

Emanuele Borgonovo

DECISION ANALYSIS

ARTICLES IN SCHOLARLY JOURNALS

BORGONOVO E., RABITTI G.

Screening: From tornado diagrams to effective dimensions

European Journal of Operational Research, 2023, vol.304, no. 3, pp.1200-1211

BORGONOVO E., PLISCHKE E., RABITTI G.

Interactions and computer experiments

Scandinavian Journal of Statistics, 2022, vol.49, no. 3, pp.1274-1303

VECCHI V., CUSUMANO N., CASADY C. B., GATTI S., BORGONOVO E.

Addressing Adverse Selection in Public-Private Partnership (PPP) Procurement: An Agent-Based Approach

Public Works Management & Policy, 2022, vol.27, no. 4, pp.371-395

BORGONOVO E., PANGALLO M., RIVKIN J., RIZZO L., SIGGELKOW N.

Sensitivity analysis of agent-based models: a new protocol

Computational and Mathematical Organization Theory, 2022, vol.28, no. 1, pp.52-94

BORGONOVO E., CASELLI S., CILLO A., MASCIANDARO D., RABITTI G.

Money, privacy, anonymity: What do experiments tell us?

Journal of Financial Stability, October, 2021, vol.56, pp.100934, 1-10

BORGONOVO E., HAZEN G. B., JOSE V. R. R., PLISCHKE E.

Probabilistic sensitivity measures as information value

European Journal of Operational Research, 2021, vol.289, no. 2, pp.595-610

RAZAVI S., JAKEMAN A., SALTELLI A., PRIEUR C., IOOSS B., BORGONOVO E., PLISCHKE E., LO PIANO S., IWANAGA T., BECKER W., TARANTOLA S., GUILLAUME J. H. A., JAKEMAN J., GUPTA H., MELILLO N., RABITTI G., CHABRIDON V., DUAN Q., SUN X., SMITH S., SHEIKHOESLAMI R., HOSSEINI N., ASADZADEH M., PUY A., KUCHERENKO S., MAIER H. R.

The Future of Sensitivity Analysis: An essential discipline for systems modeling and policy support

Environmental Modelling & Software, 2021, vol.137, pp.104954

BORGONOVO E., MOLteni L.

Gli advanced analytics a supporto delle decisioni manageriali

Economia & Management, 2021, no. 2, pp.25-29

PLISCHKE E., BORGONOVO E.

Fighting the Curse of Sparsity: Probabilistic Sensitivity Measures From Cumulative Distribution Functions

Risk Analysis, 2020, vol.40, no. 12, pp.2639-2660

BORGONOVO E., ANTONIANO-VILLALOBOS I., LU X.

Nonparametric estimation of probabilistic sensitivity measures

Statistics and Computing, 2020, vol.30, no. 2, pp.447-467

LU X., RUDI A., BORGONOVO E., ROSASCO L.

Faster Kriging: Facing High-Dimensional Simulators

Operations Research, 2020, vol.68, no. 1, pp.233-249

PLISCHKE E., BORGONOVO E.

Copula theory and probabilistic sensitivity analysis: Is there a connection?

European Journal of Operational Research, 2019, vol.277, no. 3, pp.1046-1059

RABITTI G., BORGONOVO E.

A Shapley-Owen Index for Interaction Quantification

SIAM/ASA Journal on Uncertainty Quantification, 2019, vol.7, no. 3, pp.1060-1075

ANTONIANO-VILLALOBOS I., BORGONOVO E., SIRIWARDENA S.

Which Parameters Are Important? Differential Importance Under Uncertainty

Risk Analysis, 2018, vol.38, no. 11, pp.2459-2477

BORGONOVO E., CILLO A., SMITH C. L.

On the Relationship between Safety and Decision Significance

Risk Analysis, 2018, vol.38, no. 8, pp.1541-1558

BORGONOVO E., BUZZARD G., WENDELL R. E.

A global tolerance approach to sensitivity analysis in linear programming

European Journal of Operational Research, 2018, vol.267, no. 1, pp.321-337

BORGONOVO E., MORRIS M. D., PLISCHKE E.

