

Curriculum Vitae

Name: Thomas Heckelei
Address: Mittweidaer Str. 2, D-53332 Bornheim
Date of birth: 11/18/1963
Current Position: Professor, Institute for Food and Resource
Economics (ILR), University of Bonn



Education

- Habilitation, University of Bonn, 2002
- Ph.D. Agricultural Economics and Economics at Washington State University, Pullman, August 1995
- "Diplom" in Agricultural Economics and Rural Sociology at University of Bonn, 1991
- Masters of Arts in Agricultural Economics at Washington State University, Pullman, 1990

Areas of Interest

- Quantitative Agricultural Policy Analysis (general program evaluation with respect to commodity, environmental and international trade policies)
- Methodology in Quantitative Economics, especially Econometrics

Academic Positions

- 1996 – 2001: Assistant professor (“Hochschulassistent”), University of Bonn
- February 2002 – July 2003: Assistant professor at the IMPACT Center/Department of Agricultural and Resource Economics, Washington State University,
- August 2003 – today: Professor, Institute of Agricultural Policy, Market Research, and Economic Sociology, University of Bonn

Honors and Memberships

- Exchange scholarship between Washington State University and University of Bonn, (WSU, Fall 89 and Spring 90).
- Outstanding graduation award for best Diplom in Agricultural Economics at the University of Bonn, Spring 1991.
- Scholarship of the German Academic Exchange Service (DAAD) for participation in the Ph.D.-Program at Washington State University, 1992/1993
- Stipend of the "Deutsche Forschungsgemeinschaft" (DFG, German Research Foundation) in support of research on Positive Mathematical Programming models: September 2000 – August 2001
- Editor of the European Review of Agricultural Economics
- Board member of the International Agricultural Trade Research Council (IATRC)
- Chair of the Taiwanese-German Association for Economic and Social Research
- American Agricultural Economics Association (AAEA)
- European Association of Agricultural Economists (EAAE)
- German Association of Agricultural Economists (GeWiSoLa)

Publications

Peer reviewed

- Therond, O., H. Belhoucette, S. Janssen, K. Louhichi, F. Ewert, J.-E. Bergez, J. Wery, T. Heckeley, J. Alkan Olsson, D. Leenhardt and M. Van Ittersum (2009): Methodology to translate policy assessment problems into scenarios: the example of the SEAMLESS integrated framework , *Environmental Science & Policy* (in press).
- Zimmermann, A., T. Heckeley and I. Pèrez Dominguez (2009): Modelling farm structural change for integrated ex-ante assessment: review of methods and determinants , *Environmental Science & Policy* (in press).
- Pèrez Dominguez, I., I. Bezlepina, T. Heckeley, E. Romstad, A. Oude Lansink and A. Kanellopoulos (2009): Capturing market impacts of farm level policies: a statistical extrapolation approach using biophysical characteristics and farm resources , *Environmental Science & Policy* (in press).
- Ewert, F., M. Van Ittersum, I. Bezlepina, O. Therond, E. Andersen, H. Belhoucette, C. Bockstaller, F. Brouwer, T. Heckeley, S. Janssen, R. Knapen, M. Kuiper, K. Louhichi, J. Alkan Olsson, N. Turpin, J. Wery, J. E. Wien and J. Wolf (2009): A methodology for enhanced flexibility of integrated assessment in agriculture , *Environmental Science & Policy* (in press).
- Jansson, T., and T. Heckeley, (2009): A new estimator for trade costs and its small sample properties. *Economic Modelling* 26(2): 489-498.
- Van Ittersum, M.K., F. Ewert, T. Heckeley J. Wery, J. Alkan Olsson, E. Andersen, I. Bezlepina, F. Brouwer, M. Donatelli, G. Flichmann, L. Olsson, A. E. Rizzoli, T. van der Wal, J. E. Wien, J. Wolf (2008): Integrated assessment of agricultural systems – A component-based framework for the European Union (SEAMLESS). *Agricultural Systems* 96: 150-165.

