B2
French	B1	B2	B2	B1	B1

Levels: A1/2 base - B1/2 intermediate - C1/2 advanced

DRIVING LICENSE B category

COMPUTER SKILLS

Good knowledge of Microsoft Windows and Office (Word, Excel, Access, PowerPoint, Outlook, VBA)
Good knowledge of scientific software : R, LateX.
Good knowledge of Emblem software