

PUBLICATIONS

Doctoral thesis

Pitselis G. (1998). On Robust Credibility Models including Weighted Regression. PhD Dissertation, [Université de Montréal](#), Canada.

List of publications in peer-reviewed journals

- Pitselis, G. (2026g) Distribution of Regression Errors in a Credibility Framework. Technical report.
- Pitselis, G. (2026f) Credible Distribution Estimation with Deductible, Policy Limit and Reinsurance Layers. Technical report.
- Pitselis, G. (2026e). Credibility Distribution Risk Measures. Technical report.
- Pitselis, G. (2026d). Credibility Distribution Estimation in a Hierarchical Form. Technical report.
- Pitselis, G. (2026c). Exponential Regression Type Model for Estimating Mortality rates. Technical report.
- Pitselis, G. (2026b). Credibility Distribution Estimation in a Hierarchical Form. Submitted for publication. Technical report.
- Pitselis, G. (2026a). Semi-Linear Credibility Distribution Estimation. Submitted for publication. Technical report.
- Pitselis, G. (2024). Credibility Distribution Estimation with Weighted or Grouped Observations. *Risks*, 12(1),10.
- Bozikas A. Badounas I., and Pitselis, G., (2022). Pricing Longevity Bonds under a Credibility Framework with Limited Available Data. *Risks*, 10(5), 96.
- Badounas I., Bozikas A. and Pitselis, G., (2021). Robust Random Coefficients Representation of Chain Ladder Models. *Annals of Actuarial Science* (2021), 1–32.
- Bozikas, A. and Pitselis, G., (2020b). Incorporating crossed classification credibility into the Lee-Carter model for multiple populations mortality data. *Insurance Mathematics and Economics*, 93, 353-368.
- Bozikas, A. and Pitselis, G., (2020a). Multi-Population Mortality Modelling and Forecasting: A Hierarchical Credibility Regression Approach. *Eur. Actuar. J.* (2020).
- Pitselis, G., (2020a). Quantiles in a multiple-stage nested classification credibility. *Eur. Actuar. J.* (2020), 10, 399-423.
- Pitselis, G., (2020b). Multi-stage nested classification credibility quantile regression model. *Insurance Mathematics and Economics*, 92, 162-176.
- Pitselis, G., and Badounas I., (2020). Robust Cross Section Regression in Loss Reserving Models. Technical Report (submitted).
- Badounas I., and Pitselis, G., (2020). Loss reserving estimation with correlated run-off triangles in a longitudinal quantile regression model, *Risks*, 8, 14.

- Bozikas, A., Pitselis, G., (2019a). Credible Regression Approaches to Forecast Mortality for Populations with Limited Data, *Risks* 7(27), 1-22.
- Bozikas, A., Pitselis, G., (2018). An Empirical Study on Stochastic Mortality Modelling under the Age-Period-Cohort Framework: The Case of Greece with Applications to Insurance Pricing, *Risks*, 6(44), 1-32.
- Pitselis, G., (2017). Risk Measures in a Quantile Regression Credibility Framework with Fama/French data Applications. *Insurance Mathematics and Economics*, 74, 0-12.
- Bozikas, A., Pitselis, G., (2016b). Modelling and forecasting -specific mortality rates and sex differentials in future life expectancy. An Application to the Greek population data. Technical Report.
- Pitselis, G., (2016c). Robust State Space Representation of Chain Ladder Models. Presented in the 16th International Congress of IME, July 10-23, 2014, Shanghai, China. Technical Report.
- Pitselis, (2016b). Compound Distributions of Exchangeable Random Variables – Moments and Central Moments. Technical Report.
- Pitselis, G., (2016a). Credible Risk Measures with Applications in Finance and Actuarial Sciences. *Insurance Mathematics and Economics*, 70 (2016), 373–386.
- Bozikas, A., G., Pitselis, (2016a). A Comparative Analysis of Stochastic Mortality Models under the Age-Period-Cohort Framework. The Case of Greece. Technical Report.
- Pitselis, G., (2015). Extensions of De Pril’s Recursions for Panjer’s Class for the Multivariate case. Technical Report.
- Pitselis, G., Grigoriadou, V., and Badounas, I., (2015). Robust Loss Reserving in a Log – linear Model. *Insurance Mathematics and Economics*, 64, 14-27.
- Pitselis, G., and Bozikas, A., (2014). Implications of Mortality Trends to Actuarial Pension Plans Methods and Securitization of Longevity Risk. Technical Report.
- Pitselis, G., (2014a). Credibility Estimation of Quantiles (VaR) in a Hierarchical Model. Presented in the ASTIN Congress 18-22, June 2011, Madrid, Spain.
- Dimitrov, B., Esa, S., Kolev, N., and Pitselis, G., (2014). On the transfer of Global Measures of Dependence between Random Variables into Cumulative Local Measures. *Journal of Applied Mathematics*, 5(4), 615-627.
- Pitselis, G., (2013d). Robust Eligible Capital and Value at Risk under Solvency II System. *Communication in Statistics-Simulation and Computation*, 43(1), 161-182.
- Pitselis, G., (2013c). Quantile Credibility Models. *Insurance Mathematics and Economics*, 52, 477-489.
- Pitselis, G., (2013b). Pure Robust Versus Robust Portfolio Unbiased – Credibility and Asymptotic Optimality. *Insurance Mathematics and Economics*, 52, 391–403.
- Pitselis, G., (2013a). A review on Robust Estimators Applied to Regression Credibility, *Journal of Computational and Applied Mathematics*, 239, 231-249.
- Pitselis, G., (2009). An Overview of Solvency Supervision, Regulations and Insolvency prediction. *Belgian Actuarial Journal* 8(1), 37-53.

