



**Stefan CREEMERS**

**Ph.D. in Applied Economics**

**Full Professor, Operations Management**

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## **EDUCATION**

**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

## **EMPLOYMENT EXPERIENCE**

### **ACADEMIC:**

**2011 - Present** Associate 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 école
- Project management, International mba
- Project management, Msc in business analysis and consulting
- Project management, Post graduate program

### Papers in refereed journals

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#### Published

- 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., 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

- 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
- Rostami S., Creemers S., Leus R., (2018), 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., (2018), Sequential testing of n-out-of-n systems: Precedence theorems and exact methods, *European Journal of Operational Research*, forthcoming, pp. forthcoming
- Creemers S., Melchioris 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*

## **Papers in non-refereed journals**

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### **Published**

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

## **Communications in refereed conferences**

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### **International**

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 Nieuwenhuysse 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 Nieuwenhuysse 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 Nieuwenhuysse 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**

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### **International**

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**

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### **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

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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

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Creemers S., Defraeye M., Van Nieuwenhuysse 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

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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

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

## SCIENTIFIC PRIZES AND AWARDS

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### Award

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

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

## **PROFESSIONAL MEMBERSHIPS**

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INFORMS

## **EDITORIAL ACTIVITY**

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### **Associate Editor in an academic journal**

INFORMS Transactions on Education

### **Reviewer in an academic journal**

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**

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### **Committee/task force member**

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

## **INSTITUTIONAL SERVICE**

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### **Supervision of Ph.D. Thesis:**

**2016** Director, Project scheduling under uncertainty, IÉSEG School of Management