

CURRICULUM VITAE

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Position: Professor, Insitute for Sustainable Food Systems and School of Forestry Resources and Conservation, University of Florida, PO Box 110570, University of Florida, Gainesville, FL 32611-0570.
Professor II, Department of Industrial Economics, University of Stavanger.
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Academic and Professional Experience

2016- Professor, Insitute for Sustainable Food Systems and School of Forestry Resources and Conservation University of Florida.
2000- Professor, from 2016 Professor II, Department of Industrial Economics, University of Stavanger, Norway.
2012-18 Adjunct Professor, Nicholas School for the Environment, Duke University, Durham, NC, USA.
2000- Scientific Advisor, Centre for Applied Research in Economics and Business Administration, Bergen, Norway.
2014 Interim department head, Dept. of industrial economics, University of Stavanger.
2012-13 Visiting (Fulbright) Scholar, Nicholas School for the Environment, Duke University, Durham, NC, USA.
2011-12 Associate Dean for Research, Faculty for Science and Technology, University of Stavanger, Norway.
2008-10 Adjunct Professor, Department of Environmental and Natural Resource Economics, University of Rhode Island, Kingston, RI, USA.
2007-08 Visiting Scholar, Department of Environmental and Natural Resource Economics, University of Rhode Island, Kingston, RI, USA.
2006-09 Adjunct Professor, Department of Economics, Norwegian University of Life Sciences, Oslo, Norway.
2004-07 Associate Dean for Research, Faculty for Science and Technology, University of Stavanger, Norway.
2001-02 Adjunct Professor, Department of Economics, Norwegian School of Economics and Business Administration, Norway.
1999-00 Senior researcher, The Foundation for Research in Economics and Business Administration, Bergen, Norway
1997-99 Associate Professor, Norwegian School of Economics and Business Administration, Bergen, Norway.
1993-97 Research Associate, Foundation for Research in Economics and Business Administration, Bergen, Norway
1992-93 Research Assistant, Centre for Research in Economics and Business, Bergen, Norway
1992 Teaching Assistant, Department of Economics, University of Bergen, Norway.

Education

- 1996 Ph.D. (Dr. Econ.) Norwegian School of Economics and Business Administration. Dissertation: Specification of Dynamic Demand Systems: The Demand for Salmon.
- 1992 Master degree (Cand. Polit.) The University of Bergen with specialisation in economics. Thesis: A Productivity Analysis of the North Sea Industry Trawlers.
- 1989 Cand. Mag. from the University of Bergen.

Academic papers in peer-reviewed journals

Cojocar, A., F. Asche, R.B. Pincinato and H-M. Straume (2019) Where Are the Fish Landed? An Analysis of Landing Plants in Norway. Forthcoming in *Land Economics*.

Guillen, J., F. Asche, N. Carvalho, J.M. Polanco, I. Lloriente, R. Nielsen, M. Nielsen and S. Villasante (2019) Aquaculture subsidies in the European Union: Evolution, impact and future potential for growth. Forthcoming in *Marine Policy*.

Asseng, S. and F. Asche (2019) Future Farms without Farmers. *Science Robotics*. Vol. 4, Issue 27, eaaw1875. DOI: 10.1126/scirobotics.aaw1875.

Asche, F., B. Misund and A. Oglend (2019) The Case and Cause of Salmon Price Volatility. *Marine Resource Economics*. 34(1), 23-38.

Asche, F., T. Garlock, J. Anderson, S. Bush, M. Smith, C. Anderson, J. Chu, K. Garrett, A. Lem, K. Lorenzen, A. Oglend, S. Tveteras and S. Vannuccini (2018) The Three Pillars of Sustainability in Fisheries. *Proceedings of the National Academy of Sciences*. 115(44) 11221-11225.

Asche, F. and M.D. Smith (2018) Induced Innovation in Fisheries and Aquaculture. *Food Policy*. 76(April), 1-7.

Roheim, C.A., S.B. Bush, F.Asche, J. Sanchirico and H. Uchida (2018) Evolution and Future of the Sustainable Seafood Market. *Nature Sustainability*. 1(8), 392-398.

Asche, F. and K.H. Roll (2018) Economic Inefficiency in a Revenue Setting: The Norwegian Whitefish Fishery. *Applied Economics*. 50, 6112-6127.

Pincinato, R.B. and F. Asche (2018) Domestic Landings and Imports of Seafood in Emerging Economies: The Brazilian Sardines Market. *Ocean and Coastal Management*. 165, 9-14.