- Pitselis, G., (2009). Solvency Supervision based on a Total Balance Sheet Approach. *Journal of Computational and Applied Mathematics*. 233(1), 83-96.
- Chadjiconstantinidis, S., and Pitselis, G., (2008). Further Improved Recursions for a Class of Compound Poisson Distributions, *Insurance Mathematics and Economics*, 44(2), 278-286.
- Pitselis, G., (2008). Robust Regression Credibility: The Influence Function Approach. *Insurance Mathematics and Economics*, 42(1), 288-300.
- Pitselis, G., (2006). Credibility when Risk Characteristics Vary with Time. *HERMIS International Journal*, 7, 160-181.
- Dagla, M., Antoniou, E., Pitselis, G., Greatsas G., (2005). Factors Influencing the initiation and duration of Breastfeeding in Greece. *The journal of Maternal Fetus and Neonatal Medicine*, 189-192.
- Pitselis, G., (2005). Application of M-Estimators to Cross-Section Effect Models. *Communication in Statistics-Simulation and Computation*, 34, 1-16.
- Pitselis, G., (2004). Credibility Models with Cross-Section Effect and with both Cross-Section and Time Effects. *Blatter der DGVM, Springer, Heft 4*, 643-664.
- Pitselis, G., (2004). De Vylder's Robust Nonlinear Regression Credibility, *Belgium Actuarial Bulletin*, V. 4, 44-49.
- Pitselis, G., (2003). A SUR Regression Model in a Credibility Framework. *Insurance Mathematics and Economics*, 34, 37-54.
- Garrido, J., and Pitselis, G., (2000). On Robust Estimation in Bühlmann-Straub's Credibility Model. *Journal of Statistical Research, (In Honor of C.R. Rao)*, 34, 2, 113-132.
- Pitselis G., (1990). *Personnes agees de langue Grecque de la Communaute Hellenique de Montreal*. *Ministere de la Sante nationale et du Bien-etre social du Canada* (1990), 1-46.

Publications in Conference Proceedings

- Bozikas, A. and Pitselis, G., (2019). A Three Level Hierarchical Credibility Regression Approach to Modelling Multi-Population Mortality data. *Proceedings of the 32nd Congress of the Greek Statistical Institute, Ioannina, Greece, May 30/5-1/6, 2019*.
- Bozikas, A. and Pitselis, G., (2018). Prediction of Mortality with the use of Credibility Theory. *Proceedings of the 31th Congress of the Greek Statistical Institute, Lamia, Greece, May 4-6, 2018*.
- Badounas, I. and Pitselis, G., (2018). Robust Loss Reserving with Kalman Filter. *Proceedings of the 31th Congress of the Greek Statistical Institute, Lamia, Greece, May 4-6, 2018*.
- Bozikas, A. and Pitselis, G., (2016). Comparative Analysis of Stochastic Mortality Tables in Greek Population. *Proceedings of the 29th Congress of the Greek Statistical Institute, Naousa, Greece, May 4-7, 2016*.
- Bozikas, A. and Pitselis, G., (2015). Mortality Projection in Greece and the Implication of Longevity Improvements on Pension Plans. *Proceedings of the 28th Congress of the Greek Statistical Institute, Athens, April 15-18, 2015*.

