CURRICULUM VITAE 简历

Name	Wolfgang Karl HÄRDLE
Adresse	Ladislaus von Bortkiewicz Professor of Statistics BRC Blockchain Research Center School of Business and Economics Humboldt-Universität zu Berlin Unter den Linden 6 D 10099 Berlin, Germany
FON	+49 170 900 6 888
e-mail	haerdle@hu-berlin.de
webpage	hu.berlin/wkh

Date of birth: Oktober 20, 1953; Darmstadt, Hessen

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-	Professor, 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
1978-1983	Wissenschaftlicher Mitarbeiter, Universität Heidelberg

EDITOR - EDITOR - 编辑

2019-	Digital Finance, Journal, Springer Nature
2001-	Handbook of Computational Statistics, Springer Verlag
2000-	Statistik und Ihre Anwendungen (book series), Springer Verlag
2000-	Advisory Board J Financial Econometrics, Oxford University Press
2004-2015	Advisory Board J Probability and Statistical Science

1992-2006	Computational Statistics, Physica Verlag
1992-	Statistics and Computing, book series, Springer Verlag

ASSOCIATE EDITOR - ASSOCIATE EDITOR - 副编辑

2011-	Statistics and Risk Modelling
2011-	Journal of Economics and Business
1999-2003	Statistics of Stochastic Processes
1996-2000	Test
1993-1999	Publications de l'Institute de Statistique Université de Paris
1993-2002	Econometric Theory
1991-1995	International Statistical Review
1989-1991	Computational Statistics and Data Analysis
1988-1993	Journal of the American Statistical Association
1987-2011	Statistics
1987-1997	Operations Research, Statistics and Applied Mathematics

EHRUNGEN – HONORS - 荣誉(奖励)

2023- Adjunct Senior Research Fellow, National University Singapore
2022 #4 in mathematics https://research.com/u/wolfgang-karl-hardle
2022 Most cited Researcher in Humboldt-Universität zu Berlin:
https://scholar.google.com/citations?view_op=view_org&hl=en&org=15466593082447993016

2021-	YuShan 玉山 學 者 Scholar, NYCU Hsinchu,Taiwan
2018 2020	Guest Professor Sun-Yat Sen University, Guangzhou, China
2018 -	Scientific Board of Folia Oeconomica Stetinensia
2017 -	Charter Fellow, INDI Inst. Nonlinear Dynamics, RUDN University, Moscow
2016-	Guest Professor National Chiaotong University, Hsinchu, Taiwan
2015 - 2023	Foreign Expert Professor, Xiamen University, Xiamen, China
2015 -2023	Academic Committee of MOE Key Lab of Econometrics, Xiamen University
2015 2019	Honorary Guest Professor Chung Hua University, Hsinchu, Taiwan
2012	Multa Scripsit Award „Econometric Theory“, Cambridge University Press
2010 - 2015	Council Member of the International Society for NonParametric Statistics (ISNPS)
2009 -	Advisor: Financial statistics and risk management Master program, Rutgers University
2009 - 2016	Distinguished Visiting professor WISE, Xiamen University, China
2008	Founding Council Member of the Society for Financial Econometrics (SoFiE)
2007	Faculty Research Prize for outstanding research achievements
2006 - 2010	Member National Centre Econometric Research, QUT, Australia
2003 -	“Highly cited Scientist” on the list provided by ISI – Institute or Scientific

	Information. In 2003-2014 the only “highly cited scientist” at Humboldt-Universität zu Berlin.
2002 - 2013	Advisor: Guanghua School of Management, Beijing University
2001 - 2003	Vice President IASC (Int. Ass. of Statistical Computing)
2000 - 2004	Advisory Board: Ferrell Assett Management, Singapore
1997	Fellow International Statistical Institute
1992	Fellow Institute of Mathematical Statistics

ORGANISATION VON TAGUNGEN - ORGANIZATION OF MEETINGS - 组织会议

2023	Statistics of Machine Learning, Prag
2022	Statistics of Machine Learning, Prag
2022	Machine Learning in Finance and Management, Berlin
2021	Crypto Currency Conference 3, Berlin
2021	Victoria Peak conference HKUST, Hongkong
2021	Statistics of Machine Learning, Prag
2020	Yushan Workshop on Fundamentals, Tech, Apps, NCTU, Taiwan
2020	Statistics of Machine Learning, Prag
2019	Yushan Workshop on FINTECH, Hsinchu, Taiwan
2019	Statistics of Machine Learning, Prag
2018	Crypto Currency Conference 2, Berlin
2018	Humboldt-Aarhus-Xiamen workshop, Xiamen, China
2018	Digital Economy & Decision Analytics, Berlin
2017 -	blockchainnights.com Blockchain in Academics and Industry
2017	Machine Learning in Economics, Berlin
2017	Crypto Currency Conference, Berlin
2017	Digital Economy & Decision Analytics, Xiamen University, China
2017	Modelling Dependencies in Ultra-High Dimensions, Prague
2016	Digital Economy & Decision Analytics, Xiamen University, China
2016	Energy and Finance Workshop, Stolberg
2015	Copulae on the cross road between math and economics, Oberwolfach
2014	Humboldt-Aarhus-Xiamen workshop, Berlin
2014	Energy and Finance Workshop, Stolberg
2013	Applicable Semiparametrics, Berlin
2013	Energy and Finance Workshop, Stolberg
2013	Mathematical Statistics of Partially Identified Objects, Oberwolfach
2013	Risk preferences and Investment Decisions under Uncertainty, Berlin
2012	Methods and Challenges in Financial Risk Management, Kloster Drübeck
2012	Energy and Finance Workshop, Stolberg
2007-2013	Humboldt-Princeton Meeting, Berlin, Princeton
2010	Chinese Week, Berlin
2010	200 Years Finance and Statistics, Berlin
2010	Weather Derivatives, Berlin
2009	Demographic Risk, Berlin