Zhang, D., G. Sogn-Grundvåg, F. Asche and J. A. Young (2018) Eco-Labeling and Retailer Pricing Strategies: The UK Haddock Market. *Sustainability*. 10(5), 1522; doi:10.3390/su10051522.

Asche, F., M. Sikveland and D. Zhang (2018) Profitability in Norwegian salmon farming: The impact of firm size and price variability. *Aquaculture Economics and Management*. 21(3), 306-317.

Brækkan, E.H., S.B. Thyholdt, F. Asche and Ø. Myrland (2018) The Demands They Are A-Changin'. *European Review of Agricultural Economics*. 45(4): 505-529.

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Reliability Engineering and Systems Safety. 174, 108-113.

Abrahamsen, E.B., J.T. Selvik, A.N. Dahle, F. Asche and H. B. Abrahamsen (2018) A socio-economic analysis of increased staffing in the Norwegian helicopter emergency medical service. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine*. 26:83 <https://doi.org/10.1186/s13049-018-0548-4>.

Asche, F., A. Cojucaru and M. Sikveland (2018) Market Shocks in Salmon Aquaculture: The Impact of the Chilean Disease Crisis. *Journal of Agricultural and Applied Economics*. 50(2), 255-269.

Nielsen, M., F. Asche, O. Bergesen, J. Blomquist, E. Henriksen, A. Hoff, R. Nielsen, J. R. Viðarsson and S. Waldo (2018) The Myth of the Poor Fisher: Evidence from the Nordic countries. *Marine Policy*. 93, 186-194.

Asche, F., A. Cojucaru, I. Gaasland and H-M. Straume (2018) Cod stories: Trade dynamics and duration for Norwegian cod exports. *Journal of Commodity Markets*. 12, 71-82.

Anderson, J.L., Asche, F., T. Garlock (2018) Globalization and Commoditization: The Transformation of the Seafood Market. *Journal of Commodity Markets*. 12, 2-8.

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Abrahamsen, H.B., F. Asche and E.B. Abrahamsen (2018) Increasing complexity of medical technology in helicopter emergency medical services and consequences for patient safety. *International Journal of Technology, Policy and Management*. 18(3): 234-246.

Asche, F., A. Cojucaru and B. Roth (2018) The Development of Large Scale Aquaculture Production: A Comparison of the Supply Chains for Chicken and Salmon. *Aquaculture* 493, 446-455.

Fang, Y., F. Asche and K. Novan (2018) The costs of charging Plug-in Electric Vehicles (PEVs): Within day variation in emissions and electricity prices. *Energy Economics* 69(1), 196-203.

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Landazuri-Tveteraas, U., F. Asche, D.V. Gordon and Sigbjørn Tveteraas (2018) Price Transmission in French and UK Salmon Markets. *Aquaculture Economics and Management*. 22(1), 131-149.

Asche, F., A. Oglend and T. Kleppe (2017) Price Dynamics in Biological Production Processes Exposed to Environmental Shocks. *American Journal of Agricultural Economics*. 99(5), 1246-1264.

Chu, J., T. M. Garlock, P. Sayon, F. Asche and J. L. Anderson (2017) Impact Evaluation of a Fisheries Development Project. *Marine Policy*, 85, 141-149.

Garrett, K., K. Andersen, F. Asche, R. Bowden, G. Forbes, P. Kulakow, B. Zhou (2017) Resistance Genes in Global Crop Breeding Networks. *Pythopatology*. 107(10), 1268-1278.

Asche, F. and J. Bronnmann (2017) Price Premiums for Ecolabelled Seafood: Marine Stewardship Council (MSC) Certification in Germany. *Australian Journal of Agricultural and Resource Economics* 61(4), 576-589.

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Abolofia, J., F. Asche and J. E. Wilen (2017) The Cost of Lice: Quantifying the Impacts of Parasitic Sea Lice on Farmed Salmon. *Marine Resource Economics* 32(3), 329-349.
Honorable mention best paper award.

Smith, M.D., A. Oglend, J. Kirkpatrick, F. Asche, LS. Benneer, J.K. Craig, and J. M. Nance (2017) Seafood Prices Reveal Impacts of a Major Ecological Disturbance. *Proceedings of the National Academy of Sciences*. 114(7), 1512-1517.
Quality of Research Discovery Award, American Applied Economics Association

Abrahamsen, E.B., F. Asche and R.E. Dahl (2017) Societal safety: variations between modes and Regions. *International Journal of Business Continuity and Risk Management*, 7(3): 223-243.

