

CURRICULUM VITAE 简历

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AUSBILDUNG - EDUCATION - 教育

1988 Habilitation (statistics, econometrics), Universität Bonn
1982 Dr.rer.nat. (mathematics), Universität Heidelberg
1978 Diploma in mathematics, Universität Karlsruhe
1972 Abitur, Goethe-Gymnasium Gaggenau

BERUFLICHER WERDEGANG - PROFESSIONAL POSITIONS - 专业职位

1992- Universitätsprofessor, Humboldt-Universität zu Berlin
1990-1992 Professeur Ordinaire, CORE, Université Catholique de Louvain
1989-1990 Visiting Professor, CORE, Université Catholique de Louvain
1988-1989 Privatdozent Universität Bonn
1985-1988 Wissenschaftlicher Mitarbeiter, Universität Bonn
1983-1985 Wissenschaftlicher Mitarbeiter, Universität Frankfurt

- 2002 - 2013 Advisor: Guanghai School of Management, Beijing University
- 2001 - 2003 Vice President IASC (Int. Ass. of Statistical Computing)
- 2000 - 2004 Advisory Board: Ferrell Asset Management, Singapore
- 1997 Fellow International Statistical Institute
- 1992 Fellow Institute of Mathematical Statistics

ORGANISATION VON TAGUNGEN - ORGANIZATION OF MEETINGS - 组织会议

- 2011 Humboldt-Princeton Meeting, Berlin
- 2010 Chinese Week, Berlin
- 2010 200 Years Finance and Statistics, Berlin
- 2010 Weather Derivatives, Berlin
- 2009 Demographic Risk, Berlin
- 2009 Humboldt-Princeton Meeting, Princeton
- 2009 Structure Adapting Methods, Berlin
- 2009 Financial Statistics and Financial Econometrics, Chengdu, China
- 2008 ECON BOOT CAMP, Schülerworkshop
- 2003-2008 Hermann Otto Hirschfeld Lectures
- 2004-2008 CASE Distinguished Lecture Series
- 2007 Copulae and their Applications, Berlin
- 2007 Humboldt-Princeton Meeting, Berlin
- 2006 Data and Information Visualization, Berlin
- 2005 Factor Identification in High Dimensional Time Series, Berlin
- 2003 The Art of Semiparametrics, Berlin
- 2002 Computational Finance, Berlin
- 2002 COMPSTAT conference, IASC world meeting, Berlin
- 2001 Highdimensional Nonlinear Statistical Modeling, Wulkow
- 2000 Complexity control for strongly dependent systems, Oberwolfach
- 1999 Measuring Risk in Complex Stochastic Systems, Berlin
- 1998 Germany's labor market problems, Berlin
- 1996 Stochastics, Information and Markets, Berlin
- 1995 Smoothing and Resampling in Economics, Berlin
- 1993 Computeraided semiparametric modelling, Berlin
- 1993 Curves, Images, Massive Computation, Oberwolfach
- 1991 Franco Belgian Meeting of Statisticians, CORE
- 1990 Discrete Choice Models, CORE
- 1983 Robust and Nonlinear Time Series Analysis; Heidelberg

DOKTORANDEN - PH.D. STUDENTS - 博士生

Ph. Vieu (1987), Professeur, Universite Paul Sabatier, Toulouse


- Contributions a l'estimation fonctionnelle*
P. Sarda (1988), Professeur, Universite Mirail, Toulouse
Quelques aspects de l'estimation non-parametrique
- J. Rodriguez Poo (1992), Professor, Instituto Cántabro de estadística, Santander
Constrained Nonparametric Regression
- A. Desdoigts (1994), Professeur, Universite de Dijon
Changes in the world income distribution: a nonparametric approach to challenge the neoclassical convergence argument
- B. Turlach (1994), Lecturer, University of Western Australia, Perth
Computer-aided Additive Modeling
- I. Proenca (1995), Professor, Universita tecnica Lisboa, Lissabon
Testing the link specification in Binary choice Models. A semiparametric approach.
- M. Bianchi (1995), Thames River Capital (UK) Limited, London
Time Series Modelling in the Presence of Structural Change.
- S. Klinke (1995), Humboldt-Universität zu Berlin, Berlin
Data Structures for Computational Statistics
- I. Bertschek (1996), Research director, ZEW Mannheim
Semiparametric Analysis of Innovative Behaviour
- Ch. Hafner (1996), Professeur, Université Catholique de Louvain
Nonlinear time series analysis with applications to FX rate volatility
- Th. Kötter (1996), SAP Software, Berlin
*Entwicklung statistischer Software:
Entwurf-Implementation-Netzwerkschnittstellen-Anwendungen*
- St. Sperlich (1998), Professor, Université de Geneve, Geneve
Additive Modelling and Testing Model Specification
- Jun Zheng (2002), Industrial and Commercial Bank of China, Beijing
*Wavelet Application in Nonlinear Time Series Modeling and Frequencies
Detection of Almost Periodically Correlated Processes*
- T. Kleinow (2002), Lecturer, Heriot-Watt University, Edinburgh
Testing continuous time models in financial markets
- R. Schulz (2003), Lecturer, Robert Gordon University Aberdeen, Aberdeen
Valuation of properties and economic models of real estate markets
- J. Tamine (2003), Research Analyst, Societe Generale, Paris
Approche fonctionnelle de la robustesse des estimateurs nonparamétriques par noyau
- Hizir Sofyan (2003), Professor, Syiah Kuala University, Aceh, Indonesien
Clustering and fuzzy techniques: theory, implementation and applications
- H. Lehmann (2004), SAP Software, Berlin
Client/Server based statistical Computing
- D. Mercurio (2004), Die Erste Bank, Wien
Adaptive Estimation for Financial Time Series
- M. Fengler (2004), Professor, Universität St. Gallen, St. Gallen
Semiparametric Modelling of Implied Volatility

- M. Benko (2006), Deutsche Bank, London
Functional Data Analysis with Applications in Finance
- Y. Chen (2007), National University of Singapore, Singapore
Adaptive Risk Management
- K. Detlefsen (2007), Commerzbank, London
Equity Derivatives Markets
- R. Moro (2008), Lecturer, Brunel University, London
The Application of Support Vector Machines to Default Risk Analysis
- S. Borak (2008), Deutsche Bank, London
Dynamic Semiparametric Factor Models
- T. Ahmad (2008), Professor, University of Lattakia, Syria
Design and Evaluation of Statistics E-Learning Systems
- E. Giacomini (2009), Deutsche Bank, Frankfurt
Time Varying Adaptive Copulae
- U. Ziegenhagen (2009), Sal. Oppenheim, Köln
Essays on the use of e-Learning in Statistics
- J. Mungo (2009), Humboldt-Universität zu Berlin
Modeling High Dimensional Time Series for Factors Driving Volatility Strings
- A. V. Andriyashin (2009), Corecam AG, Zug
Stock Picking via Nonsymmetrically Pruned Binary Decision Trees
- D. Colangelo (2009), Universität St. Gallen
Semi-parametric Implied Volatility Surface Models and Forecasts Based on a Regression Tree-boosting Algorithm
- B. Lopez Cabrera (2010), Humboldt-Universität zu Berlin
Weather Risk Management: CAT Bonds and Weather Derivatives
- R. Song Song (2010), University of Texas, Austin, TX
Confidence Bands in Quantile Regression and Generalized Dynamic Semiparametric Factor Models
- R Timofeev (2010), Deutsche Bank, Frankfurt
Statistical Aspects of Stock Picking and Risk-Averse Behaviour
- K. Hanewald (2010), University of New South Wales, Sydney
Stochastic Mortality and Demographic Risks
- M. Wersing (2011), TU Berlin
Real Estate Valuation and Investment Strategies

BÜCHER, PROCEEDINGSBÄNDE - PROCEEDINGS - 书籍, 书籍出版物 (论文)

Härdle, W. and Simar, L. (2012) *Applied Multivariate Statistical Analysis*, 3rd ed., Springer Verlag, Heidelberg, ISBN 978-3-642-17228-1, e-ISBN 978-3-642-17229-8, DOI 10.1007/978-3-642-17229-8 (539 p)

Cizek, P., Härdle, W. and Weron, R. (2011) *Statistical Tools in Finance and Insurance Springer 2nd edition Verlag, Heidelberg. ISBN 978-3-642-18061-3 (420 p)*

Härdle, W. and Simar, L. (2011) 应用多元统计分析  Chinese translation of *Applied Multivariate Statistical Analysis, Beijing University Press, ISBN: 978-7-301-16772-4/F-2670 (445 p)*

Franke, J., Härdle, W. and Hafner, Ch. (2011) *Statistics of Financial Markets: An Introduction. 3rd. Ed. Springer Verlag, Heidelberg. ISBN: 978-3-642-16520-7 (599 p)*
<http://dx.doi.org/10.1007/978-3-642-16521-4>

Duan, J.C., Gentle, J.E. and Härdle, W. (2012) *Handbook of Computational Finance. Springer Verlag, Heidelberg. ISBN 978-3-642-17253-3 (900 p), DOI 10.1007/978-3-642-17254-0 1*

Borak, S., Härdle, W. and Lopez Cabrera (2010) *Statistics of Financial Markets, Exercises and solutions, ISBN 978-3-642-11133-4, (200 p)*

Jaworski, P., Durante, F., Härdle, W. and Rychlik, T. (eds) (2010) *Copula Theory and Its Applications, Proceedings of the Workshop Held in Warsaw, 25-26 September 2009, Lecture Notes in Statistics, ISBN 978-3-642-12464-8, (327 p)*

