

## CV Roar Ådland

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### Employment

- 2012 - Bergen Shipowners' Association & Neptun Foundation Chair Professor of Shipping Economics, Department of Business and Management Science, Norwegian School of Economics (NHH)
- 2018/5 - 2019/7 Visiting scholar, Center for Transportation and Logistics, Massachusetts Institute of Technology (MIT), Cambridge, MA, United States
- 2006 – 2011 Hedge fund portfolio manager and trader of freight derivatives. Clarkson Fund Management Ltd., London, UK.
- 2005/3 - 2005/12 Postdoc in Shipping Economics, Department of Economics, Norwegian School of Economics (NHH)
- 2003/1 – 2005/2 Shipping analyst & consultant, Clarkson Research Studies, London, UK
- 2001/4 – 2002/8 Research Fellow, Shipping Economics, Hong Kong Polytechnic University, Department of Shipping & Transport Logistics

### Education

- 2/2003 Ph.D. in Ocean Systems Management, MIT, United States.
- 6/2000 MSc. in Ocean Systems Management, MIT, United States
- 9/1998 MPhil in Business Economics, Norwegian School of Economics (NHH)
- 12/1995 MSc in Marine Technology, NTNU, Trondheim, Norway

### Professional qualifications

- 2021 - Fellow of the Institute of Chartered Shipbrokers (chartered shipbroker)
- 2002 - Member of the Institute of Chartered Shipbrokers
- 2007 Registered by the UK Financial Conduct Authority as an Approved Person (CF30, customer-facing investment advisory)

### Other administrative and professional activity

- 2021 Member of Maritim21 government appointed group for Norwegian maritime R&D strategy
- 2015 - 2019 Board member, MAROFF programme, Research Council of Norway
- 2014 - Member of Editorial panel, Maritime Policy & Management
- 2014 - Associate Editor, Multinational Finance Journal
- 2016 - Member of editorial board, Maritime Business Review

Referee for Transportation Science, Transportation Research Part A, Transportation Research Part B, Transportation Research Part C, Transportation Research Part D, Transportation Research Part E, Journal of Cleaner Production, Ocean Engineering, Maritime Policy and Management, Journal of Energy Markets, European Financial Management, Multinational Finance Journal, International Journal of Shipping and Transport Logistics, Journal of Shipping and Trade, Maritime Economics & Logistics, Energy Economics, Energy.

### **Teaching and supervision**

- 2013 - ENE430 Commodity Trading & Transport, Master level, NHH.  
2013 - ENE431 Shipping Economics and Analytics, Master level, NHH.  
2012 INB426 Shipping Economics, Master level, NHH
- 2002 - Various guest lectures at the M.Sc. level at: University of Antwerp, Norwegian School of Economics, Copenhagen Business School, Cass Business School, Dalian Maritime University, University of Gdansk, Kuhne Logistics University
- 2012 - Supervisor or co-supervisor for Ph.D. students at the NHH Center for Shipping and Logistics (2 graduated, 2 ongoing), UCL Energy Institute in London, UK (1 graduated), and Copenhagen Business School, Denmark (1 graduated).
- Supervising 5 – 13 master theses every year at NHH in maritime economics and related areas.

### **Project funding**

- 2021 – 2025 SHIPTRACK, SHIPTRACK, Improving ship and cargo tracking with multi-source spatial data (project manager), NOK 16,1 million (USD 1.8m) total budget from the Research Council of Norway, with industry partners Vake.ai, Western Bulk, Utkilen, Bergen Shipowners' Association and research partner UiT Arctic University of Norway, Narvik.
- 2018 – 2022 SMARTDIGITAL, Smart digital contracts and commercial management (application author and project member), NOK 12.7 million (USD 1.63m) total budget from the Research Council of Norway MAROFF programme, with industry partners Bergen Shipowners' Association, BIMCO and Wikborg Rein.
- 2016 - 2019 REEalSea, Real Energy Efficiency and Emissions in the Seaway (application author and project manager), co-operation with Nanyang Technical University, Singapore. NOK11.8 million total budget (USD 1.3m) from the Research Council of Norway MAROFF programme and Singapore Maritime Institute, with industry partners Bergen Shipowners' Association, SKS Tankers and DNV GL Singapore.
- 2014 - 2017 GREENSHIPRISK, Green shipping under uncertainty (application author and project manager), NOK12.5 million total budget (USD 1.4m), Research Council of Norway MAROFF programme and industry partners Bergen Shipowners' Association and shipowners Odfjell ASA and Western Bulk AS.

