Stefan CREEMERS

Ph.D. in Applied Economics

Full Professor, Operations Management

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EDUCATION

2020   HDR, University of Lille 3, France

2009   Ph.D. in Applied Economics, KU Leuven, Belgium

2004   Master of Management, KU Leuven, Belgium

2003   Master of Social Sciences, KU Leuven, Belgium

RESEARCH INTERESTS

Business Games, Inventory Management, Project Management, Supply Chain Management

PROFESSIONAL EXPERIENCE

ACADEMIC:

2011 - Present   Full Professor, IÉSEG School of Management, France

2009 - Present   Visiting professor, KU Leuven, Leuven, Belgium

PROFESSIONAL:

2014 - Present   Member of the Board of Directors, PICS Belgium

COURSES TAUGHT

- Gestion de projet, Grande ecole (master cycle)

- Project management, International mba

- Project management, Msc in business analysis and consulting

- Project management, Post graduate program

INTELLECTUAL CONTRIBUTIONS

Papers in refereed journals

Published

Creemers S., De Moor B., Boute R., (2023), Breaking Truck Dominance in Supply Chains: Proactive Freight Consolidation and Modal Split Transport, *International Journal of Production Economics*, 257(March 2023), pp. 108764

Creemers S., Boute R., (2022), The Joint Replenishment Problem: Optimal Policy and Exact Evaluation Method, *European Journal of Operational Research*, 302(3), pp. 1175-1188

Creemers S., Lambrecht M., Belien J., Van Den Broeke M., (2020), Evaluation of appointment scheduling rules: A multi-performance measurement approach, *Omega*, 100(102231), pp. 1-15

Creemers S., (2019), The preemptive stochastic resource-constrained project scheduling problem, *European Journal of Operational Research*, 277(1), pp. 238-247

Rostami S., Creemers S., Leus R., (2019), Precedence theorems and dynamic programming for the single-machine weighted tardiness problem, *European Journal of Operational Research*, 272(1), pp. 43-49

Rostami S., Creemers S., Wei W., Leus R., (2019), Sequential testing of n-out-of-n systems: Precedence theorems and exact methods, *European Journal of Operational Research*, 274(3), pp. 876-885

Creemers S., (2018), Maximizing the expected net present value of a project with phase-type distributed activity durations: An efficient globally optimal solution procedure, *European Journal of Operational Research*, 267(1), pp. 16-22

Creemers S., (2018), Moments and distribution of the net present value of a serial project, *European Journal of Operational Research*, 267(13), pp. 835-848

Creemers S., Melchiors P., Leus R., Kolisch R., (2017), Dynamic Order Acceptance and Capacity Planning in a Stochastic Multi-Project Environment with a Bottleneck Resource, *International Journal of Production Research*, 56(1-2), pp. 459-475

Creemers S., Woumans G., Boute R., Beliën J., (2017), Tri-Vizor uses an efficient algorithm to identify collaborative shipping opportunities, *Interfaces*, 47(3), pp. 244 - 259

Padilla Tinoco S. V., Creemers S., Boute R., (2017), Collaborative shipping under different cost-sharing agreements, *European Journal of Operational Research*, 263(3), pp. 827-837

Rostami S., Creemers S., Leus R., (2016), New strategies for stochastic resource- constrained project scheduling, *Journal of Scheduling*, 21(3), pp. 349-365

Woumans G., De Boeck L., Beliën J., Creemers S., (2016), A Column Generation Approach for Solving the Examination-Timetabling Problem, *European Journal of Operational Research*, 253(1), pp. 178-194

Creemers S., (2015), Minimizing the expected makespan of a project with stochastic activity durations under resource constraints, *Journal of Scheduling*, 18(3), pp. 263-274

Creemers S., De Reyck B., Leus R., (2015), Project planning with alternative technologies in uncertain environments, *European Journal of Operational Research*, 242(2), pp. 465-476