Asche, F. (2017) New Markets, New Technologies and New Opportunities in Aquaculture. *Aquaculture Economics and Management*. 21(1), 1-8.

Asche, F., A. Oglend and P. Osmundsen (2017) Modeling UK natural gas prices when gas prices periodically decouple from the oil price. *Energy Journal*. 38(2), 131-148.

Asche, F. and B. Misund (2016) Who's a Major? A Novel Approach to Peer Group Selection: Empirical Evidences from Oil and Gas Companies. *Cogent Economics and Finance*. 4, doi.org/10.1080/23322039.2016.1264538.

Oglend, A. and Asche, F. (2016) Cyclical Non-stationarity in Commodity Prices. *Empirical Economics*. 51(4), 1465-1479.

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Asche, F. B. Misund and A. Oglend (2016) Determinants of the Atlantic Salmon Future Risk Premium. *Journal of Commodity Markets*. 2(1), 6-17.

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Asche, F., C. A. Roheim and M. D. Smith (2016) Trade Intervention: Not a Silver Bullet to Address Environmental Externalities in Global Aquaculture. *Marine Policy*. 69, 194-201.

Asche, F., T. A. Larsen, M. D. Smith, G. Sogn-Grundvåg and J. A. Young (2015) Pricing of Eco-labels with Retailer Heterogeneity. *Food Policy*. 67, 82-93.

Asche, F., Y. Chen and M. D. Smith (2015) Economic incentives to target species and fish size: Prices and fine scale product attributes in Norwegian fisheries. *ICES Journal of Marine Science*. 72(3), 741-752.

Featured as *Editor's Choice*.

Anderson, J.L., C.M. Anderson, J. Chu, J. Meredith, F. Asche, G. Sylvia, M.D. Smith, D. Anggraeni, R. Arthur, A. Guttormsen, J.K. McCluney, T. Ward, W. Akpalu, H. Eggert, J. Flores, M.A. Freeman, D.S. Holland, G. Knapp, M. Kobayashi, S. Larkin, K. MacLauchlin, K. Schnier, M. Soboil, S. Tveteras, H. Uchida, and D. Valderrama. "The Fishery Performance Indicators: A Management Tool for Triple Bottom Line Outcomes." *PLOS ONE*. (4/2015).

Gelyani, A. M., E. B. Abrahamsen, F. Asche and S. Guikema (2015) Some Considerations on how often Safety Critical Valves should be Tested. *International Journal of Business Continuity and Risk Management*. 6(1), 59-67.

Asche, F., M. Bellemare, C. Roheim, M. D. Smith and S. Tveteras (2015) Fair Enough? Food Security and the International Trade of Seafood. *World Development*, 67, 151-160.

Asche, F. and M. Sikveland (2015) The Behavior of Operating Earnings in the Norwegian Salmon Farming Industry. *Aquaculture Economics and Management*. 19, 301-315.

Sha, S., Roheim, C. A., J. Insagnaris and F. Asche (2015) Media Coverage of PCB Contamination of Farmed Salmon: The Response of U.S. Import Demand. *Aquaculture Economics and Management*. 19. 336-352.

Asche, F., R. E. Dahl and M. Steen (2015) Price Volatility in Seafood Markets: Farmed vs.

Wild Fish. *Aquaculture Economics and Management*. 19, 316-335.

Asche, F., A. Oglend and D. Zhang (2015) Hoarding the Herd: The Convenience of Productive Stocks, *The Journal of Futures Markets*. 35(7), 679-694.

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Asche, F., R. E. Dahl, D. Valderrama and D. Zhang (2014) Price Transmission in New Supply Chains - The Case of Salmon in France. *Aquaculture Economics and Management*. 18, 205-219.

Honorable mention, best paper award.

Zhang, D., F. Asche and A. Oglend (2014) Ethanol and Trade: An Analysis of Price Transmission in the US Market. *Energy Economics*. 42, 1-8.

Asche, F. (2014) Enhancing Marketing and Production Performance of Aquaculture: Special Session of World Aquaculture 2013. *Aquaculture Economics and Management*. 18, 97-100.

Smith, M. D., F. Asche, L. S. Benneer and A. Oglend (2014) Spatial-dynamics of Hypoxia and Fisheries: The Case of Gulf of Mexico Brown Shrimp. *Marine Resource Economics*, 29, 111-131.

Asche, F., M. T. Bjørndal and T. Bjørndal (2014) Development in Fleet Fishing Capacity in Rights Based Fisheries. *Marine Policy*. 44, 166-171.