Härdle, W., Hautsch, N. and Overbeck, L. (2009) *Applied Quantitative Finance, 2nd Ed. Springer Verlag, Heidelberg. ISBN: 978-3-540-69177-8 (447 p)*

Franke, J., Härdle, W. and Hafner, Ch. (2008) *Statistics of Financial Markets: An Introduction. 2nd. Ed. Springer Verlag, Heidelberg. ISBN: 978-3-540-76269-0 (501 p)*

Chen, C.H., Härdle, W. and Unwin, A. (2008) *Handbook of Data Visualization. Springer Verlag, Heidelberg. ISBN 3-540-33036-4 (936 p)*

Härdle, W. and Simar, L. (2007) *Applied Multivariate Statistical Analysis, 2nd ed., Springer Verlag, Heidelberg, ISBN: 978-3-540-72243-4 (458 p)*

Härdle, W. and Hlavka, Z. (2007) *Multivariate Statistics: Exercises and Solutions. Springer Verlag, Heidelberg. ISBN: 978-0-387-70784-6 (383 p)*

Härdle, W. , Mori, Y. and Vieu, Ph. (2006) *Statistical methods in Biostatistics and Related Fields. Springer Verlag, Heidelberg. ISBN 3-540-32690-1 (420 p)*


Sperlich, St., Härdle, W. and Aydinli, G. (2006) *The Art of Semiparametrics Springer Verlag, Heidelberg. ISBN 3-7908-1700-7 (178 p)*

Cizek, P., Härdle, W. and Weron, R. (2005) *Statistical Tools in Finance and Insurance Springer Verlag, Heidelberg. ISBN 3-540-22189-1 (535 p)*

Gentle, J. Härdle, W. and Mori, Y. (2004) *Handbook of Computational Statistics, Concepts and Methods Springer Verlag, Heidelberg. ISBN 3-540-40464-3 (1078 p)*

Franke, J., Härdle, W. and Hafner, Ch. (2004) *Einführung in die Statistik der Finanzmärkte. (2te Auflage) Springer Verlag, Heidelberg. ISBN 3-540-41722-2, (428 p)*

Härdle, W., Müller, M., Sperlich, St. and Werwatz, A. (2004) *Nonparametric and Semiparametric Models Springer Verlag, Heidelberg. ISBN 3-540-20722-8 (340 p)*


Härdle, W., Hlavka, Z. and Klinke, S. (2003)  統計解析環境XploRe – アプリケーションガイド Toukei Kaiseki Kankyo XploRe – Apurikeishon gaido. Japanese translation of XploRe – Application Guide, (translated by Tomoyuki Tarumi, Toshinari Kamakura, Yuichi Mori, Yashiro Yamamoto, Junji Nakano and Hiroshi Yadohisa) *Kyoritsu Shuppan Publisher Tokio ISBN 4-320-01745-5.*

Härdle, W., Simar, L. (2003) *Applied Multivariate Statistical Analysis. Springer Verlag, Heidelberg. ISBN 3-540-03079-4 (486 p)*

Härdle, W., Rönz, B. (2002) *COMPSTAT 2002 Proceedings. Physica Verlag, Heidelberg. ISBN 3-7908-1517-9 (648 p)*

Härdle, W., Kleinow, T. and Stahl, G. (2002) *Applied Quantitative Finance. Springer Verlag, Heidelberg. ISBN 3-540-434607 (402 p)*

Härdle, W. and Rönz, B. (2001) *MM*Stat - eine interaktive Einführung in die Welt der Statistik. Springer Verlag, Heidelberg. ISBN 3-540-14893-0 (CD ROM + software)*

Härdle, W., Klinke, S. and Müller, M. (2001)  統計解析環境XploRe – ラーニングガイド Toukei Kaiseki Kankyo XploRe – rahningu gaido. Japanese translation of XploRe – Learning Guide, (translated by Tomoyuki Tarumi, Yuichi Mori, Yashiro Yamamoto, Junji Nakano and Hiroshi Yadohisa) *Kyoritsu Shuppan Publisher Tokio ISBN 4-320-01678-5 C3041.*

Härdle, W., Hlavka, Z. and Klinke, S. (2000) *XploRe – the Application Guide. Springer Verlag, Heidelberg. ISBN 3-540-67545-0 , (525 p)*

Härdle, W., Liang, H and Gao, J. (2000) *Partially Linear Models. Physica Verlag, Heidelberg. ISBN 3-7908-1300-1, 17 figs, 11 tabs , (203 p)*

Franke, J., Härdle, W. and Stahl, G. (eds.) (2000) Measuring Risk in Complex Stochastic Systems. *Lecture Notes in Statistics, Springer Verlag, Heidelberg. ISBN 0-387-98996-X (272 p)*

Härdle, W., Klinke, S. and Müller, M. (1999) XploRe – the statistical computing environment. *CD-ROM, with Handbook Learning Guide. Springer Verlag, Heidelberg. ISBN 3-540-14767-5, (520 p)*

Härdle, W., Kerkyiacharian, G., Picard, D. and Tsybakov, A. B. (1998) Wavelets, Approximation and Statistical Applications. *Lecture Notes in Statistics, 129, Springer Verlag, Heidelberg. ISBN 0-387-98453-4, (265 p)*

Härdle, W. and Schimek, M. (eds.) (1996) Statistical Theory and Computational Aspects of Smoothing. *Physica Verlag, Heidelberg. ISBN 3-7908-0930-6, (265 p)*

Mattern, R., Härdle, W. and Kallieris, D. (1995) Biomechanik der Seitenkollision. *Berichte der Bundesanstalt für Straßenwesen (BAST), Heft M43. ISBN 3-89429-621-6, (134 p)*

Härdle, W., Klinke, S. and Turlach, B. (1995) XploRe - an interactive statistical computing environment. *Springer Verlag, New York. ISBN 0-387-94429-X (387 p)*

Härdle, W. and Simar, L. (eds.) (1993) Computer Intensive Methods in Statistics. *Physica Verlag. ISBN 3-7908-0677-3 (176 p)*

Härdle, W. and Manski, C. (eds.) (1993) Nonparametric and Semiparametric Approaches to Discrete Choice Analysis. *Journal of Econometrics, Vol. 58.*

Härdle, W. (1993)  Прикладная непараметрическая регрессия Prikladnaja Neparametricheskaya Regressija. *Russian Translation of "Applied Nonparametric Regression", MIR Publishers Moscow. (348 p)*

Härdle, W. (1991) Smoothing Techniques, with Implementation in S. *Springer Verlag, Heidelberg New York. ISBN 3-540-97367-2 (261 p)*

Härdle, W. (1990) Applied Nonparametric Regression. *Econometric Society Monograph Series 19, Cambridge University Press. ISBN 0-521-42950-1 (333 p)*

Györfi, L., Härdle, W., Sarda, P. and Vieu, P. (1989) Nonparametric Curve Estimation from Time Series. *Lecture Notes in Statistics, 60. Springer Verlag, Heidelberg ISBN 3-540-97174-2 (152 p)*

Kallieris, D. Mattern, R. and Härdle, W. (1989) Verhalten des Eurosid beim 90 Grad Seitenaufprall im Vergleich zu PMTO sowie US-SID, HYBRID II und APROD. *Forschungsvereinigung Automobiltechnik e.V. (FAT) Frankfurt FAT Schriftenreihe Nr. 79.*

Kallieris, D., Mattern, R. and Härdle, W. (1986) Belastbarkeitsgrenzen und Verletzungsmechanik des angegurteten PKW-Insassen beim Seitenaufprall. *Forschungsvereinigung Automobiltechnik e.V. (FAT) Frankfurt FAT Schriftenreihe Nr. 60.*

Franke, J., Härdle, W. and Martin, D. (eds.) (1984) Robust and Nonlinear Time Series Analysis. *Lecture Notes in Statistics, 26. Springer Verlag, Heidelberg ISBN 3-540-96102-X (286 p)*

Mattern, R. and Härdle, W. (1981) Umskalierung von Verletzungsdaten nach AIS 80. Suppl. zur FAT Reihe Nr.15 "Belastbarkeitsgrenzen des angegurteten Fahrzeug-insassen bei der Frontalkollision". *Forschungsvereinigung Automobiltechnik e.V. (FAT) Frankfurt FAT Schriftenreihe Nr. 20.*

PUBLIKATIONEN - PUBLICATIONS - 论文

Guo, M.M. and Härdle, W. (2012) A Confidence Band for Expectile Functions, *Advances in Statistical Analysis*, <http://www.springerlink.com/content/p8317t3111737qm2/>
DOI: 10.1007/s10182-011-0182-1

Akdeniz Duran, E., Härdle, W. and Osipenko, M. (2012) Difference based Ridge and Liu type Estimators in Semiparametric Regression Models, *Journal of Multivariate Analysis* 105 (2012), 164-175 DOI: 10.1016/j.jmva.2011.08.018 .

Härdle, W., Jeong, K. and Song, R. (2012) A consistent nonparametric test for causality in quantile, *Econometric Theory*, Vol 28, 3, June 2012, 1-27
doi:10.1017/S0266466611000685

Härdle, W. and Osipenko, M. (2012) Spatial Risk Premium on Weather Derivatives and Hedging Weather Exposure in Electricity, *Energy Journal*, accepted 18.5.2011, doi://10.5547/01956574.33.2

Golubev, Y., Härdle, W. and Timofeev, R. (2011) Testing Monotonicity of Pricing Kernels, *AStA - Advances in Statistical Analysis*, to appear

Ahmad, T., Härdle, W., Klinke, S. and Al Awadhi, S. (2011). Using R, LaTeX and Wiki for an Arabic e-learning platform, *Computational Statistics*, forthcoming.

