



Kristiaan KERSTENS

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EDUCATION

1999 HDR, Economy, Economics, University of Lille 3, France

1994 Ph.D. in Economics Sciences, KU Brussel, Belgium

RESEARCH INTERESTS

Efficiency measurement (benchmarking) of private and public sector organisations, Portfolio optimisation with higher

COURSES TAUGHT

- Applied optimisation and heuristics, Grande ecole (master cycle)
- Efficiency and benchmarking in banking, Grande ecole (master cycle)
- Financial markets and institutions 2, Grande ecole (master cycle)
- Multi-moment portfolios: an introduction, Grande ecole (master cycle)
- Productivity and benchmarking in banking, Grande ecole (master cycle)

INTELLECTUAL CONTRIBUTIONS

Papers in refereed journals

Published

Baležentis T., Kerstens K., Shen Z., (2024), Economic and Environmental Decomposition of Luenberger-Hicks-Moorsteen Total Factor Productivity Indicator: Empirical Analysis of Chinese Textile Firms with a Focus on Reporting Infeasibilities and Questioning Convexity, *IEEE Transactions on Engineering Management*, 71(2024), pp. 2772-2785

Chen X., Kerstens K., Tsionas M., (2024), Does Productivity Change at All in Swedish District Courts? Empirical Analysis Focusing on Horizontal Mergers, *Socio-Economic Planning Sciences*, 91(-), pp. 101787

Jin Q., Basso A., Funari S., Kerstens K., Van de Woestyne I., (2024), Evaluating Different Groups of Mutual Funds Using a Metafrontier Approach: Ethical vs. Non-Ethical Funds, *European Journal of Operational Research*, 312(3), pp. 1134-1145

Kerstens K., Sadeghi J., Van De Woestyne I., Walden J., (2024), Short-Run Johansen Frontier-Based Industry Models: Methodological Refinements and Empirical Illustration on Fisheries, *Journal of Productivity Analysis*, 61(1), pp. 47-62