- Pitselis, G., (2009). Internal Model for Solvency Supervision for Small, Medium, and Large insurers. Proceedings of the 4th Brazilian Conference on Statistical Modeling in Insurance and Finance (Ed. Kolev, Fernandez), April 4-8, 2009, Maresias, Brazil.
- Pitselis, G., (2007). Adequacy of Capital for Life and Non-life Insurer. Proceedings of the 3rd Brazilian Conference on Statistical Modeling in Insurance and Finance (Ed. Kolev, Schmidli), March 25-30, 2007, Maresias, Brazil.
- Pitselis, G., (2005). Another look at dependency for compound distributions. Proceedings of the 2nd Brazilian Conference on Statistical Modeling in Insurance and Finance, (Ed. Kolev, Morettin), September 29-October 2, Ubatuba, Brazil.
- Pitselis, G., and Ganetsos I., (2005). Prediction of Insolvency. The norm for Healthy Companies under Solvency II. Proceedings of the 20th Congress of the Greek Statistical Institute, Leukosia, April 11-15, 2005, Cyprus.
- Zaharopoulou, H., and Pitselis, G., (2004). Diagnostic of Outlier Events and Robust Estimation. Proceedings of the 17th Congress of the Greek Statistical Institute, Leykada, April 14-18, 2004, Greece.
- Pitselis, G., and Maragou, M., (2004). Investigating Insurance Insolvency and Fraud. Proceedings of the 3rd Conference in Actuarial Science and Finance, September 2-5, 2004, Samos, Greece.
- Pitselis, G., and Harisi, A., (2003). Robust estimation in multiple Regression with Random Coefficients. Proceedings of the 16th Congress of the Greek Statistical Institute, Kavala, April 30 – May 3, 2003, Greece.
- Pitselis, G., (2003). Robust Non-linear Regression Credibility. Proceedings of the 1st Brazilian Conference on Statistical Modeling in Insurance and Finance, September 1-6. (Ed. Dhaene, Kolev, Morettin), September 29-October 4, Ubatuba, Brazil.
- Pitselis, G., (2002). Application of GM and MM Estimators to Regression Credibility. Proceedings of the 2nd Conference in Actuarial Science and Finance, September 20-22, 2002, Samos, Greece.
- Pitselis, G., (2002). Credibility Estimation in a Multivariate Regression Model. Proceedings of the 15th Congress of the Greek Statistical Institute, Ioannina, April 8-11, 2002, Greece.
- Pitselis, G., (2001). Robust Estimation in the Multivariate case. Proceedings of the 14th Congress of the Greek Statistical Institute, Skiathos, April 18-21, 2001, Greece.

Invited Speaker

- Pitselis, G. (2025). A Review on Credibility Distribution Estimation with Applications to Insurance and 8th Brazilian Conference on Statistical Modelling in Insurance and Finance, September 28-3 October, 2025, Maresias, Brazil.
- Pitselis, G. (2025). Risk Related to Tail Probabilities in a Credibility Framework. Workshop on Risk Analysis and Applications. Institute of Mathematics and Statistics of the University of São Paulo, September 24-25 Brazil.
- Pitselis, G. (2025). Some New Developments in Mortality Function Workshop on Dependent Analysis and Applications. Institute of Mathematics, Statistics and Scientific Computation of the University of Campinas, September 26-27 Campinas, Brazil.