Xia, C., Härdle, W. and Zhu, L. (2011) Generalized single index models: the EFM approach, *Ann. Statist.* ,39, No. 3, 1658–1688 DOI: 10.1214/10-AOS871

Härdle, W. and Lopez Cabrera, B. (2011). The Implied Market Price of Weather Risk, *Journal Applied Math. Finance*, 1 First, 1-37, DOI:10.1080/1350486X.2011.591170

Chen, S., Härdle, W. and Moro, R. (2011) Modelling Default Risk with Support Vector Machines, *Quantitative Finance*, 11, 135 - 154, DOI: 10.1080/14697680903410015.

Chen, Y., Härdle, W. and Pigorsch, U. (2010). Localized Realized Volatility, *Journal of the American Statistical Association*, Vol. 105, No. 492, 1376-1393, DOI: 10.1198/jasa.2010.ap09039

Chen, S., Härdle, W. and Jeong, K. (2010) Forecasting volatility with support vector machine-based GARCH model, *J. Forecasting*, 29, 406-433, doi: 10.1002/for.1134

Detlefsen, K., Härdle, W. and Moro, R. (2010) Empirical Pricing Kernels and Investor Preferences, *Mathematical Methods in Economics and Finance (ISSN 1971-6419)*, 3,1, 19-48, www.dma.unive.it/mmef

Ritov, Y. and Härdle, W. (2010) Investors' preference: Estimating and demixing of the weight function in semiparametric models for biased samples, *Statistica Sinica*, 20, 2, 771-786 <http://www3.stat.sinica.edu.tw/statistica/j20n2/j20n216/j20n216.html>

Zhang, J. L. and Härdle, W. (2010) The Bayesian Additive Classification Tree Applied to Credit Risk Modelling, *Computational Statistics and Data Analysis*, 54, 1197 -1205. doi:10.1016/j.csda.2009.11.022

Härdle, W. and Lopez Cabrera, B. (2010) Calibrating CAT bonds for Mexican earthquakes, *J. Risk and Insurance*, 77, 625 - 650 DOI: 10.1111/j.1539-6975.2010.01355.x

Härdle, W. and Okhrin, O. (2010) De Copulis non est disputandum. Copulae: an overview. *AStA - Advances in Statistical Analysis*, 94, 1, 1-31, doi: 10.1007/s10182-009-0118-1

Chen, Y., Härdle, W., and Spokoiny, V. (2010) GHICA - Risk Analysis with GH Distributions and Independent Components, *Journal of Empirical Finance*, doi:10.1016/j.jempfin.2009.09.005 , 17, 255–269.

Härdle, W. and Song, R. (2010) Confidence Bands in Quantile Regression. *Econometric Theory*, 26, 1180-1200, doi:10.1017/S0266466609990491

Giacomini, E., Härdle, W. and Krätschmer, V. (2009) Dynamic Semiparametric Factor Models in Risk Neutral Density Estimation, *AStA - Advances in Statistical Analysis*, 93,4, 387-402, doi: 10.1007/s10182-009-0115-4

Cizek, P., Härdle, W., and Spokoiny, V. (2009) Statistical Inference for Time inhomogeneous volatility models, *Econometrics Journal*, 12,2, 248 - 271, doi 10.1111/j.1368-423X.2009.00292.x

- Tsay, W. J. and Härdle, W. (2009) A Generalized ARFIMA Process with Markov-Switching Fractional Differencing Parameter, *Journal of Statistical Computation and Simulation*, 79:5, 731 – 745 DOI: 10.1080/00949650801910239
- Benko, M., Härdle, W. and Kneip, A. (2009) Common Functional Principal Components, *Ann. Statist.*, 37, 1-34, doi:10.1214/07-AOS516
- Borak, S., Fengler, M. and Härdle, W. (2009) Does hedging with implied volatility factors improve the hedging efficiency of barrier options? *The Journal of Risk Model Validation*, Vol 3, 1, 73-92.
- Härdle, W. and Hlavka, Z (2009) Dynamics of State Price Densities, *J. Econometrics*, 150 (1), p.1-15, doi:10.1016/j.jeconom.2009.01.005
- Park, B., Mammen, E., Härdle, W., and Borak, S., (2009) Dynamic Semiparametric Factor Models. *Journal of the American Statistical Association*, 104, 284-298. DOI 10.1198/jasa.2009.0105
- Giacomini, E., Härdle, W. and Spokoiny, V. (2009) Inhomogeneous Dependency Modelling with Time Varying Copulae, *J. Business and Economic Statistics*. 27(2): 224-234. DOI:10.1198/jbes.2009.0016.
- Härdle, W., Lee, Y.J., Schäfer, D. and Yeh, Y.R. (2009) Variable Selection and Over-sampling in the Use of Smooth Support Vector Machines for Predicting the Default Risk of Companies. *J. Forecasting*, 28,6, 512 - 534, doi: 10.1002/for.1109
- Cizek, P., Härdle, W. and Tamine, J. (2008) Smoothed L-estimation of regression function. *Computational Statistics and Data Analysis*, 52, 5154–5162, doi:10.1016/j.csda.2008.05.024
- Härdle, W. and Lopez Cabrera, B. (2008) Methodology for calibration of CAT bonds, *Schmollers Jahrbuch, Journal of Applied Social Science Studies*, 1-16.
- Brüggemann, R., Härdle, W., Mungo, J. and Trenkler, C. (2008) VAR modelling for Dynamic Semiparametric Factors of Volatility Strings, *Journal of Financial Econometrics*, 2008 6(3):361-381.
- Härdle, W. and Mungo, J. (2008) Long Memory Persistence in the Factor of Implied Volatility Dynamics, *International Research Journal of Finance and Economics*, ISSN 1450-2887 Issue 18, EuroJournals Publishing, Inc. 2008 <http://www.eurojournals.com/finance.htm>

- Detlefsen, K. and Härdle, W. (2008) A Note on the Calibration Design of Implied Volatility Surfaces, *Journal of Data Science*, 6, 303-312
- Chen, Y., Härdle, W. and Seok-Oh Jeong (2008) Nonparametric Risk Management with Generalized Hyperbolic Distributions, *Journal of the American Statistical Association.*, 103, 910 – 923.
- Härdle, W., Kleinow, T., Korostelev, A. Logeay, C. and Platen E. (2008) Semiparametric Diffusion Estimation and Application to a Stock Market Index, *Quantitative Finance*, 7, 1-12.
- Benko, M., Fengler, M. Härdle, W. and Kopa, M. (2007) On extracting information implied in options, *Computational Statistics*, 22, 543 - 553.
- Härdle, W., Klinke, S. and Ziegenhagen, U. (2007) On the utility of e-learning in statistics, *International Statistical Review*, 75, 355 – 364
- Detlefsen, K. and Härdle, W. (2007) Calibration Risk for Exotic Options, *Journal of Derivatives*, 14, 4, 47-63. Also printed in "Trading Options: Exotic an Introduction to Types and Pricing", ICAI University Press, Hyderabad, India.
- Schulz, R., Brenner, St. and Härdle, W., (2007) Realoptionen und Immobilienbewertung: Eine Umsetzungsstudie *Schmalenbachs Zeitschrift für die betriebswirtschaftliche Forschung*, Schmalenbachs Zeitschrift für betriebswirtschaftliche Forschung (zfbf) 59, 1002-1028.
- Fengler, M., Härdle, W. and Mammen, E. (2007) A Semiparametric Factor Model for Implied Volatility Surface Dynamics. *Financial Econometrics*, 5, 2, 189-218.
- Chen, Y, Härdle, W., and Spokoiny, V. (2007) Portfolio Value at Risk based on Independent Components Analysis, *Journal of Computational and Applied Mathematics*, 205, 594-607.
- Yang, L., Härdle, W., Park, B. and Xue, L. (2006) Estimation and Testing for Varying Coefficients in Additive Models with Marginal Integration. *Journal of the American Statistical Association*, 101, 1212-1227.
- Cizek, P. and Härdle, W. (2006) Robust Adaptive estimation of dimension reduction space. *Computational Statistics and Data Analysis*, 51, 545-555.
- Andriyashin, A., Benko, M. Härdle, W. Timofeev, R. and Ziegenhagen, U. (2006) Color Harmonization in Car Manufacturing Processes, *Applied Stochastic Models for Business and Industry, special issue on "Business, Industry and Government"*, ed. D. Lin, Vol 22, issue 5-6, 519-532.