- Kerstens K., Sadeghi J., (2024), Plant Capacity Notions: Review, New Definitions, and Existence Results at Firm and Industry Levels, *International Journal of Production Research*, 62(3), pp. 1017-1040
- Ren T., Kerstens K., Kumar S., (2024), Risk-Aversion versus Risk-Loving Preferences in Nonparametric Frontier-Based Fund Ratings: A Buy-and-Hold Backtesting Strategy, *European Journal of Operational Research*, 319(1), pp. 332-344
- Shen Z., Kerstens K., Valdmanis V., Wang S., (2024), Evaluation and Optimization of Hospital System in Chinese Provinces: Does Mortality Matter?, *RAIRO - Operations Research*, 58(1), pp. 971-987
- Ang F., Kerstens K., Sadeghi J., (2023), Energy Productivity and Greenhouse Gas Emission Intensity in Dutch Dairy Farms: A Hicks-Moorsteen By-Production Approach under NonConvexity and Convexity with Equivalence Results, *Journal of Agricultural Economics*, 74(2), pp. 492-509
- Chen X., Kerstens K., (2023), Evaluating Horizontal Mergers in Swedish District Courts Using Plant Capacity Concepts: With a Focus on Nonconvexity, *RAIRO - Operations Research*, 57(1), pp. 219-236
- Deng H., Bai G., Kerstens K., Shen Z., (2023), Comparing Green Productivity under Convex and Nonconvex Technologies: Which is a Robust Approach Consistent with Energy Structure?, *Managerial and Decision Economics*, 44(8), pp. 4377-4394
- Briec W., Dumas A., Kerstens K., Stenger A., (2022), Generalised Commensurability Properties of Efficiency Measures: Implications for Productivity Indicators, *European Journal of Operational Research*, 303(3), pp. 1481-1492
- Kerstens K., Mazza P., Ren T., Van de Woestyne I., (2022), Multi-Time and Multi-Moment Nonparametric Frontier-Based Fund Rating: Proposal and Buy-and-Hold Backtesting Strategy, *Omega*, 113(2022), pp. 102718
- Kerstens K., Sadeghi J., Toloo M., Van de Woestyne I., (2022), Procedures for Ranking Technical and Cost Efficient Units: With a Focus on Nonconvexity, *European Journal of Operational Research*, 300(1), pp. 269-281
- Kerstens K., Sadeghi J., Van de Woestyne I., Zhang L., (2022), Malmquist Productivity Indices and Plant Capacity Utilisation: New Proposals and Empirical Application, *Annals of Operations Research*, 315(1), pp. 221-250
- Kerstens K., Shen Z., (2021), Using COVID-19 Mortality to Select Among Hospital Plant Capacity Models: An Exploratory Empirical Application to Hubei Province, *Technological Forecasting and Social Change*, 166(2021), pp. 120535
- Kerstens K., Van de Woestyne I., (2021), Cost Functions are Nonconvex in the Outputs when the Technology is Nonconvex: Convexification is Not Harmless, *Annals of Operations Research*, 305(1-2), pp. 81-106
- Briec W., Cavaignac L., Kerstens K., (2020), Input Efficiency Measures: A Generalised, Encompassing Formulation, *Operations Research*, 68(6), pp. 1836-1849
- Daraio C., Kerstens K., Nepomuceno T., Sickles R., (2020), Empirical Surveys of Frontier Applications: A Meta-Review, *International Transactions in Operational Research*, 27(2), pp. 709-738
- Jin Q., Kerstens K., Van de Woestyne I., (2020), Metafrontier Productivity Indices: Questioning the Common Convexification Strategy, *European Journal of Operational Research*, 283(2), pp. 737-747
- Kerstens K., Sadeghi J., Van de Woestyne I., (2020), Plant Capacity Notions in a Non-parametric Framework: A Brief Review and New Graph or Non-Oriented Plant Capacities, *Annals of Operations Research*, 228(2), pp. 837-860
- Cesaroni G., Kerstens K., Van de Woestyne I., (2019), Short- and Long-Run Plant Capacity Notions: Definitions and Comparison, *European Journal of Operational Research*, 275(1), pp. 387-397
- Daraio C., Kerstens K., Nepomuceno T., Sickles R., (2019), Productivity and Efficiency Analysis Software: An Exploratory Bibliographical Survey of the Options, *Journal of Economic Surveys*, 33(1), pp. 85-100
- Kerstens K., O'Donnell C., Van de Woestyne I., (2019), Metatechnology Frontier and Convexity: A Restatement, *European Journal of Operational Research*, 275(2), pp. 780-792
- Kerstens K., Sadeghi J., Van de Woestyne I., (2019), Convex and Nonconvex Input-Oriented Technical and Economic Capacity Measures: An Empirical Comparison, *European Journal of Operational Research*, 276(2), pp. 699-709
- Kerstens K., Sadeghi J., Van de Woestyne I., (2019), Plant Capacity and Attainability: Exploration and Remedies, *Operations Research*, 67(4), pp. 1135-1149
- Kerstens K., Van de Woestyne I., (2019), The Remarkable Incidence of Congestion in Production: A Review, Empirical Illustration, and Research Agenda, *Data Envelopment Analysis Journal*, 4(2), pp. 109-147
- Briec W., Kerstens K., Prior D., Van de Woestyne I., (2018), Testing General and Special Färe-Primont Indices: A Proposal for Public and Private Sector Synthetic Indices of European Regional Expenditures and Tourism, *European Journal of Operational Research*, 271(2), pp. 756-768