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
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 technica 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), Professor, Heriot-Watt University, Edinburgh
Testing continuous time models in financial markets

R. Schulz (2003), Professor, 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), Professor, 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), Riemser Arzneimittel AG-Germany, Mecklenburg Vorpommern
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), Professor Humboldt-Universität zu Berlin
Weather Risk Management: CAT Bonds and Weather Derivatives
R. Song Song (2010), Professor Michigan State University, USA
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), Professor, University of New South Wales, Sydney
Stochastic Mortality and Demographic Risks
M. Wersing (2011), Lecturer, Robert Gordon University Aberdeen, Aberdeen
Real Estate Valuation and Investment Strategies
Mengmeng Guo (2012), Professor, South Western University of Finance and Economics, Chengdu, China
Generalized Quantile Regression
Weining Wang (2012), Professor, Humboldt-Universität zu Berlin
Structural Adaptive Techniques in Econometrics
Andrija Mihoci (2012), Professor Universität Cottbus
Structural Adaptive Models in Financial Econometric
Maria Osipenko (2013), Toll Collect, Berlin
Essays on Modeling Multivariate Dependence with Applications to Energy and Weather
Elena Silyakova (2013), PWC Consulting
Modeling implied correlation dynamics
Maria Grith (2013), Erasmus Universität Rotterdam
Dynamics of Risk Attitudes
Barbara Choros-Tomczyk (2013), KPMG Consulting, Luxembourg, Luxembourg
Copula Dynamics in Collateralized Debt Obligations
Iona Duca (2013), European Central Bank, Frankfurt
Stock Return Market Expectations Implied from Options.
Piotr Majer (2014), Sportradar AG
Dynamic Semi parametric Factor Model in Applications to fMRI and Interest Rates
Dedy Dwi Prastyo (2015), Surabaya University, Indonesia
On Single- and Multi-Period Corporate Default Prediction
Stefan Stahlschmidt (2015), Deutsches Zentrum für Hochschul- und Wissenschaftsforschung GmbH
Towards Causal Reasoning: Notes on Dimension Reduction, Graphical Models and Treatment Effects
Shi-Kang Chao (2015), Purdue University, West Lafayette, USA
Quantile Regression in Risk Calibration

Alexander Ristig (2015), Universität Wien
Iterative Estimation of Parametric Models - Theory and Practice
Sergey Nasekin (2017), University of Lancaster
Dynamic Dimension Reduction for Financial Applications
Franziska Schulz (2017), Energy Brainpool
Probabilistic Models in Energy Finance
Lei Fang (2017), Wayfair, Berlin
Mortality Models and Longevity Risk
Lining Yu (2017), Humboldt-Universität zu Berlin
Tail Event driven Financial Risk Modeling
Lukas Borke (2017) Schnell Media
Dynamic Clustering and Visualization on Smart Data via D3-3D-LSA
Xiu Xu (2017) Suzhou University
Probabilistic Models in Financial Risk Management
Shi Chen (2017) KIT Karlsruhe Institute of Technology
Econometric Measures of Financial Risk in High Dimensions
Thijs Benschop (2017) CPB Netherlands Bureau for Economic Policy Analysis
Reduced form models for modeling the European CO2 market and systemic risk
Hien Pham Tu (2018) Deutsche Bank RiskLab, Berlin, Dependence Structure of Credit
Default Swaps to Common Factors and Underlying Assets
Alona Zharova (2018) Humboldt-Universität zu Berlin
Measures of University Research Output,
Petra Burdejova (2018) Humboldt-Universität zu Berlin
Trend Testing and Modelling of Dynamic Tail Event Curves
Simon Trimborn (2018) National University of Singapore
Statistics of Digital Finance
Alla Petukhina (2018) Humboldt-Universität zu Berlin
Tail Event Driven Asset Allocation Strategies for High-dimensional Portfolios
Artem Beque (2018) Humboldt-Universität zu Berlin
Verfahren des maschinellen Lernens zur Entscheidungsunterstützung
Lenka Zbonakova (2018) Humboldt-Universität zu Berlin
Time Varying Penalized Models in High Dimensions
Larisa Adamyan (2019) DYOS AG
Adaptive Weights Community Detection
Awdesch Melzer (2019) Ifesca, Berlin
Stochastic Electricity and Wind Power Modelling
Ya Qian (2019) Deutsche Bank Risklab, Berlin
Modeling Interactions and Interdependencies in Economic and Financial Data
Ygor Klochkov (2019) University of Cambridge, England
Modelling Financial and Social Networks
Niels Wesselhöfft (2020) Sparkasse Kreditpartner, Berlin
Utilizing Self-similar Stochastic Processes to Model Rare Events in Finance
Alisa Kim (2020) Amazon Web Services, Berlin
Deep Learning for Uncertainty Measurement