Creemers S., Defraeye M., Van Nieuwenhuyse I., (2014), G-RAND: A phase-type approximation for the nonstationary G(t)/G(t)/s(t)+G(t) queue, *Performance Evaluation*, 80(1), pp. 102-123

Creemers S., Demeulemeester E., Van de Vonder S., (2014), A new approach for quantitative risk analysis, *Annals of Operations Research*, 213(1), pp. 27-65

Creemers S., Belien J., Lambrecht M., (2012), The optimal allocation of server time slots over different classes of customers, *European Journal of Operational Research*, 219(3), pp. 508-521

Creemers S., Boute R., Colen P., Noblesse A., Van Houdt B., (2012), Matrix-analytic methods in supply chain management: recent developments, *Review of Business and Economic Literature*, 57(3), pp. 283-301

Lambrecht M., Creemers S., Boute R., Leus R., (2012), Extending the Production Dice game, *International Journal of Operations and Production Management*, 32(12), pp. 1460-1472

Creemers S., Lambrecht M., (2011), The modeling of interrupts and planned absences in healthcare operations, *Supply Chain Forum: An International Journal*, 12(1), pp. 32-40

Creemers S., Lambrecht M., (2010), Queueing models for appointment-driven systems, *Annals of Operations Research*, 178(1), pp. 155-172

Creemers S., Leus R., Lambrecht M., (2010), Scheduling Markovian PERT networks to maximize the net present value, *Operations Research Letters*, 38(1), pp. 51-56

Creemers S., Lambrecht M., (2009), An advanced queueing model to analyze appointment-driven service systems, *Computers & Operations Research*, 36(10), pp. 2773-2785

Creemers S., Lambrecht M., Vandaele N., (2007), Queueing models in healthcare, *Review of Business and Economic Literature*, 52(3), pp. 471-497

Forthcoming

Beyer Diaz S., Coussement K., De Caigny A., Perez Armas L. F., Creemers S., (2023), Do the US President's Tweets Better Predict Oil Prices? An Empirical Examination Using Long Short-Term Memory Networks, *International Journal of Production Research*, forthcoming(2023), pp. 1-10

Papers in non-refereed journals

Published

Creemers S., Beliën J., Boute R., De Bruecker P., Gijsbrechts J., Padilla Tinoco S. V., (2017), Collaborative Shipping: Logistics in the Sharing Economy, *ORMS Today*, 44(2), pp. 20-24

Communications in refereed conferences

International

Creemers S., (2022), *Editor-in-Chief panel discussion* INFORMS Annual Meeting, Indianapolis, USA

Creemers S., Boute R., (2022), *The joint replenishment problem: Optimal policy and exact evaluation method* International Symposium on Inventories (ISIR), Budapest, Hungary

Creemers S., Boute R., (2021), *The Joint Replenishment Problem: Optimal Policy And Exact Evaluation Method* INFORMS Annual Meeting, Anaheim, USA

Rostami S., Creemers S., Leus R., (2020), *Maximizing the net present value of a project under uncertainty: Activity delays and dynamic policies* 22nd Conference of the International Federation of Operational Research Societies, 22nd Conference of the International Federation of Operational Research Societies, Korea

Rostami S., Creemers S., Leus R., (2019), *Maximizing the net present value of a project under uncertainty: The value of activity delays* The 14th Workshop on Models and Algorithms for Planning and Scheduling Problems (MAPSP 2019), Renesse, Netherlands

Rostami S., Creemers S., Leus R., (2018), *Sequential testing of n-out-of-n systems: Precedence theorems and exact methods* The annual international conference of the German Operations Research Society (GOR), Brussels, Belgium

Rostami S., Creemers S., Leus R., (2018), *Precedence theorems and dynamic programming solutions for the precedence-constrained single machine weighted tardiness problem* European Conference on Operations Research (EURO), Valencia, Spain

Creemers S., (2017), *Markovian PERT networks: A new CTMC and benchmark results* International Conference of Operations Research , Berlin, Germany