- Briec W., Kerstens K., Van de Woestyne I., (2018), Hypercongestion in Production Correspondences: An Empirical Exploration, *Applied Economics*, 50(27), pp. 2938-2956
- Kerstens K., Van de Woestyne I., (2018), Enumeration Algorithms for FDH Directional Distance Functions under Different Returns to Scale Assumptions, *Annals of Operations Research*, 271(2), pp. 1067-1078
- Kerstens K., Van de Woestyne I., Shen Z., (2018), Comparing Luenberger and Luenberger-Hicks-Moorsteen Productivity Indicators: How Well is Total Factor Productivity Approximated?, *International Journal of Production Economics*, 195(2018), pp. 311-318
- Cesaroni G., Kerstens K., Van de Woestyne I., (2017), Global and Local Scale Characteristics in Convex and Nonconvex Nonparametric Technologies: A First Empirical Exploration, *European Journal of Operational Research*, 259(2), pp. 576-586
- Cesaroni G., Kerstens K., Van de Woestyne I., (2017), A New Input-Oriented Plant Capacity Notion: Definition and Empirical Comparison, *Pacific Economic Review*, 22(4), pp. 720-739
- Cesaroni G., Kerstens K., Van de Woestyne I., (2017), Estimating Scale Economies in Non-Convex Production Models, *Journal of the Operational Research Society*, 68(11), pp. 1442-1451
- Briec W., Kerstens K., Van de Woestyne I., (2016), Congestion in Production Correspondences, *Journal of Economics*, 119(1), pp. 65-90
- Brandouy O., Kerstens K., Van de Woestyne I., (2015), Frontier-based vs. Traditional Mutual Fund Ratings: A First Backtesting Analysis, *European Journal of Operational Research*, 242(1), pp. 332-342
- Briec W., Kerstens K., Van de Woestyne I., (2014), Nonparametric Cost and Revenue Functions under Constant Economies of Scale: An Enumeration Approach for the Single Output or Input Case, *International Transactions in Operational Research*, 21(4), pp. 619-625
- Kerstens K., Van de Woestyne I., (2014), A Note on a Variant of Radial Measure Capable of Dealing with Negative Inputs and Outputs in DEA, *European Journal of Operational Research*, 234(1), pp. 341-342
- Kerstens K., Van de Woestyne I., (2014), Comparing Malmquist and Hicks-Moorsteen Productivity Indices: Exploring the Impact of Unbalanced vs. Balanced Panel Data, *European Journal of Operational Research*, 233(3), pp. 749-758
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- Epure M., Kerstens K., Prior D., (2011), Technology-Based Total Factor Productivity and Benchmarking: New Proposals and an Application, *Omega*, *International Journal of Management Science*, 39(6), pp. 608-619
- Kerstens K., Mounir A., Van de Woestyne I., (2011), Geometric Representation of the Mean-Variance-Skewness Portfolio Frontier Based upon the Shortage Function, *European Journal of Operational Research*, 210(1), pp. 81-94

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- Kerstens K., Van de Woestyne I., (2011), Negative Data in DEA: A Simple Proportional Distance Function Approach, *Journal of the Operational Research Society*, 62(7), pp. 1413-1419
- Brandouy O., Briec W., Kerstens K., Van de Woestyne I., (2010), Portfolio Performance Gauging in Discrete Time Using a Luenberger Productivity Indicator, *Journal of Banking & Finance*, 34(8), pp. 1899-1910
- Brandouy O., Kerstens K., Van de Woestyne I., (2010), Exploring Bi-Criteria versus Multi-Dimensional Lower Partial Moment Portfolio Models, *International Journal of Technology, Modeling & Management*, 1(1), pp. 25-39
- Briec W., Kerstens K., (2010), Portfolio Selection in Multidimensional General and Partial Moment Space, *Journal of Economic Dynamics & Control*, 34(4), pp. 636-656
- Briec W., Kerstens K., Prior D., Van de Woestyne I., (2010), Tangency Capacity Notions Based upon the Profit and Cost Functions: A Non-Parametric Approach and a Comparison, *Economic Modelling*, 27(5), pp. 56-1166
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- Chumpitaz R., Kerstens K., Paparoidamis N., Staat M., (2010), Hedonic Price Function Estimation in Economics and Marketing: Revisiting Lancaster's Issue of "Noncombinable" Goods, *Annals of Operations Research*, 173(1), pp. 145-161
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- Briec W., Kerstens K., (2009), Multi-horizon Markowitz portfolio performance appraisals: A general approach, *Omega, International Journal of Management Science*, 37(1), pp. 50-62
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- De Borger B., Kerstens K., Staat M., (2008), Transit Costs and Cost Efficiency: Bootstrapping Non-Parametric Frontiers, *Research in Transportation Economics*, 23(1), pp. 53-64
- Grifell-Tatjé E., Kerstens K., (2008), Incentive Regulation and the Role of Convexity in Benchmarking Electricity Distribution: Economists versus Engineers, *Annals of Public and Cooperative Economics (Annales de l'Économie publique sociale et coopérative)*, 79(2), pp. 227-248
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- Briec W., Kerstens K., Jokung O., (2007), Mean-Variance-Skewness Portfolio Performance Gauging: A General Shortage Function and Dual Approach, *Management Science*, 53(1), pp. 135-149
- Blancard S., Boussemart J., Briec W., Kerstens K., (2006), Short- and Long-Run Credit Constraints in French Agriculture: A Directional Distance Function Framework Using Expenditure-Constrained Profit Functions, *American Journal of Agricultural Economics*, 88(2), pp. 351-364
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- Briec W., Kerstens K., (2006), Input, Output and Graph Technical Efficiency Measures on Non-Convex FDH Models with Various Scaling Laws: An Integrated Approach Based Upon Implicit Enumeration Algorithms, *TOP: An Official Journal of the Spanish Society of Statistics and Operations Research*, 14(1), pp. 135-166
- Kerstens K., Vestergaard N., Squires D., (2006), A Short-Run Johansen Industry Model for Common-Pool Resources: Planning a Fisheries' Industrial Capacity to Curb Overfishing, *European Review of Agricultural Economics*, *European Review of Agricultural Economics*, 33(3), pp. 361-389