Raphael Reule (2021) Humboldt-Universität zu Berlin
Digital and Surrogate Finance
Georg Keilbar (2021) Universität Wien
Essays on Modern Econometrics and Machine Learning
Daniel Jacob (2021) UC Berkeley
Essays on using Machine Learning for Causal Inference
Junjie HU (2021) Deutsche Bank
Financial Market Information with Modern Statistical Models
Michael Althof (2022), Royalton Partners, LUX
FRM Financial Risk Meter
Kainat Khowaja (2022), LMU München, Bielefeld U
Dimension Flexible and Adaptive Statistical Learning
Ingolf GA Pernice (2023), Weizenbaum Institute Berlin
On Cryptocurrency Exchange Rates and Approaches to their Stabilization
Konstantin Häusler (2023) Real Consequences of non stationary Fundamentals among Digital Assets
Min-Bin LIN (2023) Asian Institute for Digital Finance
Measuring Tokenomics: Statistical Modeling and Analysis
Danial Saef (2023) Delivery Hero
Nonstationarity in Low and High Frequency Time Series
Bingling WANG (2023) Deutsche Börse
Tail Behaviour Analysis and Robust Regression meets modern methodologies
Bruno Spilak (2023) Royalton Partners, Luxemburg
Tail Risk Protection via reproducible data-adaptive strategies

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

Franke J, Härdle WK, Hafner C (2019) Statistics of Financial Markets: An Introduction. 5th Ed. Springer Verlag, Heidelberg. eBook ISBN 978-3-030-13751-9 (print) , ISBN 978-3-030-13750-2 (softcover)

Härdle WK, Simar L (2019) Applied Multivariate Statistical Analysis, 5th ed., Springer Verlag, Heidelberg, ISBN 978-3-030-26006-4 (Print)

Härdle WK, Lu HS, Shen CS (2018) Handbook of Big data Analytics,, Springer Verlag, ISBN 978-3-319-18284-1, DOI: 10.1007/978-3-319-18284-1

Härdle WK, Chen CYH, Overbeck L (2017) Applied Quantitative Finance (3rd ed) Springer Verlag, ISBN 978-3-662-54485-3

Härdle WK, Okhrin O, Okhrin Y (2017) Basic Elements of Computational Statistics Springer Verlag, ISBN 978-3-319-55335-1

Franke J, Härdle WK, Hafner C (2016) 金融计量：金融市场统计分析, 第四版. Chinese translation of Statistics of Financial Markets: an Introduction. Mechanical Industry Press. ISBN 9787111549383

Van den Berg T, Bommes E, Härdle WK, Petukhina A (2016) Computing Machines. A book on the C.A.S.E. Computer Museum. License: CC BY-NC-SA 3.0, DOI: doi.org/10.20386/hub-43565

Härdle WK, Klinke S, Rönz B (2015) Introduction to Statistics, Using Interactive MM*Stat Elements, Springer Verlag, Heidelberg, ISBN 978-3-319-17703-8 (hardcover), ISBN 978-3-319-17704-5 (ebook), DOI: 10.1007/978-3-319-17704-5

Härdle WK, Hlavka Z (2015) Multivariate Statistics: Exercises and Solutions (2nd ed) Springer Verlag, Heidelberg.ISBN 978-3-642-36004-6 (Print), ISBN 978-3-642-36005-3 (online)

Härdle WK, Simar L (2015) Applied Multivariate Statistical Analysis, 4th ed., Springer Verlag, Heidelberg, ISBN: 978-3-662-45170-0 (Print) 978-3-662-45171-7 (Online), DOI: 10.1007/978-3-662-45171-7

Franke J, Härdle WK, Hafner C (2015) Statistics of Financial Markets: An Introduction. 4th Ed. Springer Verlag, Heidelberg. eBook ISBN 978-3-642-54539-9, Softcover ISBN 978-3-642-54538-2, DOI: 10.1007/978-3-642-54539-9

Härdle WK, Spokoiny V, Panov V, Wang W (2014) Basics of Modern Mathematical Statistics - Exercises and Solutions, ISBN 978-3-642-36849-3 (185 p),

Jaworski P, Durante F, Härdle WK (eds) (2013) Copulae in Mathematical and Quantitative Finance, Proceedings of the Workshop Held in Cracow, 10-11 July 2012, Lecture Notes in Statistics Vol 213, ISBN 978-3-642-35406-9, (294p), DOI:10.1007/978-3-642-35407-6

Borak S, Härdle WK, Lopez Cabrera B (2013) Statistics of Financial Markets 2nd ed., Exercises and solutions, ISBN 978-3-642-33929-5 (246 p), DOI:10.1007/978-3-642-33929-5_1

Gentle J, Härdle WK, Mori Y (2012) Handbook of Computational Statistics, Concepts and Methods, 2nd edition Springer Verlag, Heidelberg. ISBN 978-3-642-21550-6 (1191 p), DOI: 10.1007/978-3-642-21551-3

Härdle WK, 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, (539p) http://dx.doi.org/10.1007/978-3-642-17229-8

Duan JC, Gentle JE, Härdle WK (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

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

Härdle WK, 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 WK, 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

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

Jaworski, P., Durante, F., Härdle WK, Rychlik, T. (eds) (2010) Copula Theory and Its Applications, Proceedings of the Workshop Held in Warsaw, 25-26 September 2009, Lecture Notes in Statistics, Vol 198, ISBN 978-3-642-12464-8, (327 p)