- Härdle, W., Hlavka, Z and Stahl, G. (2006) On the appropriateness of inappropriate VaR models *Allg. Stat. Archiv*, 90/2, 273-297.
- Xia, Y. and Härdle, W. (2006) Semi-parametric Estimation of Generalized Partially Single Index Models, *Journal of Multivariate Analysis* 97, 1162-1184.
- Yatchew, A. and Härdle, W. (2006) Nonparametric State Price Density Estimation Using Constrained Least Squares and the Bootstrap, *Journal of Econometrics*, 133, 579-599.
- Wang, Q. and Härdle, W. (2005) Empirical Likelihood-based Dimension Reduction Inference for Linear Error-in-Responses Models with Validation Study, *Science in China, Ser. A*, 47(6), 921-939.
- Kirman, A., Schulz, R., Härdle, W., and Werwatz, A. (2005) Transactions that did not happen and their influence on prices. *Journal of Economic Behavior and Organization*, 56, 567-591.
- Wang, Q. , Linton, O. and Härdle, W. (2004) Semiparametric Regression Analysis under Imputation for Missing Response Data. *Journal of the American Statistical Association*, 99(466), 334-34.
- Härdle, W., Huet, S., Mammen, E. and Sperlich, S. (2004) Bootstrap Inference in Semiparametric Generalized Additive Models, *Econometric Theory*, 20(2), 265-300.
- Feldmann, D., Härdle, W. , Hafner, C., Hoffmann, M. Lepski, O. and Tsybakov, A. (2003) Testing Linearity in an AR Errors-in-variables Model with Application to Stochastic Volatility. *Applicationes Mathematicae*, 30(4), 389-412.
- Fengler, M., Härdle, W. and Villa, C. (2003) The Dynamics of Implied Volatility: A Common Principle Components Approach. *Review of Derivative Research*, 6, 179-202.
- Liang, H., Härdle, W. (2003) Partial Linear Models with heteroscedastic variances. *Journal of Japanese Society of Computational Statistics*, 15, 89-104
- Chen, S.X., Härdle, W. and Ming Li (2003) An Empirical Likelihood Goodness-of-Fit Test for Time Series. *Journal of the Royal Statistical Society*, 65, 663-678.
- Slama, R., Werwatz, A., Boutou, O., Ducot, B., Spira, A. , Härdle, W. (2003) Does male age have an influence on the risk of spontaneous abortion ? *American Journal of Epidemiology*, 157, 815-824.
- Härdle, W. , Herwatz, H. Spokoiny, V. (2003) Time Inhomogeneous Multiple Volatility Modelling, *Financial Econometrics*, 1, 55-95.

- Härdle, W., Horowitz, J. and Kreiss, J.P. (2003) A Review of the Bootstrap for Time Series. *International Statistical Review*, 71, 435-459.
- Yang, L., Sperlich, St. and Härdle, W. (2003) Derivative Estimation and Testing in Generalized Additive Models. *Journal of Statistical Planning and Inference*, 115, 521-542.
- Delecroix, M., Härdle, W. and Hristache, M. (2003) Efficient Estimation in Conditional Single-Index Regression. *Journal of Multivariate Analysis*, 86, 1, 213-226.
- Golubev, Y. and Härdle, W. (2002) On adaptive estimation in partial linear models. *Math. Methods of Statistics*, 11, 98-117.
- Aydinli, G., Härdle, W. , Kleinow, T. and Hizir, S. (2002) MD*ReX: Linking XploRe to Standard Spreadsheet Applications. *Computational Statistics*, 3, 329 - 342.
- Fengler, M., Härdle, W. and Schmidt, P. (2002) An Empirical Analysis of the Common Factors Governing Implied Volatility Movements Measured by the German VDAX. *Financial Markets and Portfolio Management*, 16, 16-29.
- Carroll, R. C. , Härdle, W. and Mammen, E. (2002) Estimation in an additive Model when the components are linked parametrically. *Econometric Theory*, 18, 886-912.
- Härdle, W., Sperlich, St. and Spokoiny, V. (2001) Structural Tests in Additive Regression. *J. Amer. Stat. Assoc.*, 96, 1333-1347.
- Härdle, W., Mammen, E. and Proenca, I. (2001) A Bootstrap Test for Single Index Models. *Statistics*, 35, 427-451.
- Härdle, W. , Kleinow, T. and Tschernig, R. (2001) Web Quantlets for Time Series Analysis. *Annals of the Institute of Statistical Mathematics*, 52, 1-18
- Hall, P., Härdle, W., Kleinow, T. and P. Schmidt (2000) On Semiparametric Bootstrap Approach to Hypothesis Tests a. Confidence Intervals for Hurst Coefficients. *Statistics of Stochastic Processes*, 3, 263-276.
- Golubev, Y. and Härdle, W. (2000) On the second order minimax estimation in partial linear models. *Math. Methods of Statistics*, 9, 2, 160 - 175.
- Härdle, W. , and Hafner, C. (2000) Discrete Time Option pricing with flexible volatility Estimation. *Finance and Stochastics* 4, 2, 189-207.
- Härdle, W. and Horowitz, J. (2000) Internet-Based Econometric Computing. *J. Econometrics*, 95, 333-345.

Liang, H., Härdle, W. and Sommerfeld, V. (2000) Bootstrap approximation in a partially linear regression model., *J. Stat. Planning and Inference*, 91, 413-426

Liang, H. Härdle, W. and Carroll, R. (1999) Large Sample Theory in a Semiparametric Partially Linear Errors-in-Variables Model. *Annals of Statistics*, 27, 1519-1535

Liang, H. and Härdle, W. (1999) Large sample theory of Estimation of the Error Distribution for Semiparametric Models. *Communications in Statistics Theory & Methods*, 28, 2025-2036.

Sperlich, St., Linton, O. and Härdle, W. (1999) A simulation comparison between integration and backfitting methods of estimating separable nonparametric regression models. *TEST*, 8, 419-458.

Yang, L.J., Härdle, W. and Nielsen, J.P. (1999) Nonparametric Autoregression with multiplicative Volatility and Additive Mean. *J. Time Series Analysis*, 20, 579-604..

Härdle, W. and Kneip, A. (1999) Testing a Regression Model when we have smooth alternatives in mind. *Scand. J. Stat.* 26, 221-238.

Härdle, W., Mammen, E. and Müller, M. (1998) Testing Parametric versus Semiparametric Modelling in Generalized Linear Models. *Journal of the American Statistical Association*, 93, 1461-1474.

Linton, O. and Härdle, W. (1998) Nonparametric Regression. *Chapter in the Encyclopedia of Statistical Science, Volume X, ed. D. Banks, and S. Kotz, Wiley, New York.*

Fan, J., Härdle, W. and Mammen, E. (1998) Direct Estimation of Low Dimensional Components in Additive Models. *Annals of Statistics*, 26, 943-971.

Burda, M., Härdle, W., Müller, M. and Werwatz, A. (1998) Semiparametric Analysis of German East-West Migration Intentions: Facts and Theory. *Journal Applied Econometrics*, 13, 525-541.

Härdle, W., Tsybakov, A.B. and Yang, L. (1998) Nonparametric Vector Auto-regression. *J. Stat. Planning. Inference*, 68, 221-245.

Linton, O., Chen, R., Wang, N and Härdle, W. (1997) An analysis of transformations for additive nonparametric regression. *Journal of the American Statistical Association*, 92, 1512-1521.

Klinke, S., Golubev, Y., Härdle, W. and Neumann, M. (1997) Teaching Wavelets in XploRe. *Computational Statistics*, 13, 141-151.

Härdle, W. and Tsybakov, A. (1997) Local polynomial estimators of the volatility function in nonparametric autoregression. *Journal of Econometrics*, 81, 223-242.

Härdle, W., Sperlich, St. and Spokoiny, V. (1997) Semiparametric Single Index Versus Fixed Link Function Modelling. *Annals of Statistics*, 25, 212-243.

Härdle, W., Lütkepohl, H. and Chen, R. (1997) Nonparametric Time Series Analysis. *International Statistical Review*, 12, 153-172.

Müller, M., Rönz, B., Härdle, W. (1997) Computer assisted Semiparametric Generalized Linear Models. *Computational Statistics*, 12, 153-172.

Härdle, W. and Schmerbach, S. (1996) Sonderforschungsbereich 373, Quantifikation und Simulation ökonomischer Prozesse. *Allg. Statistisches Archiv*, 80, 433-441.

Horowitz, J. and Härdle, W. (1996) Direct semiparametric estimation of single-index models with discrete covariates. *Journal of the American Statistical Association*, 91, 1632-1640.

Härdle, W. and Korostelev, A. (1996) Search of Significant Variables in Nonparametric Additive Regression. *Biometrika*, 83, 541-549.

Linton, O.B. and Härdle, W. (1996) Estimation of Additive Regression Models with known Links. *Biometrika*, 83, 529-540.

Härdle, W., Park, B. and Tsybakov, A. (1995) Estimation of non-sharp support boundaries. *Journal of Multivariate Analysis*, 55, 205-218.

Härdle, W. and Steiger, W. (1995) Optimal Median Smoothing. *Alg 665 Applied Statistics*, 44, No.2, 258-268.

Härdle, W. and Kirman, A. (1995) Nonclassical demand: A model-free examination of price-quantity relations in the Marseille fish market. *Journal of Econometrics*, 67, 227-257.

Härdle, W. and Tsybakov, A.B. (1995) Additive Nonparametric Regression on Principal Components. *Journal of Nonparametric Statistics*, 5, 157-184.

Hall, P., Härdle, W. and Simar, L. (1995) Iterated Bootstrap with Applications to Frontier Models. *Journal of Productivity Analysis*, 6, 63-76.

Härdle, W., Huet, S. and Jolivet, E. (1995) Better Bootstrap Confidence Intervals for Regression Curve Estimation. *Statistics*, 26, 287-306.

Härdle, W. and Park, B. (1995) Testing Increasing Dispersion. *Computational Statistics and Data Analysis*, 19, 641-654.

Härdle, W. and Marron, J.S. (1994) Fast and Simple Scatterplot Smoothing. *Computational Statistics and Data Analysis*, 20, 1-18.