- Kerstens K., Squires D., Vestergaard N., (2005), Methodological Reflections on the Short-Run Johansen Industry Model in Relation to Capacity Management, *Marine Resource Economics*, 20(4), pp. 425-443
- Briec W., Kerstens K., (2004), A Luenberger-Hicks-Moorsteen Productivity Indicator : Its Relation to the Hicks-Moorsteen Productivity Index and the Luenberger Productivity Indicator, *Economic Theory*, 23(4), pp. 925-939
- Briec W., Kerstens K., Lesourd J.-B., (2004), Single Period Markowitz Portfolio Selection, Performance Gauging and Duality: A Variation on Luenberger's Shortage Function, *Journal of Optimization Theory and Applications*, 120(1), pp. 1-27
- Briec W., Kerstens K., Vanden Eeckaut P., (2004), Non-convex Technologies and Cost Functions: Definitions, Duality and Nonparametric Tests of Convexity, *Journal of Economics*, 81(2), pp. 155-192
- Blancard S., Boussemart J., Kerstens K., (2003), L'influence des contraintes de financement de court terme sur le profit des exploitations agricoles: Une approche non paramétrique, *Économie et Prévision (articles académiques)*, 159(3), pp. 71-81
- Boussemart J., Briec W., Kerstens K., Poutineau J.-C., (2003), Luenberger and Malmquist Productivity Indices: Theoretical Comparisons and Empirical Illustration, *Bulletin of Economic Research*, 55(4), pp. 391-405
- De Borger B., Kerstens K., Costa Á., (2002), Public Transit Performance: What Does One Learn From Frontier Studies?, *Transport Reviews*, 22(1), pp. 1-38
- Briec W., Kerstens K., Leleu H., Vanden Eeckaut P., (2000), Returns to Scale on Nonparametric Deterministic Technologies: Simplifying Goodness-of-Fit Methods Using Operations on Technologies, *Journal of Productivity Analysis*, 14(3), pp. 267-274
- De Borger B., Kerstens K., (2000), The Malmquist Productivity Index and Plant Capacity Utilization, *Scandinavian Journal of Economics*, 102(2), pp. 303-310
- Dervaux B., Kerstens K., Leleu H., (1999), Rationalisation de l'offre de soins en chirurgie: Réduction des surcapacités et réallocation sectorielle, *Revue Economique*, 50(3), pp. 645-655
- Kerstens K., (1999), Decomposing Technical Efficiency and Effectiveness of French Urban Transport, *Annales d'Économie et Statistiques*, (54), pp. 129-155
- Kerstens K., Vanden Eeckaut P., (1999), A New Criterion for Technical Efficiency Measures: Non-Monotonicity Across Dimensions Axioms, *Managerial and Decision Economics*, 20(1), pp. 45-59
- Kerstens K., Vanden Eeckaut P., (1999), Estimating Returns to Scale Using Nonparametric Deterministic Technologies: A New Method Based on Goodness-of-Fit, *European Journal of Operational Research*, 113(1), pp. 206-214
- De Borger B., Ferrier G., Kerstens K., (1998), The Choice of a Technical Efficiency Measure on the Free Disposal Hull Reference Technology: A Comparison using US Banking Data, *European Journal of Operational Research*, 105(3), pp. 427-446
- Dervaux B., Kerstens K., Vanden Eeckaut P., (1998), Radial and Nonradial Static Efficiency Decompositions: A Focus On Congestion Measurement, *Transportation Research: Part B: Methodological*, 32(5), pp. 299-312
- De Borger B., Kerstens K., (1996), Cost Efficiency of Belgian Local Governments: A Comparative Analysis of FDH, DEA, and Econometric Approaches, *Regional Science and Urban Economics*, 26(2), pp. 145-170
- De Borger B., Kerstens K., (1996), Radial and Nonradial Measures of Technical Efficiency: An Empirical Illustration for Belgian Local Governments using an FDH Reference Technology, *Journal of Productivity Analysis*, 7(1), pp. 41-62
- Kerstens K., (1996), Technical Efficiency Measurement and Explanation of French Urban Transit Companies, *Transportation Research: Part A: Policy and Practice*, 30(6), pp. 431-452
- De Borger B., Kerstens K., (1995), Produktiviteit en Efficiëntie in de Belgische Publieke Sector: Situering en Resultaten van Recent Empirisch Onderzoek, *Tijdschrift voor Economie en Management*, 40(2), pp. 101-131
- Kerstens K., Vanden Eeckaut P., (1995), The Economic Cost of Subsidy-Induced Technical Inefficiency: A Methodological Postscript, *International Journal of Transport Economics*, 22(2), pp. 225-229
- De Borger B., Kerstens K., Moesen W., Vanneste J., (1994), A Non-Parametric Free Disposal Hull (FDH) Approach to Technical Efficiency: An Illustration of Radial and Graph Efficiency Measures and Some Sensitivity Results, *Swiss Journal of Economics and Statistics*, 130(4), pp. 647-667
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Kerstens K., De Borger B., Moesen W., Vanneste J., (1994), Explaining Differences in Productive Efficiency: An Application to Belgian Municipalities, *Public Choice*, 80(3-4), pp. 339-358