Härdle WK, 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 WK, 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 WK, Unwin, A. (2008) Handbook of Data Visualization. Springer Verlag, Heidelberg. ISBN 3-540-33036-4 (936 p)

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

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

Härdle WK , 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 WK, Aydinli, G. (2006) The Art of Semiparametrics Springer Verlag, Heidelberg. ISBN 3-7908-1700-7 (178 p)

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

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

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

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

Härdle WK, Hlavka, Z. and Klinke, S. (2003) 統計解析環境XploRe ー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 WK, Simar, L. (2003) Applied Multivariate Statistical Analysis. Springer Verlag, Heidelberg. ISBN 3-540-03079-4 (486 p)

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

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

Härdle WK, 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 WK, Klinke, S. and Müller, M. (2001) 統計解析環境XploRe ーラーニングガイド 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 WK, Hlavka, Z. and Klinke, S. (2000) XploRe – the Application Guide. Springer Verlag, Heidelberg. ISBN 3-540-67545-0 , (525 p)

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

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

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

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

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

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

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

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

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

Györfi, L., Härdle WK, 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 WK (1989) Verhalten des Eurosid beim 90 Grad Seitaufprall 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 WK (1986) Belastbarkeitsgrenzen und Verletzungsmechanik des angegurteten PKW-Insassen beim Seitaufprall. Forschungsvereinigung Automobiltechnik e.V. (FAT) Frankfurt FAT Schriftenreihe Nr. 60.

Franke, J., Härdle WK, 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 WK (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

LING CX, Härdle WK (2024) How Sensitive are Tail-related Risk Measures in a Contamination Neighborhood? Statistica Sinica, DOI 10.5705/ss.202022.0019 https://www3.stat.sinica.edu.tw/ss_newpaper/SS-2023-0019_na.pdf

CHANG YC, TENG HW, Härdle WK (2023) Stochastic volatility dynamic hedging for the inverse BTC option, Journal of Futures and Options, Volume 16, 2, August 2023, pp 89-137 https://www.taifex.com.tw/cht/10/journalView

LIANG H, LI XM, LIANG HZ, Härdle WK (2023) Model Checking For Generalized Partially Linear Models, TEST, 20231011 accepted

MA SP, YU KM, TANG ML, PAN JX, Härdle WK, TIAN MZ (2023) A Bayesian multi-stage spatio-temporally dependent model for spatial clustering and variable selection, Statistics in Medicine, http://doi.org/10.1002/sim.9889

XIONG W, Härdle WK, WANG JR, YU KM, TIAN MZ (2024) Mode-Based Classifier: A Robust and flexible discriminant analysis for high dimensional data. Statistica Sinica, doi:10.5705/ss.202023.0014 https://www3.stat.sinica.edu.tw/ss_newpaper/SS-2023-0014_na.pdf

WANG R, Althof M, Härdle WK (2023) A Financial Risk Meter for China, Emerging Markets Review, https://www.sciencedirect.com/science/article/abs/pii/S1566014123000572?via=ihub

WANG ZH, BAI YX, Härdle WK, TIAN MZ(2023) Smoothed quantile regression for partially functional linear models in high dimensions, Biometrical Journal, https://doi.org/10.1002/bimj.202200060

Winkel J, Härdle WK (2023) Pricing Kernels and Risk Premia implied in Bitcoin Options, Eds. NI XW, Härdle WKH, SI "Data Analysis and Financial Risk Management in Financial Markets“ https://www.mdpi.com/journal/risks/special_issues/6J8TJ13Q1C

LI E, Härdle WK, DAI XW, TIAN MZ (2023) Weighted Competing Risks Quantile Regression Models and Variable Selection, Mathematics, https://www.mdpi.com/2227-7390/11/6/1295

LIU F, Packham N, LU MJ, Härdle WK (2023) Hedging Cryptos with Bitcoin Futures, Quantitative Finance, DOI: 10.1080/14697688.2023.2187316

LIA XM, LIANG HZ, Härdle WK, LIANG H (2023) Use generalized linear models or generalized partially linear models? Statistics and Computing accepted 20230202

REN R, Althof, M, Härdle WK (2023) Financial Risk Meter for Cryptocurrencies and Tail Risk Network-Based Portfolio Construction, Singapore Economic Review, https://doi.org/10.1142/S0217590822480010

Matic JL, Packham N, Härdle WK (2023) Hedging Cryptocurrency Options. Review of Derivatives Research, https://doi.org/10.1007/s11147-023-09194-6

Härdle WK, Klochkov Y, Petukhina A, Zhivotovskiy N (2023) Robustifing Markowitz. J Econometrics, https://doi.org/10.1016/j.jeconom.2022.12.006

LI G, Härdle WK, TAO Y (2023) A Time-Varying Network for Cryptocurrencies. J Business & Economic Statistics, https://doi.org/10.1080/07350015.2022.2146695

Zharova A, Härdle WK, Lessmann S (2022) Data-driven support for policy and decision-making in university research management: A case study from Germany. European Journal of Operational Research, https://doi.org/10.1016/j.ejor.2022.10.016

Yu Z, Yu K, Härdle WK, Zhang XL, Wang K, Tian MZ (2022) Bayesian Spatiotemporal Modeling for Costs of Alcohol-related Hospital Discharges. J Royal Stat Society, Series A, https://rss.onlinelibrary.wiley.com/doi/10.1111/rssa.12963