- WIECK, C., and T. HECKELEI (2007): Determinants, Differentiation, and Development of Short-term Marginal Costs in Dairy production: An Empirical Analysis for Selected Regions of the EU. *Agricultural Economics* 36(2): 202-220.
- BRITZ, W., T. HECKELEI, I. PÉREZ (2006): Effects of Decoupling on Land Use: An EU wide, regionally differentiated Analysis. *Agrarwirtschaft* 55(5/6): 215-226.
- CHADDAD, F., M. L. COOK, and T. HECKELEI (2005): Testing for the Presence of Financial Constraints in U.S. Agricultural Cooperatives: An Investment Behavior Approach. *Journal of Agricultural Economics* 56(3), 2005: 385-97.
- HILL, B., A. GREER, T. HECKELEI, and P. WITZKE (2004): Agriculture, Forestry and Fisheries. In: H. Compston (ed.), *Handbook of Public Policy in Europe – Britain, France and Germany*, Palgrave MacMillan: 175-193.
- CHOUINARD, H., R. HUFFAKER, T. HECKELEI, and T.I. WAHL (2004): The Marriage between Humanitarian Assistance and Agricultural Interests in U.S. Overseas Aid Programs: Reconcilable Differences? *Journal of Humanitarian Assistance*, <http://www.jha.ac/articles/a136.htm>.
- BRIAND, G., T. HECKELEI, S. C. MATULICH, and R.C. MITTELHAMMER (2004): Managing Fishing Power: The Case of Alaska Red King Crab. *Canadian Journal of Fisheries and Aquatic Sciences* 61(1): 43-53.
- BRITZ, W., T. HECKELEI, and H. WOLFF (2003): Symmetric Positive Equilibrium Problem: A Framework for Rationalizing Economic Behavior with Limited Information: Comment. *American Journal of Agricultural Economics* 85(4):1078-1081.
- HECKELEI T., and H. WOLFF (2003): Estimation of Constrained Optimisation Models for Agricultural Supply Analysis Based on Generalised Maximum Entropy. *European Review of Agricultural Economics*, 30(1):27-50.
- HECKELEI, T., and R. C. MITTELHAMMER (2003): Bayesian Bootstrap Multivariate Regression. *Journal of Econometrics* 112: 241-264.
- BUCHENRIEDER, G., S. von CRAMON-TAUBADEL, T. HECKELEI, P. WEHRHEIM and C. WEISS (2002): Zukunft der agrar- und ernährungsökonomischen Forschung und Lehre. *Agrarwirtschaft* 51(4): 189-191.
- HECKELEI, T., and W. BRITZ (2000): Positive Mathematical Programming with Multiple Data Points: A Cross-Sectional Estimation Procedure. *Cahiers d'Economie et Sociologie Rurales* 57:28-50.
- HECKELEI, T. , E. KREBS, C. MÖLLMANN and M.v. LAMPE (1998): Vergleichende Analyse von Projektionen zur Entwicklung des Weizenpreises, *Agrarwirtschaft* 47: 423-428.
- HECKELEI, T., R. C. MITTELHAMMER and T. I. WAHL (1996): Evaluation of Equality and Inequality Restrictions for a Meat Demand System: A Robust Bayesian Bootstrap Approach. *Proceedings of the North American Meeting of the International Society for Bayesian Analysis*, Chicago.
- HECKELEI, T., and R. C. MITTELHAMMER (1996): Bayesian Bootstrap Inference via Regression Structure Likelihood. In: T.B.Fomby and R.C. Hill (eds.), *Advances in Econometrics* Vol. 11A:179-209.
- HECKELEI, T., WITZKE, H.P. (1995): Gedanken zu Aufgaben und Wettbewerbsfähigkeit der deutschen Agrarökonomie, *Agrarwirtschaft* 43:430-431.

Proceedings and conference contributions / working papers / book chapters

- JANSSEN, S., K. LOUHICHI, A. KANELLOPOULOS, P. ZANDER, G. FLICHMANN, H. HENGSDIJK, H. LI, T. HECKELEI, G. STOKSTAD, N. BORKOWSKI, M. HECKER, A. OUDE LANSINK, M. BLANCO, E. MEUTER and M. VAN ITTERSUM (2009): Farming Systems SIMulator: First generic bio-economic