De Borger B., Kerstens K., (1993), Technische Efficiëntie in de Gemeentelijke Voorzieningen, *Economisch en Sociaal Tijdschrift*, 47(4), pp. 665-690

Kerstens K., Meyermans E., (1993), The Draft versus an All-Volunteer Force: Issues of Efficiency and Equity in the Belgian Draft, *Defence Economics*, 4(3), pp. 271-284

De Borger B., Kerstens K., Moesen W., Vanneste J., (1990), Efficiency and Equity in Block Grant Design: Simulating some Alternatives for Flemish Municipalities, *Brussels Economic Review / Cahiers Économiques de Bruxelles*, 32(128), pp. 399-421

Forthcoming

Jin Q., Kerstens K., Van de Woestyne I., (2024), Convex and Nonconvex Nonparametric Frontier-based Classification Methods for Anomaly Detection, *OR Spectrum*, forthcoming(forthcoming), pp. forthcoming

Shen Z., Kerstens K., Baležentis T., (2023), An Environmental Luenberger-Hicks-Moorsteen Total Factor Productivity Indicator: Empirical Analysis Considering Undesirable Outputs either as Inputs or Outputs, and Attention for Infeasibilities, *Annals of Operations Research*, forthcoming(forthcoming), pp. forthcoming

Communications in refereed conferences

International

Badunenko O., Kerstens K., Sadeghi J., (2024), *Revenue Functions are Nonconcave in the Inputs when the Technology is Nonconvex: The Unbearable Lightness of Convexification* EWEPA XVIII - The 18th European Workshop on Efficiency and Productivity Analysis, Faro, Portugal

Chen X., Kerstens K., Kerstens P. J., (2023), *Two Nonconvex Variable Returns to Scale Technologies and Cost Functions: An Exploration on US Banking and Testing Convexity* 11th North American Productivity Workshop, Coral Gables, USA