- Pitselis, G. (2025). The credible tail distribution with application to insurance and reinsurance, Vienna University of Technology 2025-04-03, Austria.
- Pitselis, G. (2023c). Credible Weighted Distribution Colloquium on Risk Theory. In Honor of Hans Gerber's 80.th Birthday, University of Lausanne, Tuesday, July 11, 2023.
- Pitselis, G. (2023b). Some New Results on Credible Distribution. Seminar, Actuarial Science University of Toronto May 5, 2023, Canada.
- Pitselis, G. (2023a). Weighted Credibility Distribution Estimation with Applications to Insurance and Finance. Weekly Seminars on Risk Management and Actuarial Science, Waterloo March 23, 2023.
- Pitselis, G. (2020). Quantile Longitudinal Regression Model in the Framework of Loss Reserving Estimation With Correlated Line of Business: Workshop on Risk Analysis, IME-USP, March 9 and 10, 2020, S. Paulo. Brazil.
- Pitselis, G., (2020). Short Course: Claims Reserving Methods for one Run-off Triangle and for a Portfolio of Several Run-off Triangles. 7th Brazilian Conference on Statistical Modelling in Insurance and Finance, March 1-6 March, 2020, Maresias, Brazil.
- Pitselis, G., (2017b). Risk Measures Related to both the Information of an Individual Risk and Industry Risk. SSC Annual Meetings at University of Manitoba, June 11-14, Canada.
- Pitselis, G., (2017a). Another Look at Risk Measures in a Credibility Framework. University of Lausanne, DSA seminar Mon Apr 10, 2017, Switzerland.
- Pitselis, G., (2014d). Risk Measures in a Credibility Framework. Presented at AFI seminar, KU Leuven 12 June 2014, Belgium.
- Pitselis, G., (2014c). Credible Risk Measures. Presented at ASMF seminar, Liberal University of Brussels, 2 May 2014, Belgium.
- Pitselis, G., (2014b). Risk Measures within a Credibility Framework. University of Lausanne, DSA seminar Mon Apr 28, 2014, Switzerland.
- Pitselis, G., (2014a). Credible Risk Measures. Presented at ASMF seminar, University of Amsterdam, 14 March, 2014, Nederland.
- Pitselis, G., (2012). Some new Results on Robust Loss Reserving. Presented at AFI seminar, KU Leuven 14 February 2012, Belgium.
- Pitselis, G., (2012). Robust Loss Reserving Applied to Non-life Risk. Presented in the International Workshop in Honor of Professor Omer Gebizlioglu, 14-15 June, 2012, Ankara, Turkey.
- Pitselis, G., (2008). Robust Credibility, 24 April 2008, Bahcesehir University, Istanbul, Turkey.
- Pitselis, G., (2008). Robust credibility, 22 April 2008, Middle East Technical University Institute of Applied mathematics, Ankara, Turkey.
- Pitselis, G., (2008). Patric Poon Actuarial Science Workshop. July 14, 2008, Honk Kong, China.
- Pitselis, G., (2007). Solvency Supervision and Risk Based Capital Industry Norm, at Risk Measures and Solvency (RMS) Meeting in Antalya, Turkey, May 20-24, 2007.

- Pitselis, G., (2006). Solvency Supervision, Regulations and Insolvency Prediction: The Case of Greece. Presented in International Congress Euro2006 on Operation Research, Reykjavik, Iceland.
- Pitselis, G., (2006). Regression Analysis for Supervision of Solvency, CPI Events, Johannesburg January 2006, S. Africa.

International Conferences

- Bozikas, A. Pitselis, G., (2021) A non-linear credibility regression approach to forecasting mortality rates. Presented at the virtual conference Statistics 2021 Canada: 6th Canadian Conference in Applied Statistics, Montreal, Canada,
- Pitselis, G., and Badounas I., (2019). Loss reserving estimation with correlated run-off triangles in a quantile longitudinal model. International Congress on Insurance: Mathematics and Economics (IME 2019), July 10 – 12, 2019, Munich, Germany.
- Bozikas, A. Pitselis, G., (2019). A crossed classified credibility approach to estimating future mortality dynamics for multiple populations. International Congress of Insurance: Mathematics and Economics (IME 2019), July 10 – 12, 2019, Munich, Germany.
- Bozikas, A. Pitselis, G., (2019). Multi-population mortality modelling and forecasting: A hierarchical credibility regression approach. Third International Congress on Actuarial Science and Quantitative Finance (ICASQF2019) in Manizales, Colombia on June 19-22, 2019.
- Pitselis, G., (2019). On the application of a hierarchical credibility quantile regression model to insurance and finance. Third International Congress on Actuarial Science and Quantitative Finance (ICASQF2019) in Manizales, Colombia, June 19-22, 2019.
- Pitselis, G., (2017). Quantile regression techniques with a working correlation model for credibility premium estimation. International Congress of Insurance: Mathematics and Economics (IME 2019), Vienna, July 3-5, 2017.
- Pitselis, G., (2016b). Penalized Quantile Regression Model for Longitudinal Data in a Credibility Framework. Presented in the 3rd EAJ Conference, Lyon, Sept 5-8, 2016.
- Bozikas, A. Pitselis, G., (2016). Stochastic Mortality Models under the Age-Period-Cohort Framework: The case of Greece. Presented in the 3rd EAJ Conference, Lyon, Sept 5-8, 2016.
- Pitselis, G., (2016a). Compound Distributions of Exchangeable Random Variables – Moments and Central Moments. Technical Report. Presented in the 16th International Congress of IME, July 24-27, 2016, Atlanta, Georgia, USA.
- Pitselis, G., (2015). Risk Measures in a Quantile Regression Credibility Framework with Fama/French Research Portfolios and Three Risk Factors. Presented in the 15th International Congress of IME, June 24-26, 2015, Liverpool, UK.
- Pitselis, G., (2014). Some new Developments on Credibility Risk Measures and Applications. Presented in 2nd European Actuarial Journal (EAJ) Conference & Educational Workshop TU Vienna, September 8-12, 2014, Austria.
- Badounas, I. and Pitselis, G., (2014). Robust loss reserving regression models with random coefficients. Presented at the 2nd European Actuarial Journal (EAJ) Conference, TU Vienna, September 10-12, 2014.