Tveterås, S., F. Asche and K. Lien (2014) European Tour Operators' Market Power when Renting Hotel Rooms in Northern Norway. *Tourism Economics*, 20(3): 579–594.

Asche, F and D. Zhang (2013) Testing Structural Changes in U.S. Whitefish Import Market: An Inverse Demand System Approach. *Agricultural and Resource Economics Review*. 42(3), 453-470.

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Asche, F., B. Misund and M. Sikveland, (2013) The relationship between spot and contract gas prices in Europe. *Energy Economics*. 38, 212-217.

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Kumbhakar, S., F. Asche and R. Tveteras (2013) Estimation and Decomposition of Inefficiency when Producers Maximize Return to the Outlay: An Application to Norwegian

Fishing Trawlers. *Journal of Productivity Analysis*. 40(3), 307-321.

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Asche, F., K. H. Roll, H. N. Sandvold, A. Sørvig and D. Zhang (2013) Salmon Aquaculture: Larger Companies and Increased Production. *Aquaculture Economics and Management*. 17(3): 322-339.

Klinger, D., M. Turnipseed, J. L. Anderson, F. Asche, L. Crowder, A. G. Guttormsen, B. S. Halpern, M. I. O'Connor, R. Sagarin, K. A. Selkoe, G. Shester, M. D. Smith, P. Tyedmers (2013) Moving Beyond the Fished or Farmed Dictomy, *Marine Policy*, 38, 369-374.

Torrissen, O., S. Jones, A. Guttormsen, F. Asche, T. E. Horsberg, O. Skilbrei, D. Jackson, and F. Nilsen (2013) Salmon Lice – Impact on Wild Salmonids and Salmon Aquaculture, *Journal of Fish Diseases*. 36, 171-194.

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Asche, F. A. Oglend and P. Osmundsen (2012) Gas versus oil prices The impact of shale gas. *Energy Policy*, 47, 117-124.

Asche, F., L. Benneer, A. Oglend, M. D. Smith (2012) U.S. Shrimp Market Integration, *Marine Resource Economics*, 27, 2, 181-192.

Asche, F. and J. Guillen (2012) The Importance of Fishing Method, Gear and Origin: The Spanish Hake Market, *Marine Policy*, 36, 365-369.

Asche, F., O. Gjørberg and A. G. Guttormsen (2012) Testing the Central Market Hypothesis: A Multivariate Analysis of Tanzanian Sorghum Markets. *Agricultural Economics*, 43, 1, 115-123.

Asche, F., K. H. Roll and R. Tveterås (2012) FoU, Innovasjon og Produktivitetsvekst i Havbruk (In Norwegian, R&D, Innovation and productivity Growth in Aquaculture), *Magma*, (1), 56-64.

Torrissen, O., R. E. Olsen, R. Toresen, G. I. Hemre, A. G. J. Tacon, F. Asche, R. W. Hardy, S. P. Lall (2011) Atlantic Salmon (*Salmo salar*) – The Super-Chicken of the Sea? *Reviews in Fisheries Science*, 19, 3, 257-278.

Roheim, C. A., F. Asche and J. Insignares (2011) The Elusive Price Premium for Ecolabeled Products: Evidence from Seafood in the UK Market. *Journal of Agricultural Economics*, 62(3), 655-668.