Ang F., Kerstens K., Sadeghi J., (2022), *Energy Productivity and Greenhouse Gas Emission Intensity in Dutch Dairy Farms: A Hicks-Moorsteen By-production Approach Under Convexity and Nonconvexity and Equivalence Results* XVII European Workshop on Efficiency and Productivity Analysis (EWEPA), Porto, Portugal

Kerstens K., O'Donnell C., Van de Woestyne I., (2021), *Estimating Nonconvex Cost Metafrontiers Correctly: The Price of a Convexification Strategy* 2021 INFORMS Annual Meeting, Anaheim, USA

Kerstens K., Sadeghi J., Van de Woestyne I., Walden J., (2020), *Short-Run Johansen Frontier-Based Industry Models: Methodological Refinements and Empirical Illustration on Fisheries* 11th North American Productivity Workshop, Coral Gables, USA

Kerstens K., Cesaroni G., Van de Woestyne I., (2017), *Short- and Long-run Plant Capacity Notions: Definitions and Comparison* 15 European Workshop on Efficiency and Productivity Analysis, London, United Kingdom

Kerstens K., Cesaroni G., Van de Woestyne I., (2017), *Short- and Long-run Plant Capacity Notions: Definitions and Comparison* 15th International Conference on Data Envelopment Analysis, Prague, Czech Republic

Kerstens K., Cesaroni G., Van de Woestyne I., (2016), *A New Input-Oriented Plant Capacity Notion: Definition and Empirical Comparison* North American Productivity Workshop IX, Quebec, Canada

Kerstens K., Van de Woestyne I., (2016), *The Remarkable Incidence of Congestion in Production: A Review and Empirical Illustration* Asia-Pacific Productivity Conference 2016, Tianjin, China

Kerstens K., O'Donnell C., Van de Woestyne I., (2015), *Frontier Metatechnologies and Convexity: A Restatement* 13th International Conference on Data Envelopment Analysis, Braunschweig, Germany

Kerstens K., O'Donnell C., Van de Woestyne I., (2015), *Frontier Metatechnologies and Convexity: A Restatement* Fourteenth European Workshop on Efficiency and Productivity Measurement, Helsinki, Finland

Kerstens K., O'Donnell C., Van de Woestyne I., (2015), *Frontier Metatechnologies and Convexity: A Restatement* OR2015, Wien, Austria

Cesaroni G., Kerstens K., Van De Woestyne I., (2014), *Local and Global Scale Characteristics in Non-Convex Nonparametric Technologies* 10th Asia-Pacific Productivity Conference, Brisbane, Australia

Cesaroni G., Kerstens K., Van De Woestyne I., (2014), *Local and Global Scale Characteristics in Non-Convex Nonparametric Technologies* 2014 Taiwan Productivity and Efficiency Conference, Taipei, Taiwan

Cesaroni G., Kerstens K., Van De Woestyne I., (2014), *Local and Global Scale Characteristics in Non-Convex Nonparametric Technologies* North American Productivity Workshop VIII, Ottawa , Canada

Kerstens K., Van de Woestyne I., (2014), *Convex and Nonconvex Cost Function Estimates Are Different: A Non-Parametric Approach With an Illustration on Scale Economies and Returns to Scale* 2014 Taiwan Productivity and Efficiency Conference, Taipei, Taiwan

Briec W., Kerstens K., Van De Woestyne I., (2013), *Risk-Loving and Risk-Averse Preferences in Portfolio Modelling: A Common Characterization using a Shortage Function* Financial Modelling Post-2008: Where Next? - ESRC Seminar 2 - Distributional Assumptions and Efficiency, St Andrews , United Kingdom

Briec W., Kerstens K., Van De Woestyne I., (2013), *Risk-Loving and Risk-Averse Preferences in Portfolio Modelling: A Common Characterization using the Shortage Function* Thirteenth European Workshop on Efficiency and Productivity Measurement, Helsinki, Finland

Kerstens K., Hachem B., Van de Woestyne I., (2012), *Scale Economies and Returns to Scale in Non-Parametric Cost and Production Models: Exploring the Impact of Convexity* 3rd Helsinki Workshop on Efficiency and Productivity Analysis (HeWEPA III), Helsinki, Finland