Härdle, W., Ibragimov, I. and Tsybakov, A.B. (1994) On Efficient Estimation of an Averaged Derivative. (English translation of "Ob Effektivnom ozenivani usrednennoi proiswodnoi"). *Russian Acad. Sci. Dokl. Math. Vol. 48, No.1, 148-152.*

Härdle, W. and Nussbaum, M. (1994) Kernel Estimation: the Equivalent Spline Smoothing Method. *Publications de l'Institut de Statistique Université de Paris, XXXVIII, 61-86.*

Härdle, W. (1994) Quantifikation und Simulation ökonomischer Prozesse. *HUB - Spectrum. Zeitschrift der Humboldt-Universität Berlin.*

Härdle, W. and Linton, O. (1994) Applied Nonparametric Methods. *Chapter of the 4. Handbook of Econometrics, North Holland, 38, 2295 - 2339.*

Horowitz, J. and Härdle, W. (1994) Testing a Parametric Model against Semiparametric Alternatives. *Econometric Theory, V 10, No. 5, 821 - 848.*

Härdle, W. and Mammen, E. (1993) Comparing Nonparametric versus Parametric Regression Fits. *Annals of Statistics, 21, 1926-1947.*

Härdle, W., Ibragimov, I. and Tsybakov, A.B. (1993) Ob Effektivnom ozenivani usrednennoi proiswodnoi. *Journal Russian Academy of Sciences, 48, 550-552.*

Härdle, W. and Hall, P. (1993) On the Backfitting Algorithm for additive regression models. *Statistica Neerlandica, 47, 43-57.*

Härdle, W. and Müller, M. (1993) Nichtparametrische Glättungsmethoden in der alltäglichen statistischen Praxis. *Allg. Statistisches Archiv, 77, 9-31.*

Härdle, W. and Hart, J. (1993) A Bootstrap Test for Positive Definiteness of Income Effects Matrices. *Econometric Theory, 8, 276-290.*

Hall, P., Härdle, W. and Simar, L. (1993) On the Inconsistency of Bootstrap Distribution Estimators. *Computational Statistics and Data Analysis, 16, 11-18.*

Härdle, W. and Tsybakov, A.B. (1993) How sensitive are Average Derivatives ? *Journal of Econometrics, 58, 31-48.*

Härdle, W., Hall, P. and Ichimura, H. (1993) Optimal Smoothing of Single Index models. *Annals of Statistics*, 21, 157-178.

Härdle, W. and Scott, D.W. (1992) Smoothing in Low and High Dimensions by Weighted Averaging Using Rounded Points. *Computational Statistics*, 1, 97-128.

Härdle, W., Hart, J., Marron, J.S. and Tsybakov, A.B. (1992) Bandwidth Choice for Average Derivative Estimation. *Journal of the American Statistical Association*, 87, 218-226.

Franke, J. and Härdle, W. (1992) On Bootstrapping kernel spectral estimates. *Annals of Statistics*, 20, 121-145.

Härdle, W., Hall, P. and Marron, J.S. (1992) Regression smoothing parameters that are not far from their optimum. *Journal of the American Statistical Association*, 87, 227-233.

Härdle, W. and Vieu, P. (1992) Kernel Regression Smoothing of Time Series. *Journal Time Series Analysis*, 13, 209-232.

Härdle, W. and Jerison, M. (1991) Cross Section Engel Curves over Time. *Recherches Economiques de Louvain*, 57, 391-431.

Härdle, W., Hildenbrand, W. and Jerison, M. (1991) Empirical Evidence for the Law of Demand. *Econometrica*, 59, 1525-1550.

Härdle, W. and Marron, J.S. (1991) Bootstrap Simultaneous Error Bars for Nonparametric Regression. *Annals of Statistics*, 19, 778-796.

Mattern, R., Härdle, W. and Kallieris, D. (1990) Validierung der Verletzungskriterien TTI und VC als Verletzungsprediktoren. *FP 8940 Bundesanstalt für Strassenwesen, Bergisch-Gladbach*.

Härdle, W. and Carroll, R.J. (1990) Biased Crossvalidation for a Kernel Regression Estimator and its Derivatives. *Österreichische Zeitschrift für Statistik und Informatik*, 20, 53-64.

Härdle, W. and Marron, J. S. (1990) Semiparametric comparison of regression curves. *Annals of Statistics*, 18, 63-89.

Härdle, W. and Stoker, T. (1989) Investigating Smooth Multiple Regression by the Method of Average Derivatives. *Journal of the American Statistical Association*, 84, 986-995.

Härdle, W., Marron, J. S. and Wand, M. (1989) Bandwidth choice for density derivatives. *Journal of the Royal Statistical Society*, 52, 223-232.

Azzalini, A., Bowman, A. and Härdle, W. (1989) On the use of nonparametric regression for model checking. *Biometrika*, 76, 1-12.

Carroll, J. and Härdle, W. (1989) Symmetrized nearest neighbor regression estimates. *Statistics and Probability Letters*, 7, 315-318.

Härdle, W. (1989) Asymptotic maximal deviation of M -smoothers. *Journal of Multivariate Analysis*, 29, 163-179.

Carroll, R. and Härdle, W. (1989) A note on second order effects in a semiparametric context. *Statistics*, 20, 179-186.

Härdle, W. (1988) XploRe - a Computing Environment for eXploratory Regression and density smoothing. *Statistical Software Newsletters*, 14, 113-119.

Härdle, W. and Tsybakov, A. B. (1988) Robust Nonparametric Regression with Simultaneous Scale Curve Estimation. *Annals of Statistics*, 16, 120-135.

Härdle, W. and Bowman, A. (1988) Bootstrapping in nonparametric regression: Local adaptive smoothing and confidence bands. *Journal of the American Statistical Association*, 83, 102-110.

Härdle, W., Janssen, P. and Serfling, R. (1988) On Strong Uniform Consistency of some Functionals of the Conditional Distribution $F(Y|x)$. *Annals of Statistics*, 16, 1428-1449.

Härdle, W., Hall, P. and Marron, J.S. (1988) How far are automatically chosen regression smoothing parameters from their optimum? (with discussion) *Journal of the American Statistical Association*, 83, 86-101.

Härdle, W. (1987) Resistant Smoothing using the Fast Fourier Transform., *Appl. Statistics*, AS 222, 36, 104-111.

Collomb, G., Härdle, W. and Hassani, S. (1987) A note on prediction via estimation of the conditional mode function. *Journal Statist. Planning and Inference*, 15, 227-236.

Härdle, W. and Kelly, G. (1987) Nonparametric Kernel Regression Estimation - Optimal choice of the bandwidth. *Statistics*, 18, 21-35.

Härdle, W. (1987) An effective selection of regression variables if the error distribution is incorrectly specified. *Annals of the Institute of Statistical Mathematics*, 39, 533-548.

Gauwerky, J., Wernicke, K., Hölting, T., Matthis, P., Härdle, W., and Kubli, F. (1986) Fetal cerebral function and intrauterine hypoxia in sheep fetuses. *Biological Research in Pregnancy*, 7, 164-170.

Härdle, W. and Pham-Dinh, Tuan. (1986) Some Theory on M-smoothing of time series. *J. Time Series Analysis*, 7, 191-204.

Härdle, W. (1986) A Note on Jackknifing Kernel Regression Function Estimators. *IEEE Trans. Information Theory*, 32, 298-300.

Härdle, W. and Nixdorf, R. (1986) Nonparametric Sequential Estimation of zeros and extremas of regression functions. *IEEE Trans. Information Theory*, 33, 367-373.

Marron, S. and Härdle, W. (1986) Random approximations to an error criterion of nonparametric statistics. *Journal of Multivariate Analysis*, 20, 91-113.

Collomb, G. and Härdle, W. (1986) Strong uniform convergence rates in robust nonparametric Time Series Analysis and Prediction : kernel regression estimation from dependent observations. *Stoch. Processes and its Applications*, 23, 77-89.

Härdle, W. (1986) Approximations to the Mean Integrated Squared Error with Applications to Optimal Bandwidth Selection for Nonparametric Regression Function Estimators. *Journal of Multivariate Analysis*, 18, 150-168.

Härdle, W. (1986) Quelques aspects de la prediction non parametrique: travaux de Gerard Collomb (1951-1985) en analyse non parametrique des series temporelles. *Operations Research, Statistics and Applied Mathematics*, 28, 57-68.

Härdle, W. and Marron, S. (1985) Optimal Bandwidth Selection in Nonparametric Regression Function Estimation. *Annals of Statistics*, 13, 1465-1481.

Härdle, W. and Marron, S. (1985) Asymptotic Nonequivalence of some bandwidth selectors in Nonparametric Regression. *Biometrika*, 72, 481-484.

Härdle, W. and Gasser, T. (1985) On Robust Nonparametric Estimation of Derivatives of Regression Functions. *Scandinavian Journal of Statistics*, 12, 233-240.

Härdle, W. and Marron, S. (1985) Bandwidth Choice in Nonparametric Kernel Regression. *Statistics and Decisions, Suppl. Issue*, 2, 173-177.

Härdle, W. and Gasser, T. (1984) Robust nonparametric function fitting. *Journal of the Royal Statistical Society*, 46, 42-51.

Härdle, W., Gasser, T. and Bächer, P. (1984) EEG-responsiveness to eye opening and closing in mildly retarded children compared to a control group. *Biological Psychology*, 18, 185-199.

Härdle, W. and Luckhaus, S. (1984) Uniform Consistency of a Class of Regression Function Estimators. *Annals of Statistics*, 12, 612-623.

Härdle, W. and Bussian, B. (1984) Robust Smoothing applied to white noise and outlier contaminated Raman Spectra. *Appl. Spectroscopy*, 38, 309-313.

Härdle, W. (1984) A Law of the Iterated Logarithm for Nonparametric Regression Function Estimators. *Annals of Statistics*, 12, 624-635.

Härdle, W. (1984) Robust regression function estimation. *Journal of Multivariate Analysis*, 14, 169-180.

Härdle, W. and Aderjan, R. (1983) Klassifikation von Digoxin- Blut und Gewebekonzentrationen bei Vergiftungsverdacht. *Z. Rechtsmedizin*, 1-15.