Creemers S., (2017), *Markovian Pert Networks: New Ctmc And Benchmark Results* INFORMS, Houston, USA

Creemers S., (2017), *Moments And Distribution Of The Npv Of A Project* INFORMS, Houston, USA

Rostami S., Creemers S., Leus R., (2017), *Precedence theorems and dynamic programming solutions for the precedence-constrained single machine weighted tardiness problem* The annual international conference of the German Operations Research Society (GOR): OR2017, Berlin, Germany

Rostami S., Creemers S., Leus R., (2017), *Sequential testing of n-out-of-n systems: A comparison of exact approaches* 31st annual conference of the Belgian operational research society (ORBEL), Brussels, Belgium

Rostami S., Leus R., Creemers S., (2017), *Optimal solutions for minimum-cost sequential system testing* Multidisciplinary International Conference on Scheduling: Theory and Applications (MISTA), Kuala Lumpur, Malaysia

Creemers S., (2016), *The preemptive stochastic resource-constrained project scheduling problem: An efficient optimal solution procedure* IEEE international conference on industrial engineering and engineering management (IEEE - IEEM 2016), Denpasar (Bali), Indonesia

Creemers S., Beliën J., Woumans G., Boute R., (2016), *Identifying collaborative shipping opportunities* INFORMS Annual Meeting , Nashville, USA

Rostami S., Creemers S., Leus R., (2016), *A new policy class for the stochastic RCPSP* 15th International Conference on Project Management and Scheduling PMS, Valencia, Spain

Creemers S., Padilla Tinoco S., Boute R., (2015), *A new algorithm to optimize a can-order inventory policy for two companies in a horizontal partnership* 26th Annual POMS Conference (POMS 2015), Washington DC, USA

Padilla Tinoco S. V., Boute R., Creemers S., (2015), *Bundling of orders in a horizontal supply chain coordination* 22nd EUROMA Conference on Operations Management for Sustainable Competitiveness (EUROMA 2015), Neuchâtel, Switzerland

Padilla Tinoco S., Creemers S., Boute R., (2015), *Bundling of transport and its impact on inventories and cost allocation in horizontal supply chain partnership* 26th Annual POMS Conference (POMS 2015), Washington DC, USA

Rostami S., Creemers S., Leus R., (2015), *New benchmark results for the stochastic resource-constrained project scheduling problem* IEEE International Conference on Industrial Engineering and Engineering Management (IEEM2015), Singapore, Singapore

Van den Broeke M., Devoldere B., Creemers S., Boute R., (2015), *The interplay of operations, marketing, and product innovation: a dynamic and interdependent simulation decision model* 22nd Innovation and Product Development Management Conference (EIASM 2015), Copenhagen, Denmark

Creemers S., (2014), *Minimizing the expected makespan of a project with stochastic activity durations under resource constraints* IEEE international conference on industrial engineering and engineering management (IEEE - IEEM 2014), Kuala Lumpur, Malaysia

Creemers S., (2014), *Minimizing the makespan of a project with stochastic activity durations under resource constraints* 14th International Workshop on Project Management and Scheduling (PMS 2014), Munich, Germany

Creemers S., Defraeye M., Van Nieuwenhuyse I., (2014), *A comparison of methods to evaluate the probability of excessive waiting in the M(t)/G/s(t)+G queue* Conference for the International Federation of Operational Research Societies (IFORS 2014), Barcelona, Spain

Defraeye M., Creemers S., Van Nieuwenhuyse I., (2014), *Measuring the probability of excessive waiting in M(t)/G/s(t)+G queues with an exhaustive service policy* 5th International Conference on Information Systems, Logistics, and Supply Chain, (ILS 2014), Breda, Netherlands

Creemers S., Colen P., Lambrecht M., (2013), *Evaluation of appointment scheduling rules* Multidisciplinary International Scheduling Conference (MISTA 2013), Ghent, Belgium