Functional ANOVA with Multiple Distributions: Implications for the Sensitivity Analysis of Computer Experiments

SIAM/ASA Journal on Uncertainty Quantification, 2018, vol.6, no. 1, pp.397-427

BORGONOVO E., CAPPELLI V., MACCHERONI F. A., MARINACCI M.

Risk analysis and decision theory: A bridge

European Journal of Operational Research, 2018, vol.264, no. 1, pp.280-293

BORGONOVO E., CILLO A.

Deciding with Thresholds: Importance Measures and Value of Information

Risk Analysis, 2017, vol.37, no. 10, pp.1828-1848

BORGONOVO E., LU X., PLISCHKE E., RAKOVEC O., HILL M. C.

Making the most out of a hydrological model data set: Sensitivity analyses to open the model black-box

Water Resources Research, 2017, vol.53, no. 9, pp.7933-7950

ALIEE H., BORGONOVO E., GLASS M., TEICH J.

On the Boolean extension of the Birnbaum importance to non-coherent systems

Reliability Engineering & System Safety, 2017, vol.160, pp.191-200

CILLO A., BORGONOVO E.

Deciding with Thresholds: Importance Measures and Value of Information

Risk Analysis, 2017, vol.37, no. 10, pp.1828-1848

BORGONOVO E., LAENGLE S., MERIGÓ J., MIRANDA J., SLOWINSKI R., BOMZE I., DYSON R., OLIVEIRA J., TEUNTER R.

Forty years of the European Journal of Operational Research: A bibliometric overview

European Journal of Operational Research, 2017, vol.262, no. 3, pp.803-816

BORGONOVO E., MARANGONI G., TAVONI M., BOSETTI V.

Sensitivity of projected long-term CO₂ emissions across the Shared Socioeconomic Pathways

Nature Climate Change, 2017, vol.7, no. 2, pp.113-117

BORGONOVO E., HAZEN G., PLISCHKE E.

A Common Rationale for Global Sensitivity Measures and Their Estimation

Risk Analysis, 2016, vol.36, no. 10, pp.1871-1895

BORGONOVO E., CUCURACHI S., HEIJUNGS R.

A Protocol for the Global Sensitivity Analysis of Impact Assessment Models in Life Cycle Assessment

Risk Analysis, 2016, vol.36, no. 2, pp.357-377

BORGONOVO E., ALIEE H., GLASS M., TEICH J.

A new time-independent reliability importance measure

European Journal of Operational Research, 2016, vol.254, no. 2, pp.427-442

BORGONOVO E., PLISCHKE E.

Sensitivity analysis: A review of recent advances

European Journal of Operational Research, 2016, vol.248, no. 3, pp.869-887

BECCACECE F., BORGONOVO E., BUZZARD G., CILLO A., ZIONTS S.

Elicitation of multiattribute value functions through high dimensional model representations: Monotonicity and interactions

European Journal of Operational Research, 2015, vol.246, no. 2, pp.517-527

BORGONOVO E., MARINACCI M.

Decision analysis under ambiguity

European Journal of Operational Research, 2015, vol.244, no. 3, pp.823-836

CILLO A., BORGONOVO E., BECCACECE F., BUZZARD G., ZIONTS S.

Elicitation of Multiattribute Value Functions through High Dimensional Model Representations: Monotonicity and Interactions

European Journal of Operational Research, 2015, vol.246, no. 2, pp.517-527

BORGONOVO E., TONOLI F.

Decision-network polynomials and the sensitivity of decision-support models

European Journal of Operational Research, 2014, vol.239, no. 2, pp.490-503

BORGONOVO E.

Quando ai manager danno i numeri

Economia & Management, 2014, no. 3, pp.108-111

CEPPI A., RAVAZZANI G., SALANDIN A., RABUFFETTI D., MONTANI A., BORGONOVO E., MANCINI M.

Effects of temperature on flood forecasting: Analysis of an operative case study in Alpine basins

Natural Hazards and Earth System Sciences, 2013, vol.13, no. 4, pp.1051-1062

PLISCHKE E., BORGONOVO E., SMITH C.

Global sensitivity measures from given data

European Journal of Operational Research, 2013, vol.226, no. 3, pp.536-550

BAUCELLS M., BORGONOVO E.