Ben Amor S, Althof M, Härdle WKH (2021) FRM Financial Risk Meter for Emerging Markets, Economic Modelling, Research in International Business and Finance https://doi.org/10.1016/j.ribaf.2021.101594

Chen CYH, Fengler MR, Härdle WK, Liu Y (2021) Media-expressed tone, Option Characteristics, and Stock Return Predictability, J Economic Dynamics and Control, https://doi.org/10.1016/j.jedc.2021.104290

Ren R, Li YX, Härdle WK (2021) Financial Risk Meter Based on Expectiles. J Mult Analysis, https://doi.org/10.1016/j.jmva.2021.104881

Wang BL, Li YX, Härdle WK (2021) K-expectiles clustering. J Mult Analysis, https://doi.org/10.1016/j.jmva.2021.104869

Kim A, Trimborn S, Härdle WK (2021) VCRIX - a volatility index for crypto-currencies. International Review of Financial Analysis, https://doi.org/10.1016/j.irfa.2021.101915

Pele DT, Wesselhöft N, Härdle WK, Kolossiatis M, Yatracos Y (2021) A statistical Classification of Cryptocurrencies, European Journal of Finance, https://doi.org/10.1080/1351847X.2021.1960403

Härdle WK, Lopez Cabrera B, Melzer, A (2021) Pricing Wind Power Futures. J R Stat Soc Series C, 2021;00:1–20. https://doi.org/10.1111/rssc.12499

Chen CYH, Härdle WK, Klochkov E (2021) SONIC: SOcial Networks with Influencers and Communities, J of Econometrics, https://doi.org/10.1016/j.jeconom.2021.02.008

Petukhina A, Trimborn S, Härdle WK, Elendner H (2021) Investing with cryptocurrencies - evaluating the potential of portfolio allocation strategies, Quantitative Finance, https://doi.org/10.1080/14697688.2021.1880023 .

Kim KH, Chao SK, Härdle WKH (2021) Simultaneous Inference of the Partially Linear Model with a Multivariate Unknown Function. J Statistical Planning and Inference, 213, 93-105 https://doi.org/10.1016/j.jspi.2020.10.007

Chen S, Härdle WK, Wang W (2021) The common and specific components of inflation expectations across European countries. Empir Econ (2021). https://doi.org/10.1007/s00181-021-02027-1

Chernozhukov V, Härdle WK, Huang C, Wang W (2021) LASSO-Driven Inference in Time and Space, Annals of Statistics, http://dx.doi.org/10.1214/20-AOS2019

Zinovyeva E, Härdle WK, Lessmann S (2020) Antisocial Online Behavior Detection Using Deep Learning, Decision Support Systems, https://doi.org/10.1016/j.dss.2020.113362

Petukhina A, Reule RCG, Härdle WK (2020) Rise of the Machines? Intraday High-Frequency Trading Patterns of Cryptocurrencies, European Journal of Finance, : https://doi.org/10.1080/1351847X.2020.1789684

Dautel AJ, Härdle WK, Lessmann St, Seow WV (2020) Forex Exchange Rate Forecasting Using Deep Recurrent Neural Networks. Digital Finance, https://doi.org/10.1007/s42521-020-00019-x

Mihoci A, Althof M, Chen CYH, Härdle WK (2020) FRM Financial Risk Meter, Advances in Econometrics, The Econometrics of Networks, 42,ISBN: 9781838675769, https://doi.org/10.1108/S0731-905320200000042016

Hou AJ, Wang W, Chen CYH, Härdle WK,(2020) Pricing Cryptocurrency options. J Financial Econometrics, Vol. 18, No. 2, 250–279, https://doi.org/10.1093/jjfinec/nbaa006

Chao SK, Härdle WK, Yuan M (2020) Factorisable Multi-Task Quantile Regression, J Econometric Theory, https://doi.org/10.1017/S0266466620000304

Adamyan L, Efimov, K, Chen CYH, Härdle WK (2020) Adaptive Weights Clustering of Research Papers, Digital Finance, https://doi.org/10.1007/s42521-020-00017-z

Yu L, Härdle WK, Borke L, Benschop T (2020) An AI approach to Measuring Financial Risk, Singapore Economic Review, https://doi.org/10.1142/S0217590819500668

CHEN CYH, Härdle WK, Mihoci A (2020) TERES - Tail Event Risk Expectile based Shortfall, Quantitative Finance, https://doi.org/10.1080/14697688.2020.1786151

Härdle WK, Harvey C, Reule RCG (2020) Understanding Cryptocurrencies. J Financial Econometrics, https://doi.org/10.1093/jjfinec/nbz033

CHEN S, Härdle WK, WANG L (2020) Estimation and Determinants of Chinese Banks' Total Factor Efficiency: A New Vision Based on Unbalanced Development of Chinese Banks and Their Overall Risk., Computational Statistics, DOI: https://doi.org/10.1007/s00180-019-00951-6

Kostmann M, Härdle WK (2019) Forecasting in Blockchain-based Local Energy Markets, Energies 2019, 12(14), 2718; https://doi.org/10.3390/en12142718

Zbonakova L, Monti RP, Härdle WK (2019) Towards the interpretation of time-varying regularization parameters in streaming penalized regression models, Pattern Recognition Letters, https://doi.org/10.1016/j.patrec.2019.06.021

Härdle WK, Nasekin S (2019) Model-driven statistical arbitrage on LETF option markets, Quantitative Finance, DOI: https://doi.org/10.1080/14697688.2019.1605186

Trimborn S, Li MY, Härdle WK (2019) Investing with cryptocurrencies -A liquidity constrained investment approach. J Financial Econometrics, https://doi.org/10.1093/jjfinec/nbz016

Burdejova P, Härdle WK (2019) Dynamic semi-parametric factor model for functional expectiles Computational Statistics 34: 489. https://doi.org/10.1007/s00180-019-00883-1

Chen CYH, Härdle WK, Xu, X (2019) Dynamic credit default swaps curves in a network topology, Quantitative Finance, https://doi.org/10.1080/14697688.2019.1585560 .