ARTIKEL IN PROCEEDINGS ODER ÄQUIVALENTE PUBLIKATIONEN - ARTICLES IN PROCEEDINGS OR EQUIVALENT PUBLICATIONS - 书籍出版物(论文)或者论文同等书籍

Härdle, W., Mori, Y. and Symanzik, J. (2012) Computational Statistics, the Journal History, *Wiley Interdisciplinary Reviews (WIREs) : Computational Statistics* <http://wires.wiley.com/WileyCDA/WiresJournal/wisld-WICS.html>

Härdle, W., Schulz, R. and Wang, W. (2011) Prognose mit nichtparametrischen Verfahren in: *Prognoserechnung, 7. Auflage ed. Mertens, Physica Verlag.*

Benth, F.E., Härdle, W. and Lopez Cabrera, B. (2011) Pricing of Asian temperature risk, in: *Statistical Tools in Finance and Insurance, 2nd ed. Cizek, Härdle, Weron, Springer Verlag, p 163-199*

Härdle, W., Hoffmann, L. and Moro, R. (2011) Learning Machines Supporting Bankruptcy prediction. *Statistical Tools in Finance and Insurance (2nd ed.)*, Cizek, Härdle, Weron, Springer Verlag, p 225 - 249

Grith, M., Härdle, W. and Schienle, M. (2011) Nonparametric Estimation of Risk neutral Densities. in: *Handbook of Computational Finance, Duan, Gentle, Härdle, eds., Springer Verlag.*

Gentle, J. and Härdle, W. (2011) Modelling Asset Prices. *in: Handbook of Computational Finance*, Duan, Gentle, Härdle, eds., Springer Verlag.

Härdle, W. and Silyakova, E. (2011) Volatility Investing with Variance Swaps. *in: Handbook of Computational Finance*, Duan, Gentle, Härdle, eds., Springer Verlag. also appeared as Härdle, W. and Silyakova, E. (2010) Variance Swaps. *Statistical Tools in Finance and Insurance (2nd ed.)*, Cizek, Härdle, Weron, Springer Verlag, p 201 - 223

Klinke, S., Mihoci, A., Härdle, W. (2010). Exploratory factor analysis in Mplus, R and SPSS. *ICOTS-8 Conference Proceedings on CD. Session 4F: Sensible use of multivariate software*, ISBN 978-90-77713-54-9

Härdle, W. and Kirchner, Ch. (2010). Quantifizierbarkeit von Risiken auf Finanzmärkten? *in: Sicherheit und Risiko. Über den Umgang mit Gefahr im 21. Jahrhundert*, hrsg. v. H. Münkler, M. Bohlender, S. Meurer, Bielefeld: transcript Verlag, p 171 - 184.

Choroś, B., Härdle, W. and Okhrin, O. (2009). CDO Pricing with Copulae. *In Bulletin of the International Statistical Institute, 57th Session Durban Vol. 57. Bulletin of the International Statistical Institute*

Härdle, W. and Mysickova, A. (2009) Numerics of Implied Binomial Trees, *in Applied Quantitative Finance (2nd. Edition) W. Härdle, N. Hautsch, L. Overbeck (eds)*, Springer Verlag

Härdle, W. , Okhrin, O. and Okhrin, Y. (2009) Modeling Dependencies in Finance using Copulae, *in Applied Quantitative Finance (2nd. Edition) W. Härdle, N. Hautsch, L. Overbeck (eds)*, Springer Verlag

Härdle, W. , Hautsch, N. and Pigorsch, U. (2009) Measuring and Modeling Risk Using High-Frequency Data, *in Applied Quantitative Finance (2nd. Edition) W. Härdle, N. Hautsch, L. Overbeck (eds)*, Springer Verlag

Giacomini, E., and Härdle, W. (2008) Dynamic Semiparametric Factor Models in Pricing Kernel Estimation, *Functional and Operational Statistics, Dabo-Niang, S. and Ferraty, F. (Eds)*, Contributions to Statistics, Springer Verlag ISBN 978-3-7908-2061-4. 181-187

Giacomini, E., Härdle, W. and Handel, M. (2008) Time Dependent Relative Risk Aversion, *in Risk Assessment: Decisions in Banking and Finance (Contributions to Economics)*; Bol, Georg; Rachev, Svetlozar; Würth, Reinhold (Eds.), Physica Verlag, ISBN-10: 3790820490, 15-46,

Härdle, W., Moro, R. and Schäfer, D. (2008) Graphical Data Visualization in Banruptcy Analysis, *In: Handbook of Data Visualization. Springer Verlag, Heidelberg, ISBN 978-3-540-33036-3, 854 - 872.*

Unwin, A., Theus, M. and Härdle, W. (2008) Exploratory Graphics of a Financial Dataset In: *Handbook of Data Visualization*. Springer Verlag, Heidelberg, ISBN 978-3-540-33036-3, 831 - 852.

Unwin, A., Chen, Ch. H. and Härdle, W. (2008) Computational Statistics and Data Visualization. In: *Handbook of Data Visualization*. Springer Verlag, Heidelberg, ISBN 978-3-540-33036-3, 4-12.

Čížek, P. and W. Härdle (2008) Robust Estimation in Econometrics. *The New Palgrave Dictionary of Economics*. Second Edition. Eds. Steven N. Durlauf and Lawrence E. Blume. Palgrave Macmillan, 2008 <http://www.dictionaryofeconomics.com/article?id=pde2008_R000254>, doi:10.1057/9780230226203.1452

Ahmad, T., Härdle, W., and Ziegenhagen, U. (2007) E-Learning interkulturell. *Humboldt-Spektrum*, 2007,3, 50-53

Ahmad, T. Härdle, W., Klinke, S. and Al-Awadi, S. (2007) Using Wiki to Build an E-learning System in Statistics in Arabic Language, *CESSE 2007 Proceedings of the XXI. International Conference on Computer, Electrical, and Systems Science, and Engineering, Vienna Volume 21 May 2007, 338- 342, ISBN 978-975-01752-0-6*

Härdle, W., Klinke, S. and Ziegenhagen (2007) Yxilon – A Client/Server Based Statistical Environment, In *Bulletin of the International Statistical Institute, 56th Session Lisbon Vol. 56. Bulletin of the International Statistical Institute*

Giacomini, E., Härdle, W. (2007) Statistics of Risk Aversion, In *Bulletin of the International Statistical Institute, 56th Session Lisbon Vol. 56. Bulletin of the International Statistical Institute*

Ahmad, T, Härdle, W. and Mungo, J. (2006) On the difficulty to design Arabic e-learning systems in statistics. *COMPSTAT Proceedings Rome Rizzi and Vichi (eds) ISBN: 3790817082, 1619 – 1624*

Härdle, W., Klinke, S. and Ziegenhagen, U. (2006) e-Learning a Critical Review. *COMPSTAT 2006 - Proceedings in Computational Statistics. Rizzi and Vichi (eds) ISBN: 3790817082, 417 – 428*

Cizek, P., Härdle, W. and Symanzik, J. (2006) Spatial Statistics. in: *Statistical Methods for Biostatistics and Related Fields, Härdle, Mori, Vieu (eds)*. ISBN 13 978-3-540-32690-8, 285-304, Springer Verlag.

Härdle, W. and Liang, H., (2006) Partial Linear Models. *in: Statistical Methods for Biostatistics and Related Fields, Härdle, Mori, Vieu (eds). ISBN 13 978-3-540-32690-8, 87-104, Springer Verlag.*

Härdle, W., Klinke, S. and Ziegenhagen, U. (2005) Integrable e-elements for Statistics education. *Proceedings of the 19th annual meeting of Japanese Society of Computational Statistics, 175-184.*

Giacomini, E. and Härdle, W. (2005) Value at Risk calculations with time varying Copulae *In Bulletin of the International Statistical Institute, 55th Session Sydney Vol. 55. Bulletin of the International Statistical Institute ISBN - 10: 90 - 73592 - 23 - 2 ISBN - 13: 978 - 90 - 73592 - 23 - 0*

Borak, S., Fengler, M. and Härdle, W. (2005) DSFM Fitting of Implied Volatility Surfaces *in: Proceedings 5th International Conference on Intelligent Systems Design and Applications. IEEE Computer Society Order Number P2286, ISBN 0-7695-2286-6, Library of Congress Number 2005930524.*

Härdle, W., and Uhlig. H. (2005) Ökonomisches Risiko. *Humboldt-Spektrum, 2005,1, 18-23*

Härdle, W., Moro, R. and Schäfer, D. (2004) Support Vector Machines eine neue Methode zum Rating von Unternehmen *in: DIW Wochenbericht 49/2004, Duncker & Humblot.*

Borak, S., Härdle, W. and Lehmann, H. (2005) Working with the XQC *in: Statistical Tools in Finance and Insurance, Cizek, Härdle, Weron Springer Verlag.*

Borak, S., Detlefsen, K. and Härdle, W. (2005) FFT based Option Pricing *in: Statistical Tools in Finance and Insurance, Cizek, Härdle, Weron Springer Verlag.*

Härdle, W., Moro, R. and Schäfer, D. (2005) Rating Companies with Support Vector Machines *in: Statistical Tools in Finance and Insurance, Cizek, Härdle, Weron Springer Verlag.*

Borak, S., Härdle, W. and Weron, R. (2005) Stable distributions. *in: Statistical Tools in Finance and Insurance, Cizek, Härdle, Weron Springer Verlag.*

Härdle, W. and Seokh-Oh Jeong (2005) Nonparametric Productivity Analysis *in: Statistical Tools in Finance and Insurance, Cizek, Härdle, Weron Springer Verlag.*