2014 - 2016 CARGOMAP – Mapping vessel behaviour and cargo flows (application author and project member), NOK6 million total budget (USD 0.7m), Research Council of Norway SMARTRANS programme.

### **Publications in international peer-reviewed journals**

1. Tran, N. K., Lam, J. S. L., Jia, H., & Adland, R. (2021). Emissions from container vessels in the port of Singapore. *Maritime Policy & Management*, 1-17.
2. Adland, R., Anestad, L. E., & Abrahamsen, B. (2021). Statistical arbitrage in the freight options market. *Maritime Policy & Management*, 1-16.
3. Adland, R., Jia, H., Harvei, H. C. O., & Jørgensen, J. (2021). Second-hand vessel valuation: an extreme gradient boosting approach. *Maritime Policy & Management*, 1-18.
4. Adland, R., Jia, H., Lode, T., & Skontorp, J. (2021). The value of meteorological data in marine risk assessment. *Reliability Engineering & System Safety*, 107480.
5. Adland R. (2021) Shipping Economics and Analytics. In: Artikis A., Zissis D. (eds) Guide to Maritime Informatics. Springer, Cham. [https://doi.org/10.1007/978-3-030-61852-0\\_11](https://doi.org/10.1007/978-3-030-61852-0_11)
6. Mohanty, S. K., Aadland, R., Westgaard, S., Frydenberg, S., Lillienkiold, H. E., & Kristensen, C. (2021). Modelling Stock Returns and Risk Management in the Shipping Industry. *Journal of Risk and Financial Management*, 14(4), 171.
7. Fuentes, G., & Adland, R. (2020, December). A Spatial Framework for Extracting Suez Canal Transit Information from AIS. In *2020 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)* (pp. 586-590). IEEE.
8. Prochazka, V., & Adland, R. (2020, December). Feature Engineering for Supply Analysis in Ocean Transportation. In *2020 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)* (pp. 314-318). IEEE.
9. Adland, R. and Prochazka, V. (2020). The value of timecharter optionality in the drybulk market. *Transportation Research Part E: Logistics and Transportation Review*, 145, 102185.
10. Peng, W. H., Adland, R., & Yip, T. L. (2020). Investor domicile and second-hand ship sale prices. *Maritime Policy & Management*, 1-15.
11. Jia, H., Adland, R., & Wang, Y. (2021) Global Oil Export Destination Prediction: A Machine Learning Approach. *The Energy Journal*, 42(4).
12. Adland, R., Aarheim, G. M., & Holseter, O. M. (2020). Baltic Exchange index changes and FFA hedging efficiency. *Transportation Research Procedia*, 48, 107-122.
13. Adland, R., Ameln, H. and Børnes, E.A. (2020) Hedging ship price risk using freight derivatives in the drybulk market, *Journal of Shipping and Trade* 5:1, <https://doi.org/10.1186/s41072-019-0056-3>

14. Adland, R., Cariou, P., & Wolff, F. C. (2020). Optimal ship speed and the cubic law revisited: Empirical evidence from an oil tanker fleet. *Transportation Research Part E: Logistics and Transportation Review*, 140,
15. Jia, H., Adland, R., & Wang, Y. (2019, December). Latin American Oil Export Destination Choice: A Machine Learning Approach. In 2019 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM) (pp. 345-348). IEEE.
16. Prochazka, V. and Adland, R. (2019, December). Ocean Mesh Grid: Applications in Shipping Modeling. In 2019 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM) (pp. 330-334). IEEE.
17. Prochazka, V., Adland, R. and Wolff, F.C. (2019) Contracting decisions in the crude oil transportation market: Evidence from fixtures matched with AIS data, *Transportation Research Part A: Policy and Practice*, 130, 37 – 53.
18. Prochazka, V., Adland, R. and Wallace, S.W. (2019) The value of foresight in the drybulk freight market, *Transportation Research Part A: Policy and Practice*, 129, 232-245.
19. Adland, R., Cariou, P. and Wolff F.C. (2019) When energy efficiency is secondary: The case of Offshore Support Vessels, *Transportation Research Part D: Transport and Environment*, 72, 114-126
20. Adland, R., Thomassen, K. and Østensen, E. (2019) Environmental management in shipping: theory and practice of energy-efficient ship operation, in: *The Routledge Handbook of Maritime Management*, 80-97
21. Adland, R. and Jia, H. (2019) Contractual Barriers and Energy Efficiency in the Crude Oil Supply Chain, *Proceedings of the IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)*, Bangkok, December 6 – 10, 2018.
22. Regli, F. and Adland, R. (2019) Crude Oil Contango Arbitrage and the Floating Storage Decision, *Transportation Research Part E*, 122, 100 – 118.
23. Adland R., Köhn S. (2019) Semiparametric Valuation of Heterogeneous Assets. In: Mathew J., Lim C., Ma L., Sands D., Cholette M., Borghesani P. (eds) *Asset Intelligence through Integration and Interoperability and Contemporary Vibration Engineering Technologies. Lecture Notes in Mechanical Engineering*. Springer, Cham, 23 – 30.
24. Adland, R., Cariou, P. and Wolff, F.C. (2019): Comparing transaction-based and expert-generated price indices in the market for offshore support vessels, *Journal of Transport Economics and Policy*, 53(1), 99-118.
25. Adland, R. and Alizadeh, A. (2018): Explaining price differences between physical and derivative freight contracts, *Transportation Research Part E*, 118, 20 - 33.
26. Adland, R., Cariou, P. and Wolff, F.C. (2018): Does energy efficiency affect ship values in the second-hand market? *Transportation Research Part A*, 111, 347 - 359.
27. Adland, R., Cariou, P., Jia, H. and Wolff, F.C. (2018): The energy efficiency effects of periodic ship hull cleaning, *Journal of Cleaner Production*, 178, 1 – 13.