Creemers S., Defraeye M., Van Nieuwenhuyse I., (2013), *A Markov model for measuring service levels in nonstationary G(t)/G(t)/s(t)+G(t) queues* 26th European Conference on Operational Research (EURO/INFORMS 2013), Rome, Italy

Creemers S., Beliën J., Lambrecht M., (2012), *The optimal allocation of server time slots over different classes of patients* 4th International Conference on Information Systems, Quebec, Canada

Creemers S., Beliën J., Lambrecht M., (2012), *The optimal allocation of server time slots over different classes of patients* Annual Operational Research Applied to Health Services Conference - ORHAS 2012, Enschede, Netherlands

Creemers S., Colen P., Lambrecht M., (2012), *Evaluation of appointment scheduling rules: a multi-performance measures approach* 4th International Conference on Information Systems, Quebec, Canada

Creemers S., Demeulemeester E., Van de Vonder S., (2012), *A simulation experiment of ranking indices for mitigation risks* 13th International Conference on Project Management and Scheduling, Leuven, Belgium

Creemers S., De Reyck B., Leus R., (2011), *Project Scheduling with Alternative Technologies: Incorporating Varying Activity Duration Variability* Conference for the International Federation of Operational Research Societies (IFORS), Melbourne, Australia

Creemers S., De Reyck, Leus R., (2011), *Project Scheduling with Alternative Technologies: Incorporating Varying Activity Duration Variability* 22nd Annual POMS Conference, Reno, USA

Creemers S., Demeulemeester E., Van de Vonder S., (2011), *A new approach for quantitative risk analysis* 2011 IEEE international conference on industrial engineering and engineering management (IEEE IEEM 2011), Singapore, Singapore

Creemers S., Deblaere F., Demeulemeester E., Herroelen W., Van de Vonder S., (2009), *An integrated risk analysis methodology for construction projects* INFORMS International Meeting (INFORMS 2009), San Diego, USA

Other conference and seminar presentations

International

Beyer Diaz S., Coussement K., De Caigny A., Perez Armas L. F., Creemers S., (2020), *Incorporating Donald Trump's tweets into LSTM for Oil Price Prediction* Decision Sciences Institute, Online, USA

Beyer Diaz S., Coussement K., De Caigny A., Perez Armas L. F., Creemers S., (2020), *Incorporating Tweets into LSTM for Oil Price Prediction* Analytics for Management and Economics Conference, St. Petersburg, Russia

Woumans G., Beliën J., Creemers S., Boute R., (2014), *The Identification of Transport Bundling Opportunities in a Horizontal Supply Chain* INFORMS San Francisco 2014, San Francisco, USA

Woumans G., De Boeck L., Beliën J., Creemers S., (2013), *A Column Generation Approach to Solve the Examination-Timetabling Problem* 26th European Conference of Operational Research (EURO), Rome, Italy

National

Creemers S., Lambrecht M., (2009), *Queueing models for appointment-driven systems* 23rd Belgian Conference on Operations Research (ORBEL 2009), Leuven, Belgium

Chapters in books

Published

Creemers S., Van de Vonder S., Demeulemeester E., (2015), Ranking Indices for Mitigating Project Risks, in: Schwindt Christoph & Zimmermann Jürgen(Eds.), *Handbook on Project Management and Scheduling Vol. 2, 978-3-319-05914-3, Springer, New York, chapter 63, pp. 1135-1153*

Creemers S., Lambrecht M., (2011), Modeling a hospital queueing network, in: Boucherie, R.J., Van Dijk, N.M.(Eds.), *Queueing Networks: A Fundamental Approach, 978-1-4419-6471-7, Springer, Berlin, chapter 18, pp. 767-798*

Case studies

Boute R., Van Steendam T., Creemers S., (2017), *B-Kay Tech: Horizontal Collaboration in Logistics*, *The Case Centre*, case study 9B17D017, teaching note 8B17D017

Research reports

Creemers S., Defraeye M., Van Nieuwenhuyse I., (2013), *A Markov model for measuring service levels in nonstationary $G(t)/G(t)/s(t)+G(t)$ queues*