- farm model , in: Integrated Assessment of Agriculture and Sustainable Development (AgSAP), 10-12 March, 2009, Egmont an Zee (The Netherlands), p. 256-257.
- ZIMMERMANN, A. and T. HECKELEI (2009): Farm structural change in European regions , in: Integrated Assessment of Agriculture and Sustainable Development (AgSAP), 10-12 March, 2009, Egmont an Zee (The Netherlands), p. 168-169.
- EWERT, F., M. VAN ITTERSUM, I. BEZLEPKINA, O. THEROND, E. ANDERSEN, H. BELHOUCLETTE, C. BOCKSTALLER, F. BROUWER, T. HECKELEI, S. JANSSEN, B. JONSSON, M.J.R. KNAPEN, M. KUIPER, K. LOUHICHI, J. ALKAN OLSSON, L. RUINELLI, A. EMILIO RIZZOLI, N. TURPIN, J. WERY, J. E. WIEN and J. WOLF (2009): A methodology for enhanced flexibility of integrated assessment of policy impacts in agriculture , in: Integrated Assessment of Agriculture and Sustainable Development (AgSAP), 10-12 March, 2009, Egmont an Zee (The Netherlands), p. 130-131
- PÈREZ DOMINGUEZ, I., I. BEZLEPKINA, A. KANELLOPOULOS, T. HECKELEI and A. OUDE LANSINK (2009): EXPAMOD – connecting the farm and market levels , in: Integrated Assessment of Agriculture and Sustainable Development (AgSAP), 10-12 March, 2009, Egmont an Zee (The Netherlands), p. 58-59.
- EWERT, F., M. VAN ITTERSUM, O. THEROND, I. BEZLEPKINA, E. ANDERSEN, T. HECKELEI and G. FLICHMANN (2009): Complex scaling issues in integrated assessment modelling: Approaches used and their integration into SEAMLESS-IF , in: Integrated Assessment of Agriculture and Sustainable Development (AgSAP), 10-12 March, 2009, Egmont an Zee (The Netherlands), p. 56-57.
- MARTIN VAN ITTERSUM, FRANK EWERT, ERLING ANDERSEN, FLOOR BROUWER, THOMAS HECKELEI, JOHANNA ALKAN OLSSON, JACQUES WERY and JAN ERIK WIEN (2009): Integrated assessment of agricultural systems: On integrated science and science integration , in: Integrated Assessment of Agriculture and Sustainable Development (AgSAP), 10-12 March, 2009, Egmont an Zee, (The Netherlands), p. 6-7.
- Christine Wieck, Dominik Fortenbacher and Thomas Heckeley (2009): Aspekte der Agrarpolitik 2008 , Agrarwirtschaft, vol. 58, p. 1-14.
- BRITZ, W. and T. HECKELEI (2008): Recent Development in EU Policies - Challenges for Partial Equilibrium Models, invited paper presented at the 107th EAAE Seminar „Modeling of Agricultural and Rural Development Policies”. January 29 -February 1st Sevilla, Spain.
- WEIBLEDER, L., M. ADENÄUER, and T. HECKELEI (2008): Impact assessment of trade liberalisation between EU and Mercosur countries, selected paper presented at the 107th EAAE Seminar „Modeling of Agricultural and Rural Development Policies”. January 29th -February 1st, Sevilla, Spain.
- GÖTZ, C., T. HECKELEI and B. RUDLOFF (2008): What makes countries initiate WTO disputes on food-related issues?, selected paper presented at the 48. Jahrestagung der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaues e.V., September 24 - 26 Bonn, Germany.
- RUDLOFF, B., T. HECKELEI und S. RASCH (2008): Aspekte der Agrarpolitik 2007. Agrarwirtschaft 57(1): 1-14
- WIECK C. and T. HECKELEI (2007): Parametric or nonparametric regression approaches to the estimation of marginal costs in dairy production? A comparison of estimation results, selected paper presented at the AAEA Annual Meeting, Portland, OR, USA.
- BRITZ, W., T. HECKELEI, F. JUNKER and I. PEREZ (2007): Analyse der Auswirkungen von Handlungspolitikszenarien auf die landwirtschaftlichen Märkte, in: Tagungsband der 19. und 20. Wissenschaftlichen Fachtagung: Landwirtschaft 2015, 10-22