Invariant Probabilistic Sensitivity Analysis

Management Science, 2013, vol.59, no. 11, pp.2536-2549

BORGONOVO E., ZENTER I., PELLEGGRI A., TARANTOLA S., DE ROCQUIGNY E.

On the importance of uncertain factors in seismic fragility assessment

Reliability Engineering & System Safety, 2013, vol.109, no. -, pp.66-76

BORGONOVO E., GATTI S.

Risk Analysis with contractual default. Does Covenant Breach Matter?

European Journal of Operational Research, 2013, vol.230, no. 2, pp.431-443

BORGONOVO E., TARANTOLA S., PLISCHKE E., MORRIS M.

Transformations and invariance in the sensitivity analysis of computer experiments

The Journal of The Royal Statistical Society, Series B (Statistical Methodology), 2013, vol.76, no. 5, pp.925-947

BORGONOVO E., ANDERSON B., GALEOTTI M., ROSON R.

Uncertainty in Climate Change Modeling: Can Global Sensitivity Analysis Be of Help?

Risk Analysis, 2013, vol.34, no. 2, pp.271-293

BORGONOVO E., SMITH C.

Composite multilinearity, epistemic uncertainty and risk achievement worth

European Journal of Operational Research, 2012, vol.222, no. 2, pp.301-311

BORGONOVO E., CASTAINGS W., TARANTOLA S.

Model emulation and moment-independent sensitivity analysis: An application to environmental modeling

Environmental Modelling & Software, 2012, vol.34, pp.105-115

CASTANINGS W., BORGONOVO E., MORRIS M., TARANTOLA S.

Sampling strategies in density-based sensitivity analysis

Environmental Modelling & Software, 2012, vol.38, pp.13-26

BORGONOVO E., SMITH C.

A Study of Interactions in the Risk Assessment of Complex Engineering Systems: an Application to Space PSA

Operations Research, 2011, vol.59, no. 6, pp.1461-1476

BIAVA P., BASEVI M., BIGGIERO L., BORGONOVO A., BORGONOVO E., BURIGANA F.

Cancer cell reprogramming, 2010: stem cell differentiation stage factors and an agent based model to optimize cancer treatment

Current Pharmaceutical Biotechnology, 2011, vol.12, no. 2, pp.231-242

BORGONOVO E., PECCATI L.

Finite Change Comparative Statics for Risk-Coherent Inventories

International Journal of Production Economics, 2011, vol.131, no. 1, pp.52-62

BECCACECE F., BORGONOVO E.

Function decomposition, monotonicity and ultramodularity: applications to multi-attribute utility theory

European Journal of Operational Research, 2011, vol.210, no. 2, pp.326-335

BORGONOVO E., CAVALLI L., GUALDONI D., IOZZI F., SODA G., GERMANI A., GOLLIN G.

La progettazione dei sistemi di incentivazione del personale. Un modello sperimentale

Economia & Management, 2011, no. 5, pp.49-66

BORGONOVO E., PECCATI L.

Managerial Insights from Service Industry Models: A New Scenario Decomposition Method

Annals of Operations Research, 2011, vol.185, no. 1, pp.161-179

BORGONOVO E., CASTAINGS W., TARANTOLA S.

Moment Independent Importance Measures: New Results and Analytical Test Cases

Risk Analysis, 2011, vol.31, no. 3, pp.404-428

BORGONOVO E., PERCOCO M.

Sensitivity Analysis of Portfolio Properties with Budget Constraints

International Journal of Mathematics in Operational Research, 2011, vol.3, no. 3, pp.295-321

GATTI S., BORGONOVO E., PECCATI L.

What drives value creation in investment projects? An application of sensitivity analysis to project finance transactions

European Journal of Operational Research, 2010, vol.205, no. 1, pp.227-236

RESEARCH MONOGRAPHS

BORGONOVO E.

Sensitivity analysis: an introduction for the management scientist

Springer International Publishing, , 2017

EDITED BOOKS

MOLTENI L., BORGONOVO E. (EDS.)

Quando ai manager danno i numeri . Come prendere decisioni nell'era dei big data

Egea, Milano, Italy, 2020

ARTICLES IN NATIONAL/INTERNATIONAL NEWSPAPERS

BORGONOVO E., CASELLI S., CILLO A., MASCIANDARO D., RABITTI G.