Kerstens K., Hachem B., Van de Woestyne I., (2012), *Scale Economies and Returns to Scale in Non-Parametric Models: Exploring the Impact of Convexity* NAPW VII - North American Productivity Workshop, Houston, USA

Kerstens K., Van de Woestyne I., (2012), *Primal Productivity Indices: Exploring the Impact of Unbalanced Panel Data* National Marine Fisheries Service Productivity Workshop, Santa Cruz, USA

Briec W., Kerstens K., Van de Woestyne I., (2011), *Polynomial Goal Programming and Shortage Function Approaches to Reconstruct MVS Portfolio Frontiers: A Preliminary Comparison* 12th European Workshop on Efficiency and Productivity Analysis, Verona, Italy

Kerstens K., (2010), *Non-Parametric Frontier Estimates of Mutual Fund Performance Using Cand L-Moments: Some Specification Tests* North American Productivity Workshop VI, Houston, USA

Kerstens K., Mounir A., (2009), *Non-Parametric Frontier Estimates of Mutual Funds: Some Specification Issues* Eleventh European Workshop on Efficiency and Productivity Measurement, Pisa, Italy

Kerstens K., (2008), *Performance Gauging in Discrete Time Using a Luenberger Portfolio Productivity Indicator* AFFI 2008, Lille, France

Blancard S., Boussemart J.-P., Briec W., Kerstens K., (2007), *Technology Adoption in French Agriculture and the Role of Financial Constraints* Tenth European Workshop on Efficiency and Productivity, Lille, France

Kerstens K., (2006), *Hedonic Price Function Estimation in Economics and Marketing: Revisiting Lancaster's Issue of 'Noncombinable' Goods* North American Productivity Workshop IV, New York, USA

Kerstens K., (2006), *Multi-horizon Markowitz Portfolio Performance Appraisals: A General Approach* 23rd International Symposium on Banking and Monetary Economics, Lille, France

Kerstens K., (2006), *Multi-horizon Markowitz Portfolio Performance Appraisals: A General Approach* Forecasting Financial Markets (FFM) Conference, Aix en Provence, France

Kerstens K., Staat M., Chumpitaz R., Papanoidamis N., (2006), *Hedonic Price Function Estimation in Economics and Marketing: 'Revisiting Lancaster's Issue of 'Non combinable Goods* North American Productivity Workshop IV, New York, USA

Papanoidamis N., Kerstens K., Chumpitaz R., (2006), *Measuring Market Efficiency Revisited* 35th European Marketing Academy (EMAC) Conference, Athens, Greece

Other conference and seminar presentations

International

Badunenko O., Kerstens K., Sadeghi J., (2024), *Revenue Functions Are Nonconcave in the Inputs When the Technology is Nonconvex: The Unbearable Lightness of Convexification* EURO 2024, Copenhagen, Denmark

Badunenko O., Kerstens K., Sadeghi J., (2023), *Revenue Functions are Non-Concave in the Inputs when the Technology is Non-Convex: The Unbearable Lightness of Convexification* International Conference on Data Envelopment Analysis DEA45, Guildford, United Kingdom

Dakpo H., Ang F., Kerstens K., (2023), *Cost Efficiency under Convex and Non-Convex Technologies: Does Output Aggregation Matter?* International Conference on Data Envelopment Analysis DEA45, Guildford, United Kingdom

Kerstens K., O'Donnell C., Van De Woestyne I., (2023), *When the Production Metafrontier is Nonconvex, then Cost Metafrontiers are Nonconvex in the Outputs: The Price of a Convexification Strategy* 15th International Conference on Data Envelopment Analysis and Decision Science, Tehran, Iran

Kerstens K., O'Donnell C., Van de Woestyne I., (2023), *When the Production Metafrontier is Nonconvex, then Cost Metafrontiers are Nonconvex in the Outputs: The Price of a Convexification Strategy* International Conference on Empirical Economics, Altoona, USA

Ang F., Kerstens K., Sadeghi J., (2022), *Energy Productivity and Greenhouse Gas Emission Intensity in Dutch Dairy Farms: A Hicks-Moorsteen By-production Approach Under Convexity and Nonconvexity and Equivalence Results* 15th International Conference of Iranian Operations Research Society, Tabriz, Iran