- Abrahamsen, E. B., F. Asche and T. Aven (2011) To what extent should all the attributes be transformed to one comparable unit when evaluating safety measures. *The Business Review, Cambridge*, 19(1) 70-76.
- Asche, F., R. E. Dahl, D. V. Gordon, T. Trollvik and P. Aandal (2011) Demand growth for salmon in the European market, *Marine Resource Economics*, 26(4), 255-265.
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- Asche, F., P. Osmundsen og A. Øglend (2011) Gass versus Olje (In Norwegian: Gass vs. Oil), *Samfunnsøkonomen*, 65(5), 14-21.
- Abrahamsen, E. B. and F. Asche (2011) On how access to an insurance market affects investments in safety measures, based on the expected utility theory. *Reliability Engineering and System Safety*, 96, 361-364.
- Asche, F., L. Nøstbakken, A. Oglend and S. Tveterås (2011) Buying power in UK retail chains: A residual supply approach. *Aquaculture Economics and Management*, 14, 1-17.
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- Smith, M. D., C. A. Roheim, L. B. Crowder, B. S. Halpern, M. Turnipseed, J. L. Anderson, F. Asche, L. Bourillón, A. G. Guttormsen, A. Kahn, L. A Liguori, A. McNevin, M. O'Connor, D. Squires, P. Tyedemers, C. Brownstein, K. Carden, D. H. Klinger, R. Sagarin, K. A. Selkoe (2010) Sustainability and Global Seafood, *Science*, 327, 784-786.
- Chu, J., J. L. Anderson, F. Asche and L. Tudur (2010) Stakeholders' Perceptions of Aquaculture and Implications for it's Future: A Comparison of the U.S.A. and Norway. *Marine Resource Economics*, 25(1), 61-76.
- Asche, F., A.G. Guttormsen, D. Kristofersson and C. A. Roheim (2010) US Import Demand for Swordfish. *Food Economics* 7, 36-43.
- Abrahamsen, E. B. and F. Asche (2010) The Insurance Market's Influence on Investmants in Safety Measures, *Safety Science*, 48(10), 1279-1285.
- Asche, F., H. Hansen, R. Tveteras and S. Tveterås (2009) The Salmon Disease Crisis in Chile. *Marine Resource Economics*, 24(4), 405-411.
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- Asche, F., T. Bjørndal and D. V. Gordon (2009) Resource Rent in Individual Quota Fisheries. *Land Economics*, 85(2), 280-292.
- Asche, F. and A.G. Guttormsen (2009) Innovation, Production and New Markets in Aquaculture. *Aquaculture Economics and Management*, 13(2), 71-75.

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- Asche, F. (2009) Adjustment Cost and Supply Response: A Dynamic Revenue Function. *Land Economics*, 85(1), 201-215.
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Asche, F. and C. R. Wessells (1997) "On Price Indices in the Almost Ideal Demand System," *American Journal of Agricultural Economics*, 79, 1182-1185.

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Books and bookchapters

Asche, F., J. L. Anderson and T. M. Garlock (2019) Food from the Water – Fisheries and Aquaculture. In G. L. Cramer, K. P. Paudel and A. Schmitz (ed.). *The Routledge Handbook of Agricultural Economics*. Routledge, London, pp. 134-158.

Abrahamsen, E. B., F. Asche and R. E. Dahl (2018) Safety and Economic Activity. In K. Engeman (ed.) *The Routledge Companion to Risk, Crisis and Security in Business*. Routledge, London, pp. 434-440.

Anderson, J.L., F. Asche, T. Garlock and J. Chu (2017) Aquaculture: It's Role in the Future of Food. In A. Schmitz, P.L. Kennedy and T.G. Schmitz (ed.). *World Agricultural Resources and Food Security (Frontiers of Economics and Globalization, Vol. 17)*. Emerald Publishing, pp. 159-173.

Kumbhakar, S.C., F. Asche, K. Roll and R. Tveteras (2016) A General Error Revenue Function Model with Technical Inefficiency: An Application to Norwegian Fishing Trawlers. In *Productivity and Efficiency Analysis* (ed. W. Greene, L. Khalaf, R. Sickles, M. Veall, M-C. Voia). Springer, Berlin, pp. 51-70.

Asche, F. C. A. Roheim and M.D. Smith (2014) Markets, Trade, and Seafood. In *Encyclopedia of Natural Resources* (ed Y. Wang). CRC Press, pp. 791-797.

Asche, F. and T. Bjørndal (2014) Salmon Aquaculture: Environmental Impacts and Economic Implications. In *Salmon: Biology, Ecological Impacts and Economic Importance* (Eds. P.T.K. Woo and D. J. Noakes). Nova Science Publishers, Hauppauge, New York, pp. 307-326.

Asche, F. and K. H. Roll (2014) Oppdrettsnæringen (In Norwegian: The Aquaculture Industry). In *Naturressursenes økonomi (Natural Resource Economics)*(Eds. O. Flåten and A. Skonhøft). Gyldendal, Oslo, pp. 344-376.

Asche, F. and T. Bjørndal (2011) *The Economics of Salmon Aquaculture*, Wiley-Blackwell: Chichester.

Anderson, J. L., Asche, F. and Tveterås, S. (2010) World Fish Markets. In *Handbook of Marine Fisheries Conservation and Management* (Eds, Grafton, R. Q., Hilborn, R., Squires, D., Tait, M. and Williams, M.) Oxford University Press, Oxford.

Asche, F. and Bjørndal, T. (2010) Aquaculture: Production and Markets. In *Handbook of Marine Fisheries Conservation and Management* (Eds, Grafton, R. Q., Hilborn, R., Squires, D., Tait, M. and Williams, M.) Oxford University Press, Oxford.