Zhu X, Wang W, Wang H, Härdle WK (2019) Network Quantile Autoregression, J Econometrics, https://doi.org/10.1016/j.jeconom.2019.04.034

Chua WS, Chen Y, Härdle WK (2019) Forecasting Limit Order Book Liquidity Supply-Demand Curves with Functional AutoRegressive Dynamics. Quantitative Finance, https://doi.org/10.1080/14697688.2019.1622290

Chen Y, Härdle WK, Qiang H, Majer, P (2018) Risk Related Brain Regions Detected with 3D Image FPCA, Statistics and Risk Modeling, 35,89110 DOI: https://doi.org/10.1515/strm-2017-0011

Zharova A, Tellinger-Rice J, Härdle WK (2018) How to Measure the Performance of a Collaborative Research Center, Scientometrics, https://link.springer.com/article/10.1007/s11192-018-2910-8 DOI: https://doi.org/10.1007/s11192-018-2910-8

Ngoc MT, Osipenko M, Härdle WK, Burdejova P (2019) Principal Components in an Asymmetric Norm. J Multivariate Analysis 171, 1-21, DOI: https://doi.org/10.1016/j.jmva.2018.10.004

Trimborn S, Härdle WK (2018) CRIX an Index for Cryptocurrencies, Empirical Finance, 49, 107-122, https://doi.org/10.1016/j.jempfin.2018.08.004

Vomfell L, Härdle WK, Lessmann, S (2018) Improving Crime Count Forecasts Using Twitter and Taxi Data, Decision Support Systems, https://doi.org/10.1016/j.dss.2018.07.003

Chao SK, Härdle WK, Sheen J, Trück S, Wang BZ (2018) A note on the impact of news on US household inflation expectations, J Macroeconomic Dynamics, (http://dx.doi.org/10.1017/S1365100518000482).

Chen CYH, Chiang CT, Härdle WK (2018) Downside risk and stock returns: An empirical analysis of the long-run and short-run dynamics from the G-7 Countries, J Banking and Finance, Volume 93, August 2018, Pages 21-32, https://doi.org/10.1016/j.jbankfin.2018.05.012

Li YX, Huang C, Härdle WK (2018) Spatial Functional Principal Component Analysis with Applications to Brain Image Data, J Multivariate Analysis, https://doi.org/10.1016/j.jmva.2018.11.004

Chen CYH, Härdle WK, Okhrin Y (2018) Tail event driven networks of SIFIs. J Econometrics, https://doi.org/10.1016/j.jeconom.2018.09.016

Grith M, Härdle WK, Kneip A, Wagner H (2018) Functional Principal Component Analysis for Derivatives of Multivariate Curves, Statistica Sinica, 28, 2469-2496 https://doi.org/10.5705/ss.202017.0199

Xu X, Mihoci A, Härdle, WK (2018) lCARE - localizing Conditional AutoRegressive Expectiles, J Empirical Finance, https://doi.org/10.1016/j.jempfin.2018.06.006

Chao SK, Härdle WK, Huang C (2018) Multivariate Factorisable Sparse Asymmetric Least Squares Regression. Comp Stat Data Analysis, https://doi.org/10.1016/j.csda.2017.12.001

Härdle WK, Osipenko M (2017) Dynamic Valuation of Weather Derivatives under Default Risk, International Journal of Financial Studies, doi:10.3390/ijfs5040023

Belomestny D, Härdle WK, Krymova E (2017) Sieve estimation of the minimal entropy martingale marginal density with application to pricing kernel estimation, International J of Theoretical and Applied Finance, DOI 10.1142/S0219024917500418

Moro RA, Härdle WK, Schäfer D (2017) Company rating with support vector machines. Statistics&Risk modeling, Vol 34 Issue: 1-2 Pages: 55-67 DOI: https://doi.org/10.1515/strm-2012-1141

Liu R, Härdle WK, Zhang G (2017) Statistical Inference for Generalized Additive Partially Linear Model, J Multivariate Analysis, https://doi.org/10.1016/j.jmva.2017.07.011

Härdle WK, Huang LS (2017) Analysis of Deviance in Generalized Partial Linear Models. J Bus. Econ. Stat. DOI:http://dx.doi.org/10.1080/07350015.2017.1330693

Härdle WK, Lee DK, Nasekin S, Petukhina A (2018) TEDAS Tail Event Driven ASset allocation: evidence from equity and mutual funds' markets, Journal of Asset Management, 19, 49-63, DOI 10.1057/s41260-017-0060-9

Guo MM, Härdle WK (2017) Adaptive Interest Rate Modeling, J. Forecasting, Volume 36, Issue 3, 241–256, https://doi.org/10.1002/for.2431

LU MJ, Chen CYH, Härdle WK (2016) Copula-Based Factor Model for Credit Risk Analysis. Review of Quantitative Finance and Accounting. DOI:10.1007/s11156-016-0613-x