28. Adland, R., Jia, H. and Strandenes, S.P. (2018): The determinants of vessel capacity utilization: the case of Brazilian iron ore exports, *Transportation Research Part A*, 110, 191 – 201.
29. Adland, R. and Jia, H. (2018): Dynamic speed choice in bulk shipping, *Maritime Economics & Logistics*, 20(2), 253 – 266.
30. Adland, R., Benth, F.E. and Koekebakker, S. (2018): Multivariate modelling and analysis of regional ocean freight rates, *Transportation Research Part E*, 113, 194 - 221.
31. Adland, R. and Sværen, O. (2017): The determinants of asset mothballing in the offshore supply market, Proceedings of the IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Singapore, 1460 – 1463, doi: 10.1109/IEEM.2017.8290135
32. Adland, R., Cariou, P. and Wolff, F.C. (2017): What makes a freight market index? An empirical analysis of vessel fixtures in the offshore market, *Transportation Research Part E*, 104, 150-164.
33. Adland, R., Hansson, D. and Wense, L. (2017): Valuing cargo flexibility in oil transportation, *Maritime Policy and Management*, 44(7), 803 – 814.
34. Jia, H., Adland, R., Prakash, V. and Smith, T. (2017): Energy efficiency with the application of virtual arrival, *Transportation Research Part D*, 54, 50-60.
35. Adland, R., Fonnes, G., Jia, H., Lampe, O.D., Strandenes, S.P. (2017): The impact of regional environmental regulations on empirical vessel speeds, *Transportation Research Part D*, 53, 37-49.
36. Adland, R., Jia, H. and Strandenes, S.P. (2017): Are AIS-based trade volume estimates reliable? The case of crude oil exports, *Maritime Policy and Management*, 44(5), 657-665.
37. Adland, R., Norland, K. and Sætrevik, E. (2017): The impact of shipyard and shipowner heterogeneity on contracting prices in the newbuilding market, *Maritime Business Review*, 2(2), 58 – 78.
38. Adland, R., and Jia, H. (2017): Simulating physical basis risks in the Capesize freight market, *Maritime Economics and Logistics*. 19(2), 196-210.
39. Adland, R. Bjerknes, F. and Herje, C. (2017), Spatial efficiency in the bulk freight market, *Maritime Policy and Management*, 44(4), 413 – 425.
40. Adland, R. Noraas, J. and Iversen R.S. (2017), Capital Structure Determinants of Shipbuilding Companies, *International Journal of Shipping and Transport Logistics*, 9(6), 763 – 789.
41. Adland, R., Alger, H., Banyte, J. and Jia, H. (2017), Does fuel efficiency pay? Empirical evidence from the drybulk timecharter market revisited, *Transportation Research Part A*, 95, 1-12.
42. Adland, R. and Jia, H. (2016). Vessel speed analytics using satellite-based ship position data, Proceedings of the 2016 IEEE IEEM conference, Bali, 1299 – 1303, doi: 10.1109/IEEM.2016.7798088
43. Adland, R., Cariou, P., and Wolff, F. C. (2016). The influence of charterers and owners on bulk shipping freight rates. *Transportation Research Part E: Logistics and Transportation Review*, 86, 69-82.
44. Adland, R. and Jia, H. (2015): Shipping market integration – the case of sticky newbuilding prices, *Maritime Economics and Logistics*, 17(4), 389 – 398.