- Pitselis, G., (2014). Robust State Space Representation of Chain Ladder Models. Presented in the 16th International Congress of IME, July 10-23, 2014, Shanghai, China.
- Pitselis, G., (2013). Credible Risk Measures. Presented in the 16th International Congress of IME, July 1-3, 2013, Copenhagen, Denmark.
- Pitselis, G., (2012). Credible Risk Measures. Presented in the Workshop on Risk Dependency and Ruin, University of Piraeus, 9 November 2012, Greece.
- Pitselis, G., (2012). Some new Developments in Quantile Credibility Models. Presented in the 16th International Congress of IME, June 28-30 Hong Kong, China.
- Pitselis, G., (2012). The Effect of Large Claims to Loss Reserving. Presented in the International Conference on Actuarial Science and Risk Management, June 23-27 2012, Xiamen, China.
- Pitselis, G., (2012). Robust Loss Reserving applied to Non-life Risk in Solvency II. Presented in the Actuarial Science and Risk Measures Workshop on Solvency II, 11 May 2012, Athens, Greece.
- Pitselis, G., (2011). On a Hierarchical Credibility Model for Quantiles, presented in the ASTIN Congress 18-22, June 2011, Madrid, Spain.
- Pitselis, G., Grigoriadou V. (2011). Robust Regression Techniques applied to Loss Reserving. Presented in the 15th International Congress of IME, June 14-18, 2011, Trieste, Italy.
- Pitselis, G. and Iliopoulos, I., (2010). Pension Plans Valuation Based on Simultaneous Equations Model. Presented in the 13th International Congress of IME 2010, June 17 – 19, 2010, Toronto Canada.
- Pitselis, G., (2011). Robust Eligible Capital and Value at Risk under Solvency II System. Presented in the 24th Congress of the Greek Statistical Institute, April 7-11 2010, Veria, Greece.
- Pitselis, G., (2008). Robust and efficient estimator applied to regression credibility. Presented in the 11th International Congress of IME July 16-18, 2008, Dalian, China.
- Pitselis, G., (2007). Quantile regression in a Credibility Framework. Presented in the 10th International Congress of IME, 12-15 July, 2007, Piraeus, Greece.
- Pitselis, G., (2007). Robust and Efficient Estimator Applied to Regression Credibility. Presented at the 22th Congress of the Greek Statistical Institute, Samos, April 30-May 4, 2007, Greece.
- Pitselis, G., (2006). Risk Based Capital, Supervision of Solvency and Cross-Section Effect models. Presented in the 10th International Congress of IME, 18-20 July, Leuven Belgium.
- Papaioanou, T., and Pitselis, G., (2004). On Information and Censoring in Actuarial Science. Presented in the 8th International Congress of IME, June 14-16, Rome, Italy.
- Pitselis, G., (2004). Extensions of De Pril's Recursions for Panjer's Class. Presented in 8th International Congress of IME, June 14-16, 2004 Rome, Italy.
- Pitselis, G., (2004). Extensions of De Prill's Recursions for Panjer's Class for the Multivariate case. Presented in the 2nd international workshop in Applied Probability, March 22-25, 2004, Piraeus, Greece.

- Pitselis, G., (2003). Further Improved Recursions for a Class of Compound Poisson Distributions. presented in the 7th International Congress on IME. 22-25 June, 2003, Lyon, France. With S. Chadjiconstantinidis.
- Pitselis, G., (2002). Credibility Estimation in Seemingly Unrelated Regressions Model with Random Coefficients Presented in 6th International Congress of IME, July 15-17, 2002, Lisbon, Portugal.