Härdle WK, Huang C (2016) Discussion on "Of quantiles and expectiles: consistent scoring functions, Choquet representations and forecast rankings" by Ehm, Gneiting, Jordan and Krüger. Journal of the Royal Statistical Society: Series B Statistical Methodology 78(3): 545, DOI: 10.1111/rssb.12154

Burdejova P, Härdle WK, Kokoszka P, Xiong Q (2016) Change point and trend analyses of annual expectile curves of tropical storms, Journal of Econometrics and Statistics, http://dx.doi.org/10.1016/j.ecosta.2016.09.002

Härdle WK, Lopez Cabrera B, Okhrin O, Wang W (2016) Localizing Temperature Risk. J Amer Stat Assoc, DOI: http://dx.doi.org/10.1080/01621459.2016.1180985

Wang Q, Zhang T, Härdle WK (2016) An extended Single Index Model with Missing Response at Random, Scand. J Stat. DOI: 10.1111/sjos.12233

Dai XH, Härdle WK, Yu KM (2016) Do Maternal Health Problems Influence Child's Worrying Status? Evidence from British Cohort Study. Journal of Applied Statistics 03/2016; DOI: http://dx.doi.org/10.1080/02664763.2016.1155203

Fan Y, Härdle WK, Wang W, hu L (2016) Single index based CoVaR with very high dimensional covariates, J. Business Econ. Statistics, DOI:10.1080/07350015.2016.1180990

Härdle WK, Yu L, Wang W (2016) TENET - Tail Event driven NETwork risk. J Econometrics, 192, 2, 499-513 DOI: https://doi.org/10.1016/j.jeconom.2016.02.013

Härdle WK, Silyakova E (2016) Implied basket Correlation Dynamics, Statistics and Risk Modeling, DOI: 10.1515/strm-2014-1176

Choros B, Härdle WK, Okhrin O (2016) A semi parametric factor model for CDO Surfaces Dynamics. J. Multivariate Analysis, 146, 151–163, doi:https://doi.org/10.1016/j.jmva.2015.09.002

Grith M, Härdle WK, Krätschmer V (2016). Reference Dependent Preferences and the EPK Puzzle, Review of Finance, doi: https://doi.org/10.1093/rof/rfv062

Zheng S, Liu R, Yang L, Härdle WK (2016) Statistical inference for generalized additive models: simultaneous confidence corridors and variable selection. TEST, 25, 4, p 607–626 DOI:10.1007/s11749-016-0480-8

Zhang JZ, Härdle WK, Chen CYH, Bommes E (2016) Distillation of News Flow into Analysis of Stock Reactions, J. Business Econ. Statistics, Vol34, 4, 547-563, DOI:http://dx.doi.org/10.1080/07350015.2015.1110525

Majer P, Mohr P, Heekeren H, Härdle WK (2016) Portfolio Decisions and Brain Reactions via the CEAD method. Psychometrika, 81, 3, 881–903, DOI 10.1007/s11336-015-9441-5

CHEN D, CHEN S, Härdle WK (2015) The Influence of Oil Price Shocks on China's Macro-economy: A Perspective of International Trade. Journal of Governance and Regulation, 4, (4-1), 178-189, http://doi.org/10.22495/jgr_v4_i4_c1_p5

Chao SK, Proksch K, Dette H, Härdle WK (2015) Confidence Corridors for Multivariate Generalized Quantile Regression J. Business Econ. Statistics, DOI:http://dx.doi.org/10.1080/07350015.2015.1054493

Härdle WK, Lopez Cabrera B, Teng HW (2015) State Price Densities implied from Weather Derivatives, Insurance: Mathematics and Economics. http://dx.doi.org/10.1016/j.insmatheco.2015.05.001

Chen CYH, Härdle W (2015) Common Factors in credit default swap markets, Computational Statistics, DOI: 10.1007/s00180-015-0578-6

Stahlschmidt S, Härdle WK, Thome H (2015) An Application of Principal Component Analysis on Multivariate Time Stationary Spatio Temporal Data, Spatial Economic Analysis, Vol 2, 2, 160-180:DOI: http://dx.doi.org/10.1080/17421772.2015.1023339

Chen RB, Guo MH, Härdle WK, Huang SF (2015) COPICA - Independent Component Analysis Via Copula Techniques, Statistics and Computing, , 25:273-288 10.1007/s11222-013-9431-3

Härdle WK, Ritov Y, Wang W (2015) Tie the straps: Uniform bootstrap confidence bands for bounded influence curve estimators.J. Multivariate Analysis, 134, 129-145, doi: https://doi.org/10.1016/j.jmva.2014.11.003

Wang W, Okhrin O, Härdle WK (2015) Hidden Markov Structures for dynamic copulae, J Econometric Theory, DOI: https://doi.org/10.1017/S0266466614000607

Härdle WK, Okhrin Y, Wang W (2015) Uniform confidence bands for pricing kernels, J. Financial Econometrics, 13 (2): 376-413, DOI: https://doi.org/10.1093/jjfinec/nbu002

CHEN S, Härdle WK, Jeong K (2014) Recurrent Support Vector Regression for a Nonlinear ARMA Model with Applications to Forecasting Financial Returns, Computational Statistics, DOI 10.1007/s00180-014-0543-9

