

<b>School/Department:</b>	Rotterdam School of Management, Department of Technology and Operations Management
<b>Project Title:</b>	Risk Management in Global Supply Chains
<b>Abstract:</b>	<p>Globalization has increased the vulnerability of supply chains to risks. Recent political developments such as trade conflicts, natural disasters and pandemic have brought the importance of global supply chain risk management to the attention of practitioners as well as academicians. Trade agreements have long been a driving factor for the emergence and organization of global supply chains. However, the increased uncertainty and instability of those agreements poses a huge risk to supply chains. This entails rethinking and restructuring of the supply chains to be able to respond to such changes robustly. Thus, one direction of this project will be to include the uncertainty of trade agreements in the design of global supply chains network structure. We aim to understand how such vulnerabilities have influenced the performance and strategic decisions of supply chains. We also aim to identify what supply chain strategies can address these risks more efficiently and effectively. Another direction of this project will be focusing on how these global risks increased the susceptibility of supply chains to illicit activities such as counterfeiting. Counterfeit products account for 5-7% of global trade making it worth \$600bn/year with a significant economic and societal impact. There are practical evidence suggesting that incidents such as trade-war or recent Covid 19 pandemics led to an increase of counterfeiting activities. Using a dataset of counterfeit seizures, we will empirically investigate whether such trends can be verified. Additionally, we investigate the effectiveness of anti-counterfeiting strategies in hindering the illegal activities of counterfeiters.</p>
<b>Requirements of candidate:</b>	<p>Background: MSc degree in industrial engineering, operations research, business analytics and supply chain management.</p> <p>Master's degree: Yes</p> <p>EUR requirement: IELTS: 7.5 (min. 6.0 for all subs) or TOEFL: 100 (internet) or 600 (paper); GMAT-test or GRE-test: 85%</p>

<p><b>Supervisor information:</b></p>	<p>Promotor: Prof. dr. Rob Zuidwijk          Email: <a href="mailto:RZuidwijk@rsm.nl">RZuidwijk@rsm.nl</a>          Personal website: <a href="https://www.rsm.nl/people/rob-zuidwijk/">https://www.rsm.nl/people/rob-zuidwijk/</a></p> <p>Co-Promotor: Dr. Morteza Pourakbar          Email: <a href="mailto:MPourakbar@rsm.nl">MPourakbar@rsm.nl</a>          Personal website: <a href="https://www.rsm.nl/people/morteza-pourakbar/">https://www.rsm.nl/people/morteza-pourakbar/</a></p> <p>Recent publications by Rob Zuidwijk          A.M. Arslan, N.A.H. Agatz, L.G. Kroon &amp; R.A. Zuidwijk (2019). Crowdsourced Delivery -- A Dynamic Pickup and Delivery Problem with Ad-Hoc Drivers. <i>Transportation Science</i>, 53 (1), 222-235. doi: 10.1287/trsc.2017.0803</p> <p>□ Y. Fan, B. Behdani, J.M. Bloemhof-Ruwaard &amp; R.A. Zuidwijk (2019). Flow consolidation in hinterland container transport: an analysis for perishable and dry cargo. <i>Transportation Research. Part E, The Logistics and Transportation Review</i>, 130, 128-160. doi: 10.1016/j.tre.2019.08.011 [go to publisher's site]</p> <p>□ H. Saeedi, B. Behdani, B. Wiegman &amp; R.A. Zuidwijk (2019). Assessing the Technical Efficiency of Intermodal Freight Transport Chains Using a Modified Network DEA Approach. <i>Transportation Research. Part E, The Logistics and Transportation Review</i>, 126, 66-86. doi: 10.1016/j.tre.2019.04.003 [go to publisher's site]</p> <p>□ P. Ypsilantis &amp; R.A. Zuidwijk (2019). Collaborative Fleet Deployment and Routing for Sustainable Transport. <i>Sustainability</i>, 11 (20):5666. doi: 10.3390/su11205666 [go to publisher's site]</p> <p>□ A. Kishore Bhoopalam, N.A.H. Agatz &amp; R.A. Zuidwijk (2018). Planning of truck platoons: A literature review and directions for future research. <i>Transportation Research. Part B, Methodological</i>, 107 (January), 212-228. doi: 10.1016/j.trb.2017.10.016</p> <p>□ M. Pourakbar &amp; R.A. Zuidwijk (2018). The Role of Customs in Securing Containerized Global Supply Chains. <i>European Journal of Operational Research</i>, 271 (1), 331-340. doi: 10.1016/j.ejor.2018.05.012</p> <p>□ T. Hjortnaes, B. Wiegman, R.R. Negenborn, R.A. Zuidwijk &amp; R.</p>