Creemers S., De Reyck B., Leus R., (2013), *Project planning with alternative technologies in uncertain environments*, KU Leuven, 32 pages

Creemers S., Colen P., Lambrecht M., (2012), *Evaluation of appointment scheduling rules: a multi-performance measures approach*, KU Leuven, 33 pages

Creemers S., Beliën J., Lambrecht M., (2011), *The optimal allocation of server time slots over different classes of patients*, KU Leuven, 44 pages

Lambrecht M., Creemers S., Boute R., Leus R., (2010), *Extending the production dice game*, KU Leuven, 16 pages

Creemers S., Demeulemeester E., Van de Vonder S., (2010), *A new approach for quantitative risk analysis*, KU Leuven, 27 pages

Creemers S., Lambrecht M., (2008), *Healthcare queueing models*, KU Leuven, 49 pages

Creemers S., Lambrecht M., (2008), *Queueing models for appointment-driven systems*, KU Leuven, 31 pages

Creemers S., Leus R., Lambrecht M., (2008), *Scheduling Markovian PERT networks with maximum-NPV objective*, KU Leuven, 12 pages

Creemers S., Lambrecht M., (2007), *Modeling a healthcare system as a queueing network: The case of a Belgian hospital*, KU Leuven, 55 pages

Working papers

Creemers S., Pérez Armas L. F., (2022), *Quantum Computing in Operations Research*

Rostami S., Creemers S., Leus R., (2016), *New benchmark results for the stochastic resource- constrained project scheduling problem*, KU Leuven

Creemers S., Colen P., Lambrecht M., (2013), *Evaluation of appointment scheduling rules: a multi-performance measures approach*, IESEG Working Paper Series 2013-MAN-01, LEM Working Paper 2013-13, IESEG

Creemers S., Defraeye M., Van Nieuwenhuys I., (2013), *A Markov model for measuring service levels in nonstationary $G(t)/G(t)/s(t) + G(t)$ queues*, IESEG Working Paper Series 2013-MAN-02, LEM Working Paper 2013-14, IESEG

Creemers S., Demeulemeester E., Van de Vonder S., (2013), *A new approach for quantitative risk analysis*, IESEG Working Paper Series 2013-MAN-03, LEM Working Paper 2013-15, IESEG

Grants

2009   Risicomanagement in de bouw, Agentschap voor Innovatie door Wetenschap en Technologie (IWT)

GRANTS AND HONORS

Award

2016   Winner of the second best paper award, International Workshop on Project Management and Scheduling (PMS 2016), Spain

2011   Winner of the outstanding conference paper award., The IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Singapore

2008   Winner of the best paper award., The IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Singapore

PROFESSIONAL MEMBERSHIPS

INFORMS

EDITORIAL ACTIVITY

Associate Editor in an academic journal

INFORMS Journal on Applied Analytics

Chair of the editorial board of an academic journal

INFORMS Transactions on Education

Reviewer in an academic journal

Operations Research

Naval Research Logistics

OMEGA Journal

INFORMS Transactions on Education

Performance Evaluation

European Journal of Operational Research

Computers and Operations Research

OR Spectrum

European Journal of Industrial Engineering

International Journal of Project Management

Journal of the Operational Research Society

Journal of Scheduling

Annals of Operations Research

Applied Mathematical Modelling

Transportation Research Part E

PROFESSIONAL SERVICE

Chair in an academic conference

PMS Conference Toulouse

Committee/task force member

IEEE international conference on industrial engineering and engineering management (IEEE IEEM)

Involvement in a board of Directors

2014   PICS Belgium, Belgium

RESEARCH ACTIVITIES

Supervision of Ph.D. Thesis:

2019   Director, Project scheduling under uncertainty, IÉSEG School of Management

2019   Director, To be determined

2019   Director, New models and methods for sequencing and project scheduling., IÉSEG School of Management