Asche F., K. H. Roll and S. Tveterås (2008) Future directions in Aquaculture. In *Aquaculture in the Ecosystem*, ed. M. Holmer, Y. Karakassis og K. Black, Springer: Berlin.

Johnston, R. J., C. R. Wessells, H. Donath, and F. Asche. (2007) Measuring Consumer Preferences for Ecolabeled Seafood: An International Comparison, In *Labelling Strategies in Environmental Policy* , ed. M. Teisl, Ashgate Publishing: Brookfield.

Asche, F., K. H. Roll and S. Tveterås (2007) Markedsvekst – En viktig drivkraft for laksenæringens utvikling (in Norwegian: market growth – An important factor in the development of salmon aquaculture), ed. B. Aarset and G. Rusten, Havbruk på Norsk, Fagbokforlaget: Bergen.

Asche, F., T. Bjørndal and D. V. Gordon (2007) Studies in the Demand Structure for Fish and Seafood Products,” in *Handbook of Operations Research in Natural Resources*. (Weintraub, A., Romero, C., Bjørndal, T. and Epstein, R., (eds.), Springer: Berlin.

Asche, F. (ed) (2006) *Primary Industries Facing Global Markets: The Supply Chains and Markets for Norwegian Food*, Universitetsforlaget: Oslo.

Engelsen, R., F. Asche, F. Skjennum, and Adolf. G. (2004) New Species in Aquaculture: Some Basic Economic Aspects, ed. E. Moksness, E. Kjørsvik, and Y. Olsen, *Culture of Cold-Water Marine Fish*, Blackwell: Oxford.

Asche, F. and E. H. Sissener (2003) *Sjømatmarkedet i Fremtiden*, ed. T. Bjørndal, *Økonomiske Perspektiv på Sjømatnæringa*, Fagbokforlaget: Bergen.

Jaffry, S., and F. Asche (2001) *Demand Forecasting*, ed. S. Hurd, and J. Mangan. London, Statistics for Education.

Other publications

I have participated in a number of project financed by different Norwegian sources, the EU Commission, FAO, OECD, the WorldBank and the WTO. There have been published a number of reports and working papers from these projects. A list is available upon request.

I have also given speeches at a number of industry conferences in Norway as well as internationally, have written a number of popular scientific articles and have been interviewed in a number of newspapers and industry journals, including the *Economist* (09.08.13) and the *Financial Times* (18.02.14, 21.11.14). A list of recent appearances and publications is available upon request.

Academic conference participation with paper presentation

Asche, F. (2011) Aquaculture, Fisheries and the Environment, Keynote address, NAAFE2011, Hawaii, May 9-12.

Asche, F. (2012) The Oceans as a Source for Food and Resources: Seafood, Keynote address, American Fisheries Society, Kodiak, October 24-26.

European Aquaculture Society, Montpellier, France, 2018.

IIFET 2018, Seattle, USA, 2018.

World Congress of Environmental and Resource Economics, Gothenburg, Sweden, 2018.

Commodity and Energy Markets Associations, Rome, Italy, 2018.

Aquaculture America, 2018, Las Vegas, USA.

European Association of Agricultural Economics, 2017, Parma, Italy.

Aquaculture America 2017, San Antonio, USA.

North American Association of Fisheries Economists, La Paz, Mexico, 2017.

Aquaculture 2016, Las Vegas, USA.

Norwegian Aquaculture Conference, Bodø, Norway, 2016.

North American Association of Fisheries Economists, Ketchikan, USA, 2015.

European Association of Fisheries Economics, Salerno, Italy, 2015

Aquaculture America, New Orleans, USA, 2015.

European Aquaculture Society, San Sebastian, Spain, 2014.

World Congress of Environmental and Resource Economics, Istanbul, Turkey, 2014.

Aquaculture America, Seattle, USA, 2014.

North American Association of Fisheries Economists, St. Petersburg, USA, 2013.

Aquaculture Americas, Nashville, USA, 2013.

Aquaculture 2012, Prague, Czech Republic, 2012.

Aqua Americas, Las Vegas, USA, 2012.

European Productivity Workshop, Verona, Italy, 2011.

World Aquaculture, Natal, Brazil, 2011.

North American Association of Fisheries Economists, Hawaii, USA, 2011.

Norwegian Economics Association, Bergen, 2011.

Innovations and structural change in seafood markets and production, Loshavn, Norway, 2010.

International Association for Energy Economics (IAEE), Vilnius, Lithuania, 2010.