Ang F., Kerstens K., Sadeghi J., (2022), *Energy Productivity and Greenhouse Gas Emission Intensity in Dutch Dairy Farms: A Hicks-Moorsteen By-production Approach Under Convexity and Nonconvexity with Equivalence Results* Asia Pacific Productivity Conference 2022 - Virtual Meeting, Taipei, Taiwan

Kerstens K., Mazza P., Ren T., Van de Woestyne I., (2022), *Multi-Time and Multi-Moment Nonparametric Frontier-Based Fund Rating: Proposal and Buy-and-Hold Backtesting Strategy* 1st Conference of the Modeling Uncertainty in Social, Economic, and Environmental Sciences (MUSEES) Association, Lyon, France

Kerstens K., Chen X., Zhu Q., (2021), *Exploring Horizontal Mergers in Swedish District Courts Using Convex and Nonconvex Technologies: Usefulness of a Conservative Approach* 13th International Conference on Decision and Data Envelopment Analysis, Tehran, Iran

Jin Q., Kerstens K., Van de Woestyne I., (2019), *Metafrontier Malmquist Productivity Index and The Price of a Convexification Strategy* workshop "Firm Heterogeneity in Technical Change", Gent, Belgium

Kerstens K., O'Donnell C., Van de Woestyne I., (2019), *The Cost Metafrontier is Nonconvex in the Outputs Since the Metafrontier is Nonconvex: The Price of a Convexification Strategy* Data Envelopment Analysis International Conference, Canterbury, United Kingdom

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Kerstens K., O'Donnell C., Van de Woestyne I., (2019), *The Cost Metafrontier is Nonconvex in the Outputs Since the Metafrontier is Nonconvex: The Price of a Convexification Strategy* Sixteenth European Workshop on Efficiency and Productivity Measurement, London, United Kingdom

Kerstens K., Sadeghi J., Van De Woestyne I., (2018), *Plant Capacity and Attainability: Exploration and Remedies* 12th Asia-Pacific Productivity Conference, Seoul, Korea

Kerstens K., Sadeghi J., Van De Woestyne I., (2018), *Plant Capacity and Attainability: Exploration and Remedies* DEA40: International Conference on Data Envelopment Analysis, London, United Kingdom

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GRANTS AND HONORS

Award

- 2013 Prime d'excellence scientifique (2010-2013), CNRS, France
- 2012 Prime d'excellence scientifique (2010-2013), CNRS, France
- 2011 Prime d'excellence scientifique (2010-2013), CNRS, France
- 2010 Prime d'excellence scientifique (2010-2013), CNRS, France

Honor

- 2012 Outstanding peer reviewer, Elsevier, Netherlands
- 1999 "Citation of Excellence" (Highest Quality Rating), ANBAR Electronic Intelligence, Unknown

EDITORIAL ACTIVITY

Associate Editor in an academic journal

- 2016** Data Envelopment Analysis Journal
- 2011** International Journal of Portfolio Analysis & Management
- 2010** Journal of Productivity Analysis
- 2000 - 2006** TOP

RESEARCH ACTIVITIES

Supervision of HDR:

- 2013** Director, Public Economics and Industrial Organisation – Empirical and Theoretical Considerations

Supervision of Ph.D. Thesis:

- 2021** Director, Multi-Time and Multi-Moment Rating and Portfolio Models with Nonparametric Frontier Methods: Overview, New Proposals and Empirical Studies
- 2020** Director, Ordinal Classification with Non-parametric Frontier Methods: Overview and New Proposals, University of Lille
- 2013** Director, The Relation Between Technical Efficiency and Stock Returns: Evidence from the Us Airline Industry (1990-2012)
- 2011** Director, Frontier Estimation of Efficiency and Productivity: Some New Perspectives for Firms and Industry
- 2010** Co-director, Novel Perspectives on Technology-Based Efficiency and Productivity Analyses
- 2010** Co-director, On the Use of the Shortage Function in Portfolio Theory
- 2007** Co-director, Multiple Criteria Decision Making in Fisheries Management: Fleet Structure Adjustment, Conservation Aspects and Stake Holder Attitudes