- KEMPEN, M., T. HECKELEI and W. BRITZ (2006): Validation of Spatially Explicit Land Use Choices Based On Probabilistic Theory, selected paper presented at the International Conference on Regional and Urban Modeling, June 1-2, 2006 Brussels, Belgium.
- HECKELEI, T., R. C. MITTELHAMMER and W. BRITZ (2005): A Bayesian Alternative to Generalized Cross Entropy Solutions to Underdetermined Models. Contributed paper presented at the 89th EAAE Symposium „Modelling Agricultural Policies: State of the Art and New Challenges“, February 3-5, Parma, Italy.
- HECKELEI, T. and W. BRITZ (2005): Models based on Positive Mathematical Programming: State of the Art and Further Extensions. in: Modelling Agricultural Policies: State of the Art and New Challenges, Proceedings of the 89th European Seminar of the EAAE, Parma, Italy, February 3-5, 200, 48-73.
- ADENÄUER, M. and T. HECKELEI (2005): Economic Incentives to Supply Sugar Beet in Europe. in: Modelling Agricultural Policies: State of the Art and New Challenges, Proceedings of the 89th European Seminar of the EAAE, Parma, Italy, February 3-5, 200, 588-608
- KEMPEN, M., T. HECKELEI, W. BRITZ (2005): A Statistical Approach for Spatial Disaggregation of Crop Production in the EU. in: Modelling Agricultural Policies: State of the Art and New Challenges, Proceedings of the 89th European Seminar of the EAAE, Parma, Italy, February 3-5, 200, 810-830
- WOLFF, H., T. HECKELEI, and R.C. MITTELHAMMER (2004): Imposing Monotonicity and Curvature on Flexible Functional Forms. Paper presented at the annual meeting of the American Agricultural Economics Association, Denver, July 2004.
- WIECK, C., T. HECKELEI (2004): Development of Marginal Cost Distributions in Dairy Production Regions of the EU. Paper presented at the annual meeting of the American Agricultural Economics Association, Denver, July 2004.
- XI, J., R.C. MITTELHAMMER, and T. HECKELEI (2004): A QUAIDS Model of Japanese Meat Demand. Paper presented at the annual meeting of the American Agricultural Economics Association, Denver, July 2004.
- JANSSON, T. and T. HECKELEI (2004). Estimation of a transportation model using a mathematical program with equilibrium constraints. Paper presented at the 7th Annual Conference on Global Economic Analysis, June 17-19, 2004, World Bank, Washington D.C., GTAP resource 1501.
- CHOUINARD, H., T. HECKELEI, R. HUFFAKER, and T.I. WAHL (2003): The Law and Economics of Federal-Reserve Wheat Held in Private Storage Warehouses. Paper presented at the annual meetings of the Western Agricultural Economics Association, Denver, July.
- BRIAND, G., T. HECKELEI, S. C. MATULICH, and R.C. MITTELHAMMER (2003): Efficiency and Equity of Pot Limits: The Case of Alaska Red King Crab. Presentation at the North American Association of Fisheries Economists Forum, Williamsburg, Virginia, May 4-7.
- CHADDAD, F. and T. HECKELEI (2003): Access to Capital and Firm-Level Investment Behavior in Food Industries: A Comparison of Cooperatives and Publicly Traded Firms. Paper presented at the annual meeting of the American Agricultural Economics Association, Montreal, July 2003.
- XI, J., T. HECKELEI, and R.C. MITTELHAMMER (2003): Semiparametric Bayesian Analysis of Simultaneous Systems With an Application to Japanese Meat Demand. Paper presented at the annual meeting of the American Agricultural Economics Association, Montreal, July 2003.
- HECKELEI, T. and R.C. MITTELHAMMER (2002): Simultaneous Equations Bayesian Bootstrap. Paper presented at the Annual Meeting of the American Agricultural Economics Association, Long Beach, July 2002.