European Association for Research in Industrial Organization(EARIE), Istanbul, Turkey, 2010.

International Association for Energy Economics (IAEE), San Fransisco, USA, 2009.

North American Association of Fisheries Economists, Newport, USA, 2009.

European Agricultural Economics Association, Ghent, Belgium, 2008.

IIFET 2008, Nha Trang, Vietnam, 2008.

North American Productivity Workshop, New York, USA, 2008.

Farming the Sea, Refsnes, Norway, 2007.

International Association for Energy Economics (IAEE), Florence, Italy, 2007

European Association of Fisheries Economists, Reykjavik, Iceland, 2007.

North American Association of Fisheries Economists, Merida, Mexico, 2007.

International Association for Energy Economics (IAEE), Berlin, Tyskland, 2006.

IIFET 2006, Portsmouth, UK, 2006.

World Aquaculture Society, Firentze, Italy, 2006.
 International Association for Energy Economics (IAEE), Denver, USA, 2005.
 American Agricultural Economics Association, Providence, USA, 2005.
 ESREL 2005, Gdansk, 2005.
 European Association of Fisheries Economists, Roma, Italy, 2004
 European Productivity Workshop, Oviedo, Spain, 2003.
 International Association for Energy Economics (IAEE), Prague, Czech Republic, 2003.
 European Association of Fisheries Economists, Brest, France, 2003.
 IIFET 2002, Wellington, New Zealand, 2002.
 International Association for Energy Economics (IAEE), Aberdeen, UK, 2002.
 North American Productivity Workshop, Schenachtady, USA, 2002.
 The Agricultural Society, Aberyswyth, UK, 2002.
 European Productivity Workshop, Oviedo, Spain, 2001.
 European Association of Fisheries Economists, Salerno, Italy, 2001.
 World Aquaculture Society, Orlando, USA, 2001
 International Association for Energy Economics (IAEE), Bergen, Norway, 2000.
 International Institute of Fishery Economics and Trade, Corvallis, Oregon, USA, 2000
 American Agricultural Economics Association, Nashville, USA, 1999.
 European Association of Fisheries Economists, Dublin, Ireland, 1999.
 American Agricultural Economics Association, Salt Lake City, USA, 1998.
 Workshop on overcapacity in fisheries, Porthsmouth, UK, 1998
 International Institute of Fishery Economics and Trade, Tromsø, 1998.
 Norwegian Economics Association, Molde, 1998.
 Norwegian Economics Association, Bergen, 1997.
 International Workshop on Quota Assessment and Distribution, Geiranger, 1996.
 International Institute of Fishery Economics and Trade, Marakesh, Marokko, 1996.
 Norwegian Economics Association, Oslo, 1996.
 Canadian Economics Association, Calgary, Canada, 1994.
 International Institute of Fishery Economics and Trade, Taipei, Taiwan, 1994.

Invited seminars

ADETTI Lisboa (2002, 2004), University of Alaska at Anchorage (2012), University of Alberta (2008), Arkansas State University (2008; 2013), Auburn University (2013), University of British Columbia (1994), University of Bergen (2006, 2007), University of Calgary (1997; 2003), University of California at Davis (1997, 2005), Duke University (2008), University of Florida (2008, J. Wayne Reitz lecture, 2015), University of Gothenburg (2016), Karl Albrechts University, Kiel (2017), Louisiana State University (2008, Efferson Lecture), Luleå Technical University (2007), University of Minnesota (2014; 2018), North Carolina State University (2012), Norwegian University of Life Sciences (1998, 2001, 2002), Norwegian School of Economics and Business Administration (1997, 1999, 2002, 2006), Oregon State University (1997), University of Rhode Island (1997, 2007; 2013), University of Tromsø (1996), University of Trondheim (1997), University of Washington (2008; 2014), Washington State University (2008).

Appointments and awards

Quality of Research Discovery, 2018, American Applied Economics Association.

Honorable mention, Best Paper Award, *Marine Resource Economics*, 2018.

Guest Editor, *Aquaculture Economics and Management*, 2017, Issue 1.

Member of Global Think Tank for Ocean Partnerships for Sustainable Fisheries organized by WWF, 2016-

Associate editor, *Marine Policy*, 2015-.

Honorable mention, Best Paper Award, *Aquaculture Economics and Management*, 2014.

Guest Editor, *Aquaculture Economics and Management*, 2014, Issue 2.

Guest Editor, *Marine Resource Economics*, 2014, Issue 4.

Member of a Norwegian government expert committee to propose new regulations for management land-based aquaculture, 2013-2014.