45. Sodal, S., Koekebakker, S. and Adland, R. (2009): Trading rules with analytical ship valuation under stochastic freight rates, *Applied Economics*, 41(22), 2793 – 2807.
46. Sodal, S., Koekebakker, S. and Adland, R. (2008): Market switching in shipping - A real option model applied to the valuation of combination carriers, *Review of Financial Economics*, 17(3), 183 – 203.
47. Adland, R. and Jia, H. (2008): Default risk in bulk shipping: A conceptual approach, *Transportation Research Part E*, 44(1), 152-163.
48. Adland, R., Jia, H., and Lu, J. (2008): Price dynamics in the market for liquid petroleum gas transport, *Energy Economics*, 30(3), 818-828.
49. Alizadeh, A., Adland, R. and Koekebakker, S. (2007): Unbiasedness and predictive power of implied forward charter rates, *Journal of Forecasting*, 26(6), 385 - 403.
50. Adland, R. and Koekebakker, S. (2007): Ship valuation using cross-sectional sales data, *Maritime Economics and Logistics*, 9, 105 – 118.
51. Koekebakker, S., Adland, R. and Sodal, S. (2007): Pricing freight rate options, *Transportation Research Part E*, 43(5), 535 – 548.
52. Adland, R. and Strandenes, S. P. (2007): A discrete-time stochastic partial equilibrium model of the spot freight market, *Journal of Transport Economics and Policy*, 41(2), 1 - 30.
53. Adland, R., Jia, H. and Strandenes, S. P. (2006): Asset bubbles in shipping? An analysis of recent history in the drybulk market, *Maritime Economics and Logistics*, 8, 223 – 233.
54. Koekebakker, S., Adland, R. and Sodal S. (2006): Are spot freight rates stationary? *Journal of Transport Economics and Policy*, 40(3), 449-472.
55. Adland, R. and Strandenes, S. P. (2006): Market efficiency in the bulk freight market revisited, *Maritime Policy and Management*, 33(2), 107 – 117.
56. Adland, R. and Cullinane, K. (2006): The non-linear dynamics of spot freight rates in tanker markets, *Journal of Transportation Research E*, 42(3), 211 – 224.
57. Adland, R. and Cullinane, K. (2005): A time-varying risk premium in the term structure of bulk shipping freight rates, *Journal of Transport Economics and Policy* 39(2), 191 - 208.
58. Koekebakker, S. and Adland, R. (2004): Modelling forward freight rate dynamics – empirical evidence from time charter rates, *Maritime Policy and Management*, 31(4), 319 – 335.
59. Koekebakker, S. and Adland, R. (2004): Market efficiency in the second-hand market for bulk ships, *Maritime Economics and Logistics*, 6(1), 1 – 15.
60. Adland, R., Jia, H. and Koekebakker, S. (2004): The pricing of forward ship value agreements and the unbiasedness of implied forward prices in the second-hand market for ships, *Maritime Economics and Logistics*, 6(2), 109-121.

#### **International conference participation with papers or presentations**

- Hong Kong Society for Transportation Studies annual conference, Hong Kong (2017)

- Conference on Industrial Engineering and Engineering Management (IEEM), Bali (2016), Singapore (2017), Bangkok (2018), Macau (2019)
- Multinational Finance Society Spring Conference, Larnaca (2015), Limassol (2016, 2017)
- International Association of Energy Economics (IAEE) annual conference: Antalya (2015), Singapore (2017)
- International Association of Energy Economics Asia conference, Perth (2016)
- Logistics and Maritime Systems (LOGMS) annual conference: Hong Kong (2015), Sydney (2016), Bergen (2017), Guangzhou (2018), Singapore (2019)
- International Association of Maritime Economists annual conference: Rotterdam (2021), Athens (2019), Kyoto (2017), Hamburg (2016), Kuala Lumpur (2015 – Best Paper Award), Norfolk (2014), Marseilles (2013), Taipei (2012), Dalian (2008), Athens (2007), Limassol (2005 - Best Paper Award), Izmir (2004), Busan (2003), Panama City (2002), Hong Kong (2001)
- International Forum on Shipping, Ports and Airports, Hong Kong, 2012, 2013, 2014, 2015 (Best Paper Award), 2017.
- World Conference on Engineering Asset Management, Brisbane (2017)
- World Conference on Transportation Research, Mumbai (2019)
- One Belt One Road conference, Hong Kong (2016)
- SNAME International Symposium on Ship Operations and Economics, Athens, 2005.