Benko, M. and Härdle, W. (2005) Functional Data Analysis for IV surfaces *in: Statistical Tools in Finance and Insurance, Cizek, Härdle, Weron Springer Verlag.*

- Härdle, W. Klinke, S. and Ziegenhagen, U. (2004) Yxilon – Designing The Next Generation, Vertically Integrable Statistical Software Environment. *Computing Science and Statistics, Vol 36, CD, Proceedings of the Interface 2004 conference, Baltimore*
- Gentle, J. Härdle, W. and Mori, Y. (2004) Computational Statistics and Data Analysis. In: *Handbook of Computational Statistics, Concepts and Methods Springer Verlag, Heidelberg.*
- Burnecki, K. Härdle, W. , Weron, R. (2004) Simulation of risk processes. *Chapter in the Encyclopedia of Actuarial Science, Volume X, ed. Teugels, Sundt, Wiley,*
- Chen, Y. Härdle, W. and Schulz, R. (2004) Prognose mit nichtparametrischen Verfahren in: *Prognoserechnung, 6. Auflage ed Mertens, Physica Verlag.*
- Blaskowitz, O., Härdle, W. and Schmidt, P. (2004) Skewness and Kurtosis trades in: *Handbook: Computational and Numerical Methods in Finance, ed. S. T. Rachev Birkhäuser Verlag.*
- Aydinli, G, Härdle, W. and Neuwirth, E. (2003) Computational Statistics with Spreadsheets Towards Efficiency, Reproducibility and Security. *Proceedings of the Interface 2003 conference, Utah, CD Rom*
- Aydinli, G, Härdle, W. and Rönz, B. (2003) e-learning/e-teaching in statistics: a new challenge. *Proceedings of the IASE conference, Korea, CD Rom*
- Tamine, J. , Cizek, P. and Härdle, W. (2003) Smoothed L-estimation for regression functions. *In Bulletin of the International Statistical Institute, 54th Session Vol. 54. Bulletin of the International Statistical Institute, (pp.207-208).*
- Franke, J., Härdle, W. and Kreiss, J-P. (2003) Nonparametric Estimation in a Stochastic Volatility Model. *Recent advances and trends in Nonparametric Statistics M Akritas and D.N. Politis (eds) Elsevier (North Holland), 303-314.*
- Cramer, E., Härdle, W., Kamps, U. and Witzel, R. (2003) e-stat: Views, Methods, Applications. *ISI 2003, Berlin Proceedings, CD ROM, Book 2 82-85.*
- Härdle, W. and Müller, M.. (2003) Exploring Credit Data. *In: Credit Risk, Eds: Bol, Nakhaeizadeh, Rachev, Ridder, Vollmer, 157-173. Physica Verlag.*
- Härdle, W., Schulz, R. Sofyan, H. Werwatz, A. and Witzel, R. (2002) MD*Immo. Online Preisprognose für Berliner Einfamilienhäuser. *Humboldt-Spektrum, 2002, 4, 42-44.*

Cizek, P., Härdle, W. and L. Yang (2002) Comments on adaptive estimation of dimension reduction space, Discussion of paper by Xia, Tong, Li and Zhu, *Journal of the Royal Statistical Society*, 64, 363-410.

Härdle, W. Rönz, B. (2002) e-learning/e-teaching: students' and teachers' views. *The 4th conference of the Asian Regional Section of the IASC "e-statistics for information society"* J.J.Lee (ed.), 222-227.

Reprinted in : *Proceedings of the Okayama Statistical Association (OSA), Okayama regional section of Behaviormetrics Society of Japan (ORS of BSJ) and Area studies group in Okayama University of Sciences (ASG-OUS) (2005)*

Härdle, W., Klinke, S., Cizkova, L. and Cizek, P. (2002) XploRe – the interactive computing environment. *Humboldt-Spektrum*, 2002,1, 42-44.

Härdle, W., Klinke, S. and Witzel, R. (2002) MD*book – a tool for creating interactive documents. *Humboldt-Spektrum*, 2002,1, 46-47.

Härdle, W., Lehmann, H. and Rönz, B. (2001) Eine interaktive Einführung in die Welt der Statistik. *Humboldt-Spektrum*, 2001,1, 56-59.

Härdle, W., Kim, W. and Tripathi, G. (2001) Nonparametric Estimation of Additive Models with Homogeneous Components. p. 159-180. *Festschrift for Werner Hildenbrand Cambridge University Press. ISBN 3-540-41882-2.*

Härdle, W. and Tschernig, R. (2000) Flexible Time Series Analysis. *XploRe Application Guide*, 397-458, Springer Verlag, Heidelberg

Härdle, W. and Stahl, G. (2000) Backtesting beyond VaR. *Lecture Notes in Statistics 147*, 119-130, Springer Verlag, Heidelberg.

Härdle, W. and Müller, M. (2000) Multivariate and Semiparametric Kernel regression. in *Smoothing and Regression, Approaches, Computation and Application, Chapter 12 M.Schimke (ed), Wiley Publishers, 357-391.*

Härdle, W. and Lehmann, H. (1999) Neural Networks. *XploRe Learning Guide*, p 229-246, Springer Verlag, Heidelberg

Franek, P. and Härdle, W. (1999) Time Series. *XploRe Learning Guide*, p 247-270, Springer Verlag, Heidelberg

Sperlich, S. and Härdle, W. (1999) Finance. *XploRe Learning Guide*, p 285-305, Springer Verlag, Heidelberg

Liang, H., Härdle, W. and Werwatz, A. (1999) Asymptotic Properties of the Nonparametric Part in Partially Linear Heteroskedastic Models. *Econometric Theory, Problems and Solutions* 15, 258-259.

Härdle, W. , Klinke, S. and Marron, J.S. (1999) Connected Teaching of Statistics. *Statistical Computing and Graphics Newsletter, Vol 10, No.1* .

Härdle, W. and Sperlich, S. (1998) Financial Calculations on the Net. *Finanzmarktanalyse und -prognose, 53-56* Editor: Bol, Nakhaeizadeh, Vollmer, Physica Verlag.

Härdle, W. and Yang, L.J. (1997) Nonparametric Time Series Analysis Model Selection. *Computing Science and Statistics (Billard, L. and Fisher, N (eds), Interface Meeting Sydney, (1996), ISBN 1-886658-02-1, 407-412.*

Schmelzer, S., Kötter, Th., Klinke, S. and Härdle, W. (1996) A New Generation of a Statistical Computing Environment on the Net *COMPSTAT Proceedings Barcelona Physica Verlag, Heidelberg. ISBN 3-7908-0953-5*

Härdle, W. and Hafner, Ch. (1996) Zinsprognose mit univariater nichtparametrischer Zeitreihenanalyse. *Finanzmarktanalyse und -prognose, 329-333* Editor: Bol, Nakhaeizadeh, Vollmer, Physica Verlag ISBN 3-7908-0925-X.

Chen, R., Härdle, W., Linton, O. and Severance-Lossin, E. (1996) Nonparametric Estimation of Additive Separable Regression Models. *in: Statistical Theory and Computational Aspects of Smoothing. Härdle, W. and Schimek, M. (eds.) Physica Verlag, Heidelberg. ISBN 3-7908-0930-6*

Bossaerts, P., Härdle, W. and Hafner, Ch. (1996) Foreign exchange rates have surprising Volatility. *Athens Conference on Applied Probability ad Time Series Ted Hannan memory Volume. LNS 115, p 55-72* Editor: P. Robinson, M Rosenblatt Springer Verlag.

Bossaerts, P., Hafner, Ch. and Härdle, W. (1996) A New Method for Volatility Estimation with Applications in Foreign Exchange Rate Series. *5. Karlsruher Ökonometrie-Workshop, Editor Bol., Physica Verlag.*

Härdle, W. and Chen, R. (1995) Nonparametric Time Series Analysis, a selective review with examples. *ISI meeting in Beijing, proceedings, IP10.2, 375-394.*

Härdle, W. and Kötter, Th. (1994) XploRe - An Interactive Computing Environment. *SoftStat '93, Advances in Statistical Software 4, 261-266.*

Härdle, W., Klinke, S. and Müller, M. (1994) Applied Nonparametric Smoothing Techniques. *"Computational Statistics"(ed. Dirschedl, Ostermann), Physica Verlag.*

Härdle, W. and Müller, M. (1993) Discussion of the paper by Hastie and Tibshirani, Februar (1993). *Journal of the Royal Statistical Society*, 55, 791.

Härdle, W. and Turlach, B. (1993) Semiparametric Approaches to Dimension Reduction. in "Operations Research '92", ed. Karmann, A., Mosler, K., Schader, M., Uebe, G. *Physica-Verlag Heidelberg (1993)*, 352-369.

Härdle, W. and Turlach, B. (1992) Nonparametric Approaches to Generalized Linear Models. in "'Advances in GLIM and Statistical Modelling'", ed. Fahrmeir, L., Francis, B., Gilchrist, R. and Tutz, G., *Springer Lecture Notes in Statistics*, 213-225.

Härdle, W. and Tsybakov, A. B. (1992) Robust Locally Adaptive Nonparametric Regression. in *Data Analysis and Statistical Inference - Festschrift in Honour of Friedhelm Eicker*, Schach, S. and Trenkler, G. (eds) *Eul-Verlag, Bergisch-Gladbach*, pp 127-144.

Härdle, W. and Park, B. (1992) Discussion of the paper by Hall and Johnstone, September (1991). *Journal of the Royal Statistical Society*, 54, 37-38

Härdle, W. and Tsybakov, A.B. (1991) Remarks on Sliced Inverse Regression. *Discussion of a paper by Ker-Chau Li. Journal of the American Statistical Association*, 86, 333-335.