Fulbright Grant to visit Duke University, 2012-2013.

Member of Editorial Board, *Food Economics*, 2011-2013.

Member of the Publication of Enduring Quality committee, American Environmental and Resource Economics Association, 2010-13.

President, International Association for Aquaculture Economics and Management (IAAEM), 2009- (Re-elected 2014).

Director, Marine Resource Economics Foundation, 2009-2015.

Member of a Norwegian government expert committee to respond to the market challenges following the financial crisis, 2009-2010.

Member of the the programme board for aquaculture research, Norwegian Research Council, 2009-2015.

Guest Editor, *Aquaculture Economics and Management*, 2009, Issue 2.

Guest Editor, *Marine Resource Economics*, 2008, Issue 4.

The Aquaculture Prize, Biomarin Vekst, 2007

Member of the Scientific Advisory Board Worldfish, 2007-2010.

Member of the Norwegian Technical-Scientific Academy (NTVA), 2007-.

Traveling grant from the Norwegian Research Council and visiting scholar at the University of Rhode Island, 2007-2008.

The Norwegian Fish- and Aquaculture Industry's research award, 2006.

Stavanger Forum's Research Award, 2005.

Member of a Norwegian government expert committee to propose new law for management of marine resources, 2003-2005.

Associate Editor, *Marine Resource Economics*, 2002-.

Lyse's research award, 2002.

Guest Editor, *Marine Resource Economics*, 2002, Issue 2.

Traveling grant for a one year stay at UBC in Vancouver from the Norwegian Research Council, 1994,

Ph.D. scholarship from the Norwegian Research Council, 1993.

Member of the scientific committee for Seafood: World Congress of Environmental and Resource Economics (2018), Seafood: A Global Commodity (2016), European Association of Fisheries Economics (2013), European Agricultural Economics Association (2011; 2017), European Association of Environmental and Resource Economics (2011; 2013; 2017), North American Association of Fisheries Economists (2012), IIFET 2006 in Portsmouth and Global Aquaculture 2007 in Qingdao.

Member of the organizing committee for the workshops Salmon Markets and Aquaculture Production (2013), Innovations and structural change in seafood markets and production (2010), Farming the Sea (2007), Centre for Fisheries Economics anniversary conference (2004) and Economics of Aquaculture (2001).

Referee in: *Agribusiness – An International Journal*, *Agricultural Economics*, *Ambio*, *Applied Economics*, *American Journal of Agricultural Economics*, *Annals of Operation Research*, *Applied Economics*, *Aquacultural Economics and Management*, *Aquaculture*, *Aquaculture International*, *Aquaculture Research*, *Aquatic Living Resources*, *Australian Journal of Agricultural and Resource Economics*, *Brussels Economic Review*, *Canadian Journal of Agricultural Economics*, *Conservation Biology*, *Ecological Applications*, *Ecological Economics*, *Empirical Economics*, *Energy – An International Journal*, *Energy Journal*, *Energy Economics*, *Energy Policy*, *Environmental and Resource Economics*, *European Review of Agricultural Economics*, *Fisheries Research*, *Fish and Fisheries*, *Food Economics*, *Food Policy*, *ICES Journal of Marine Sciences*, *International Journal of Production Economics*, *International Journal of Water Resources Development*, *Journal of Agricultural Economics*, *Journal of Agricultural and Applied Economics*, *Journal of Agricultural and Resource Economics*, *Journal of Applied Aquaculture*, *Journal of the Association of Environmental and Resource Economics*, *Journal of Economic Behavior and Organization*, *Journal of Environmental Economics and Management*, *Journal of Environment and Development*, *Journal of Environmental Management*, *Journal of Forest Economics*, *Journal of Productivity Analysis*, *Journal of Regional Studies*, *Journal of the World Aquaculture Society*, *Marine Fisheries Review*, *Marine Policy*, *Marine Resource Economics*, *Nature Communications*, *Nature Sustainability*, *Oxford Economic Papers*, *PLOS One*, *Proceedings of the National Academy of Sciences*, *Review of Agricultural Economics*, *Review of Agricultural, Food and Environmental Studies*, *Review of Fisheries and Aquaculture*, *Review of Aquaculture*, *Structural Change and Economic Dynamics*, *Samfunnsøkonomen*, *Sustainability*, *Scandinavian Journal of Hospitality and Tourism*.

Project evaluator for the Norwegian Research Council, Network Centres of Excellence of Canada, the European Commission and several research institutes and stations.