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	<p><i>Klijnhout (2017). Minimizing cost of empty container repositioning in port hinterlands, while taking repair operations into account. Journal of Transport Geography, 58 (1), 209-219. doi: 10.1016/j.jtrangeo.2016.12.015</i></p> <p>□ <i>H. Saeedi, B. Wiegman, B. Behdani &amp; R.A. Zuidwijk (2017). Analyzing competition in intermodal freight transport networks: The market implication of business consolidation strategies. Research in Transportation Business and Management, 23(June), 12-20. doi: 10.1016/j.rtbm.2017.02.009</i></p> <p>□ <i>H. Saeedi, B. Wiegman, B. Behdani &amp; R.A. Zuidwijk (2017). European intermodal freight transport network: Market structure analysis. Journal of Transport Geography, 60 (4), 141-152. doi: 10.1016/j.jtrangeo.2017.03.002</i></p> <p>□ <i>B. Behdani, Y. Fan, B. Wiegman &amp; R.A. Zuidwijk (2016). Multimodal schedule design for synchromodal freight transport systems. European Journal of Transport and Infrastructure Research, 16 (3), 424-444.</i></p> <p>□ <i>R.A. Zuidwijk &amp; A.W. Veenstra (2015). The Value of Information in Container Transport. Transportation Science, 49 (3), 675-685. doi: 10.1287/trsc.2014.0518</i></p> <p>□ <i>L.G. Kroon, L.W.P. Peeters, J.C. Wagenaar &amp; R.A. Zuidwijk (2014). Flexible Connections in PESP models for Cyclic Passenger Railway Timetabling. Transportation Science, 48(1), 136-154. doi: 10.1287/trsc.1120.0453</i></p> <p>□ <i>R.A. Zuidwijk, F. Caro, T. Tan &amp; C.J. Corbett (2013). Double-Counting in Supply Chain Carbon Footprinting. Manufacturing and Service Operations Management, 15 (4), 545-558. doi: 10.1287/msom.2013.0443</i></p> <p><i>Recent Publications by Morteza Pourakbar</i></p> <p><i>J.B.G. Frenk, S. Javadi, M. Pourakbar &amp; S.O. Sezer (2019). An exact static solution approach for the service parts end of life inventory problem. European Journal of Operational Research, 272 (2), 496-504. doi: 10.1016/j.ejor.2018.06.041</i></p> <p>□ <i>M. Pourakbar &amp; R.A. Zuidwijk (2018). The Role of Customs in Securing Containerized Global Supply Chains. European Journal of Operational Research, 271 (1), 331-340. doi: 10.1016/j.ejor.2018.05.012</i></p>
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	<p>□ P. Letizia, M. Pourakbar &amp; T. Harrison (2018). <i>The Impact of Consumer Returns on the Multichannel Sales Strategies of Manufacturers</i>. <i>Production and Operations Management</i>, 27 (2), 323-349. doi: 10.1111/poms.12799</p> <p>□ S. Rezapour, R. Zanjirani Farahani &amp; M. Pourakbar (2017). <i>Resilient supply chain network design under competition: A case study</i>. <i>European Journal of Operational Research</i>, 259 (3), 1017-1035. doi: 10.1016/j.ejor.2016.11.041</p> <p>□ M. Pourakbar, E.A. van der Laan &amp; R. Dekker (2014). <i>End-of-Life Inventory Problem with Phase-out Returns</i>. <i>Production and Operations Management</i>, 23 (9), 1561-1576. doi: 10.1111/poms.12176</p> <p>□ M. Pourakbar, J.B.G. Frenk &amp; R. Dekker (2012). <i>End-of-life inventory decisions for consumer electronics service parts</i>. <i>Production and Operations Management</i>, 21 (5), 889-906. doi: 10.1111/j.1937-5956.2012.01340.x</p> <p>□ M. Pourakbar &amp; R. Dekker (2012). <i>Customer Differentiated End-of-Life Inventory Problem</i>. <i>European Journal of Operational Research</i>, 222 (1), 44-53. doi: 10.1016/j.ejor.2012.03.034</p>
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