Central bank digital currencies, cryptocurrencies, and privacy: What experiments tell us

VoxEU – CEPR, 28 October, 2021

BORGONOVO E., CASELLI S., CILLO A., MASCIANDARO D., RABITTI G.

Money, digital cash and cryptocurrencies: Privacy matters

VoxEU – CEPR, 12 March, 2019

EDITORIALS IN JOURNAL

BORGONOVO E., BUSACCA B., SODA G.

L'onda dei Big Data: minaccia o opportunità

2015, *Economia & Management*, Milano, Italy

BORGONOVO E., TARANTOLA S.

Advances in Sensitivity Analysis

2012, *Reliability Engineering & System Safety*, Netherlands (The)

ENTRY (IN DICTIONARY OR ENCYCLOPEDIA)

BORGONOVO E.

Sensitivity Analysis in Decision Making in *Wiley Encyclopedia of Operations Research and Management Science*

J. J. Cochran, L. A. Cox, Jr. Pinar Keskinocak, J. P. Kharoufeh, J. C. Smith(Ed), John Wiley & Sons, pp.1076-1076, 2013

INTERVIEW ARTICLES

BORGONOVO E., BUSACCA B.

Big Data: il presente e il futuro secondo Cisco, Facebook, IBM, HP e Oracle

2015, *Economia & Management*, Milano, Italy

PROCEEDINGS/PRESENTATIONS

BORGONOVO E., BAUCCELLS M., BARR J., PLISCHKE E., RABITZ H.

On the Properties of Graphical Tools

Advances in Decision Analysis Conference (ADA 2022), June 22-24 2022, Washington D.C., United States of America

CILLO A., ULU C., BORGONOVO E., ORTIS A., BATTIATO S.

Should Advisors Signal Access to Algorithms?

Advances in Decision Analysis Conference (ADA 2022), June 22-24 2022, Washington D.C., United States of America

CILLO A., ULU C., BORGONOVO E., ORTIS A., BATTIATO S.

Should Advisors Signal Access to Algorithms?

FUR Conference, July 11-14, 2022, Ghent, Belgium

BORGONOVO E., SMITH C.

Importance measures with finite changes: the relationship between Fussell-Vesely and total order reliability importance

20th European Safety and Reliability Conference, ESREL 2011, Advances in Safety, Reliability and Risk Management - September 18-22, 2012, Troyes, France

BORGONOVO E., SMITH C.

Uncertainty in importance measures: Developing the epistemic Risk Achievement Worth

20th European Safety and Reliability Conference, ESREL 2011, Advances in Safety, Reliability and Risk Management - September 18-22, 2012, Troyes, France

BORGONOVO E., ANDERSON B., ROSON R., GALEOTTI M.

Global Sensitivity Analysis and the Economics of Climate Change

6th International Congress on Environmental Modelling and Software (iEMSs) - July 1-5 2012, Leipzig, Germany

BORGONOVO E., PECCATI L.

Value of Information in the Appraisal of Industrial Investments

17th International Working Seminar on Production Economics - February 20-24 2012, Innsbruck, Austria

BORGONOVO E., BAUCCELLS M.

Probabilistic Sensitivity of Uncertain Cash Flow Streams

INFORMS Annual Meeting Proceedings - November 13-16, 2011, Charlotte, North Carolina, United States of America

ZENTNER I., BORGONOVO E., TARANTOLA S.

Use of HDMR metamodel for seismic fragility analysis

Applications of Statistics and Probability in Civil Engineering. Proceedings of the 11th International Conference on Applications of Statistics and Probability in Civil Engineering (ICASP11) - August 1-4, 2011, Zürich, Switzerland

RESEARCH NOTES OR SHORT ARTICLES IN JOURNALS

PERCOCO M., BORGONOVO E.

On the Sensitivity Analysis of Internal Rates of Return

2012, International Journal of Production Economics, United States of America

RESEARCH REPORTS

BORGONOVO E., POLETTI C.

WORKING PAPERS

CASELLI S., BORGONOVO E., CILLO A., MASCIANDARO D.

Beyond Bitcoin and Cash: Do We Would Like a Central Bank Digital Currency? A Financial and Political Economics Approach

2017, SSRN Electronic Journal