- WITZKE, H.P. and T. HECKELEI (2002): EU Sugar Policy Reform: Quota Reduction and Devaluation. Paper presented at the Annual Meeting of the American Agricultural Economics Association, Long Beach, July 2002.
- HECKELEI T. and H. WOLFF (2001): Ansätze zur (Auf-)lösung eines alten Methodenstreits: Ökonometrische Spezifikation von Programmierungsmodellen zur Agrarangebotsanalyse. Paper presented at the 41st annual meeting of the German association of agricultural economists (Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaues –GeWiSoLa), Braunschweig.
- HECKELEI, T., and W. BRITZ (2001): Concept and Explorative Application of an EU-wide Regional Agricultural Sector Model (CAPRI-Projekt). In: Heckeley, T., H.P. Witzke, and W. Henrichsmeyer (Eds.): *Agricultural Sector Modelling and Policy Information Systems*. Proceedings of the 65th EAAE Seminar, March 29-31, 2000 at Bonn University, Vauk Verlag Kiel, pp. 281-290.
- HECKELEI, T., H.P. WITZKE, and W. HENRICHSMEYER (Eds.) (2001): *Agricultural Sector Modelling and Policy Information Systems*. Proceedings of the 65th EAAE Seminar, March 29-31, 2000 at Bonn University, Vauk Verlag Kiel.
- BRITZ. W. and T. HECKELEI (2000): Effekte von Agenda 2000 auf den Deutschen und Französischen Agrarsektor - Anwendung des regionalisierten Modellsystems CAPRI. Paper presented at the joint meeting of the German and French Agricultural Economics Associations, Strasbourg, August 2000.
- HECKELEI, T., and W. BRITZ (2000): A Cross Sectional Maximum Entropy Estimation of Cost Functions for Regional Programming Models. Paper presented at the Conference of the International Association of Agricultural Economists (IAAE) in Berlin, August 2000.
- SANDER, R., H. WOLFF, W. BRITZ, and T. HECKELEI (2000): Die Veränderung der Regionalen Wettbewerbsfähigkeit der Ölsaaten- und Getreideproduktion unter dem Einfluss der GAP-Reform 1992 – Analyse auf Grundlage einer EU-weiten Regionalisierten Datenbasis. In: Wettbewerbsfähigkeit und Unternehmertum in der Land- und Ernährungswirtschaft. *Schriften der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaues e.V.*, Band 37, S. 21-28, Münster-Hiltrup
- HECKELEI, T., and W. BRITZ (1999): Maximum Entropy Specification of PMP in CAPRI. CAPRI - working paper 99-08, Institute of Agricultural Policy, University of Bonn.
- BRITZ, W. and HECKELEI, T. (1999): Calibration of feed requirements and price determination of feed in CAPRI. CAPRI - working paper 99-06, Institute of Agricultural Policy, University of Bonn.
- HECKELEI, T. (1998): Quantitative Modelle als Grundlage des Politikdialogs. In: Agrarwirtschaft in der Informationsgesellschaft. *Schriften der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaues e.V.*, Band 35, S. 39-47, Münster-Hiltrup.
- HECKELEI, T. , E. KREBS, C. MÖLLMANN and M.v. LAMPE (1998): Comparative Analysis of World Market Projections with Special Regard to Wheat Prices. *Agricultural and Resource Economics*, Discussion Paper 98-02, Institute of Agricultural Policy, University of Bonn.
- HECKELEI, T. (1997): Positive Mathematical Programming: Review of the Standard Approach. CAPRI - working paper 97-03, Institute of Agricultural Policy, University of Bonn.
- HECKELEI, T., R. C. MITTELHAMMER and T.I. WAHL (1997): Bayesian Analysis of a Japanese Meat Demand System: A Robust Likelihood Approach. *Agricultural and Resource Economics*, Discussion Paper 97-01, Institute of Agricultural Policy, University of Bonn
- BRITZ, W. and HECKELEI, T. (1997): Pre-study for a medium-term simulation and forecast model of the agricultural sector for the EU. CAPRI - working paper 97-01, Institute of Agricultural Policy, University of Bonn.

- HECKELEI, T. (1997): Generic Robust Bayesian Regression. Presentation at the Econometrics Seminar of the Center of Operations Research and Econometrics (CORE), Catholic University of Leuven, Louvain-la-Neuve, Belgium.
- WITZKE, H.P., and T. HECKELEI (1997): Betrieblicher Strukturwandel unter dem Einfluß ökonomischer Rahmenbedingungen. In: Land- und Ernährungswirtschaft in einer erweiterten EU, *Schriften der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaues*, Münster-Hiltrup, Band 34, S.279-287.
- HECKELEI, T., R. C. MITTELHAMMER and T.I. WAHL (1996a): Robust Bayesian Analysis of a Japanese Meat Demand System, Paper presented at the VIIIth Congress of the European Association of Agricultural Economists, Edinburgh.
- HECKELEI, T., R. C. MITTELHAMMER and T. I. WAHL (1996b): Evaluation of Equality and Inequality Restrictions for a Meat Demand System: A Robust Bayesian Bootstrap Approach. Paper presented at the North American Meeting of the International Society for Bayesian Analysis, Chicago.
- WITZKE, H.P., HECKELEI, T. (1996): Adjustment Cost and Partial Adjustment Models for German Agriculture. In: Märkte der Agrar-und Ernährungswirtschaft, *Schriften der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaues*, Band 33, S.125-137, Münster-Hiltrup.
- HECKELEI, T., R. C. MITTELHAMMER (1994): Robust Bayesian Bootstrap Regression. Paper presented at the annual Meeting of the American Agricultural Economics Association, San Diego.

Degree-related publications

- HECKELEI, T. (2002): Calibration and Estimation of Programming Models for Agricultural Supply Analysis. Habilitation Thesis, University of Bonn, Germany.
- HECKELEI, T. (1995): Robust Bayesian Estimation of Econometric Models: Theory and Application. Ph.D. Thesis, Washington State University.
- HECKELEI, T. (1990): Economic Efficiency in Water Resource Allocation. Special Project for Masters Degree. Washington State University.
- HECKELEI, T. (1989): Handelsintensitäten als Instrument zur Analyse bilateraler Handelsströme am Beispiel des EG-Weizenhandels. Diplom Thesis, University of Bonn.