Härdle, W. and Nussbaum, M. (1991) Bootstrap Confidence Bands. in "Bootstrapping and Related Techniques", ed. Jöckel, K.H., Rothe, G. and Sendler, W., *Springer Lecture Notes in Economics and Mathematical Systems*, 376, 63-70.

Grund, B. and Härdle, W. (1991) On the Choice of Kernel Regression Estimators. *Discussion of a paper by Chu and Marron. Statistical Science*, 6, 421-425

Härdle, W. and Mammen, E. (1991) Bootstrap Methods for Nonparametric Regression. *Nonparametric Functional estimation and Related Topics*, Edited by G.Roussas, *Kluwer Publishing company, Series C: Mathematical and Physical Sciences*, 335, 111-124.

Härdle, W. (1989) Interactive Data Analysis on a Personal Computer. *SSS 89 Symposium Statistische Software (1989)*, Utrecht, *Centraal Bureau voor de Statistiek, Voorburg Oktober (1989)*.

Härdle, W. (1989) The Interplay between Statistics and Computing in Data Analysis. *Proceedings of the International Symposium on Data Analysis, Learning symbolic and numeric knowledge, Antibes, September (1989)*.

Härdle, W. (1989) Resampling for Inference from Curves. *Proceedings of the International Statistical Institute (ISI) Meeting, Paris, September (1989)*. P89.1

Härdle, W. (1989) Discussion of papers by Eagleson, Tibshirani and Rice. *Proceedings of the International Statistical Institute (ISI) Meeting, Paris, September (1989)*.

Härdle, W., Kallieris, D. and Mattern, R. (1988) Multinomial response models for analysis of simulated car side impact data. *Proceedings of the IRCOBI Conference Bergisch Gladbach, September (1988)*.

Härdle, W. (1988) Efficient Smoothing Techniques in High and Low Dimensions. *Proceedings of the COMPSTAT Conference Meeting, Copenhagen, August (1988)*.

Härdle, W. (1988) Interactive Smoothing Techniques. *Proceedings of the Conference on the Interface Meeting, Washington DC, April (1988)*.

Härdle, W. (1987) Sequential kernel smoothing for estimation of zeros and location of extrema of regression functions. *Proceedings of the International Statistical Institute (ISI) Meeting, Tokio, September (1987)*.

Härdle, W. (1987) XploRe - a Computing Environment for eXploratory Regression. *Statistical Data Analysis based on the L_1 norm (Y.Dodge, ed.) North Holland*.

Härdle, W. (1986) What regression model should be chosen when the statistician misspecifies the error distribution? "*Function Estimates*", ed. J. S. Marron, *Amer. Math. Soc. Contemporary Mathematics Series*.

Härdle, W. (1986) Automatic Curve Smoothing. *Proceedings of the First World Congress of the Bernoulli Society, Tashkent, VNU Science Press*.

Härdle, W. (1985) Discussion of the paper by Silverman, October (1984). *Journal of the Royal Statistical Society, 47, 37-38*.

Härdle, W. (1984) How to determine the bandwidth of nonlinear smoothers in practice? *Lecture Notes in Statistics "Robust and Nonlinear Time Series Analysis" ed. J.Franke, W.Härdle, D.Martin. Springer Verlag Heidelberg, (1984)*.

Härdle, W. and Mattern, R. (1983) Mathematische Modellierung der Eliminations-phase des Ethanols. "*Fortschritte der Rechtsmedizin*" ed. H.Froberg, J.Barz, J.Bösche, R.Käppner, R.Mattern. *Springer Verlag Heidelberg*.

Mattern, R., Bösche, J., Birk, J. and Härdle, W. (1983) Experimentelle Untersuchungen zum Verlauf der Alkoholkurve in der späten Eliminationsphase., in "*Fortschritte der Rechtsmedizin*" ed. H.Froberg, J.Barz, J.Bsche, R.Käppner, R.Mattern. *Springer Verlag Heidelberg*.

Härdle, W. and Kneip, A. (1982) DACAPO - Ein Programmpaket zur graphischen Verarbeitung von Daten und Funktionen. *Angewandte Informatik/Depot Heft 7*.

Aderjan, R. and Härdle, W. (1982) Die Beurteilung von Vergiftungsfällen mittels Diskriminanzanalyse am Modellbeispiel Digoxin. *Proceedings "Entwicklung und Fortschritte der forensischen Chemie" ed. W.Janssen, W.Arnold, University of Hamburg*.

Härdle, W. and Gasser, T. (1981) Estimating and Testing the Innovation Variance of On-Off EEG Time Series Proc. *ASSP Workshop on Spectral Estimation, Hamilton, Ontario, Canada*.

EINGEREICHTE VERÖFFENTLICHUNGEN - SUBMITTED PUBLICATIONS - 论文

Chen, R.B., Chen, Y and Härdle, W. (2011) TVICA - Time varying independent component analysis, *submitted to J Business and Economic Statistics, 1.10.2011*

Wang, W., Bobojonov, I., Härdle, W. and Odening, M. (2011) Increasing weather risk: fact or fiction, *submitted to Natural Hazards and Earth System Sciences, 10.11.2011*

Stahlschmidt, St. , Tausendteufel, H and Härdle, W. (2011) Bayesian Networks and Sex related Homicides, *submitted J R. Stat. Soc. (Series C) 26.07.2011*.

Moro, R., Härdle, W., Aliakbari, S. and Hoffmann, L.(2011) Forecasting Corporate Distress in the Asian and Pacific Region, *submitted 05.05.2011*.

Härdle, W. , Lopez Cabrera, B. , Okhrin, O. and Wang, W. (2011) Localizing Temperature Risk, *J. Econometrics , submitted 25.07.2011*.

Härdle, W., Spokoiny, V. and Wang, W. (2011) Local Quantile Regression, *Scand. Journal Statistics, submitted 05.01.2011*.

Lin, L., Li, F, Zhu, L and Härdle, W.K. (2011) Mean Volatility Regression. *Financial Econometrics, submitted 20110801*

Zheng, Sh. , Yang, L., and Härdle, W.K. (2011) A Confidence Corridor for sparse longitudinal data curves. *Ann. Statist. submitted 20101201*

Chen, S., Härdle, W. and Jeong, K. (2010) Recurrent Support Vector Regression for a Nonlinear ARMA Model with Applications to Forecasting Financial Returns, *submitted*

- Song, R., Härdle, W. and Ritov, J. (2011) High Dimensional Nonstationary Time Series Modelling with Generalized Dynamic Semiparametric Factor Model *J. Amer. Stat Assoc.* submission 1.10.2011
- Härdle, W. Ritov, J. and Song, R. (2011) Partial Linear Quantile Regression and Bootstrap Confidence Bands *J. Multivariate Analysis* submission 1.3.2011, tentatively accepted, invited resubmission 8.9.2011
- Härdle, W. and Trück, St. (2011) The Dynamics of hourly Electricity Prices *Applied Financial Economics*, tentatively accepted, invited resubmission 1.10.2010
- Guo, M.M. and Härdle, W. (2011) Adaptive Interest Rate Modelling, *J. Forecasting*, submitted 02.06.2011
- Härdle, W., Okhrin, Y. and Wang, W. (2011) Uniform confidence bands for pricing kernels, *J. Empirical Finance*, submitted 02.02.2011.
- Trück, St., Härdle, W. and Weron, R. (2011) The Relationship between Spot and Futures in the EU-ETS, *Energy Economics*, tentatively accepted, invited resubmission 1.4.2011
- Härdle, W. Okhrin, Y. and Okhrin, O. (2011) Time varying Hierarchical Archimedean Copulae, submitted *Canadian J Statistics*, 3.5.2011
- Härdle, W., Hautsch, N. and Mihoci, A. (2011). Modelling and Forecasting Liquidity Supply Using Semiparametric Factor Dynamics, submitted to *J. Empirical Finance*. 21.04.2010, manuscript ID, 10-67, SFB 649 DP 2009-44 , invited resubmission 6.9.2010
- Choroś, B., Härdle, W. and Okhrin, O. (2011). CDO and HAC, submitted to *Empirical Finance*, 1.1.2011.
- Grith, M., Härdle, W. and Park, J. (2011). Shape invariant modelling pricing kernels and risk aversion, submitted to *J. Financial Econometrics*, 31.3.2009, SFB 649 DP 2009-41. Invited resubmission 1.11.2010, tentatively accepted 24.8.2011
- Grith, M., Härdle, W. and Krätschmer, V. (2011). A Microeconomic Explanation of the EPK Paradox, Submitted to *Financial Econometrics*, 1.10.2009, invited resubmission 26.9.2011.
- Härdle, W. and Mysickova, A. (2011) Stochastic Population Forecast for Germany and its Consequence for the German Pension System, Submitted to *A. Stat. Archive*, 10.3.2010
- Andriyashin, A., Härdle, W. and Timofeev, R. (2011) Recursive Portfolio Selection with Decision Trees., *International Journal Forecasting*, submitted 1.2.2011

Chen, R.B., Guo, M.H., Härdle, W. and Huang, S.F. (2011) COPICA - Independent Component Analysis Via Copula Techniques, *Computational Statistics and Data Analysis*, submitted 1.4.2010 (Ms. Ref. No.: CSDA-D-10-00355)

Härdle, W., Moro, R. and Schäfer, D.(2011) Estimating Probabilities of Default With Support Vector Machines, *Computational Statistics and Data Analysis*, submitted 1.9.2010