Härdle WK, Vogt A (2014) Ladislaus von Bortkiewicz - statistician, economist, and a European intellectual, Intern. Stat. Review, DOI: 10.1111/insr.12083

Gu L, Wang L, Härdle WK, Yang L (2014) A Simultaneous Confidence Corridor for Varying Coefficient Regression with Sparse Functional Data, TEST, 23 (4), 806-843. DOI 10.1007/s11749-014-0392-4

Härdle WK, Majer P (2014) Yield Curve Modeling and Forecasting using Semi parametric Factor Dynamics, The European Journal of Finance,
DOI: 10.1080/1351847X.2014.926281

CHEN S, Härdle WK (2014) Dynamic activity analysis model based on win win development forecasting under the environmental regulation in China. Computational Statistics, 29:1543-1570, DOI 10.1007/s00180-014-0505-2

Song R, Härdle WK, Ritov J (2014) High Dimensional Nonstationary Time Series Modelling with Generalized Dynamic Semiparametric Factor Model Econometrics Journal, 17, 1-32, doi: 10.1111/ectj.12024

Härdle WK, Wang W (2014) Principle Volatility Component Analysis (a Discussion). J. Business and Economic Statistics, 32, 173-174, DOI:10.1080/07350015.2014.898585

Golubev Y, Härdle WK, Timofeev R (2014) Testing Monotonicity of Pricing Kernels, AStA - Advances in Statistical Analysis, 98:305 - 326, DOI: 10.1007/s10182-014-0225-5

Honda T, Härdle WK (2014) Variable Selection in Cox Regression with varying coefficients., J. Stat. Plan. Inference, 148, 67-81, 10.1016/j.jspi.2013.12.002

Chen RB, Chen Y, Härdle WK (2014) TVICA - Time varying independent component analysis, J Comp. Stat. Data Analysis, 74: 95-109, DOI: http://dx.doi.org/10.1016/j.csda.2014.01.002

Härdle WK, Hautsch N, Mihoci A (2014) Local Adaptive Multiplicative Error Models for High-Frequency Forecasts. J Applied Econometrics, DOI: 10.1002/jae.2376

Zheng S, Yang L, Härdle WK (2014) A Smooth Simultaneous Confidence Corridor for the mean of sparse functional data. 109, 506, 661-673, J. Amer. Stat. Assoc., DOI:10.1080/01621459.2013.866899

Choros-Tomczyk B, Härdle WK, Overbeck L (2014) Copula Dynamics in CDOs., Quantitative Finance, 14,9, 1573-1585, https://doi.org/10.1080/14697688.2013.847280

Guo MM, Zhou L, Huang JZ, Härdle WK (2013) Functional Data Analysis of Generalized Regression Quantiles, Statistics and Computing, 10.1007/s11222-013-9425-1

Härdle WK, Okhrin Y, Okhrin O (2013) Dynamic structured Copula Models, Statistics and Risk Modelling, 30, 4, 361-388, 10.1524/strm.2013.2004

Choros-Tomczyk B, Härdle WK, Okhrin O (2013). Valuation of Collateralized Debt Obligations with Hierarchical Archimedean Copulae, Empirical Finance, 24: 42-62 10.1016/j.jempfin.2013.08.001

Stahlschmidt S, Tausendteufel H, Härdle WK (2013) Bayesian Networks and Sex related Homicides, Journal of Applied Statistics, Volume 40, Issue 6, 1155-1171, 10.1080/02664763.2013.780235

Liu R, Yang L, Härdle WK (2013) Oracally Efficient Two-Step Estimation of Generalized Additive Model. Journal of the American Statistical Association, Vol 108, Issue 502, 619-631, https://doi.org/10.1080/01621459.2013.763726

van Bömmel A, Song R, Majer P, Mohr P, Heekeren H, Härdle WK (2013) Risk Patterns and correlated brain activities. Multidimensional Statistical Analysisof fMRI Data in Economics Decision making Study, Psychometrika, Vol 78, https://link.springer.com/article/10.1007%2Fs11336-013-9352-2

Spokoiny V, Wang W, Härdle WK (2013) Local Quantile Regression (with discussion), Journal Statistical Planning and Inference, 143, 1109–1129, DOI: 10.1016/j.jspi.2013.03.008

Detlefsen K, Härdle WK (2013) Variance Swap Dynamics, Quantitative Finance, 13, 675-685, DOI:10.1080/14697688.2012.749420

Wang W, Bobojonov I, Härdle WK, Odening M (2013) Testing for increasing weather risk, Stochastic Environmental Research and Risk Assessment, 27, 1565-1574, DOI: 10.1007/s00477-013-0692-3

Grith M, Härdle WK, Park J (2013). Shape invariant modeling pricing kernels and risk aversion, J. Financial Econometrics,11, 370-399, DOI: 10.1093/jjfinec/nbs019

Härdle WK, Hautsch N, Mihoci A (2012) Modelling and Forecasting Liquidity Supply Using Semiparametric Factor Dynamics, J. Empirical Finance. 19, 610-625, DOI http://dx.doi.org/10.1016/j.jempfin.2012.04.002

Härdle WK, Ritov J, Song R (2012) Partial Linear Quantile Regression and Bootstrap Confidence Bands J. Multivariate Analysis, 107, 244-262, DOI http://dx.doi.org/10.1016/j.jmva.2012.01.020

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

Härdle WK, Jeong K, Song R (2012) A consistent nonparametric test for causality in quantile, Econometric Theory, Vol 28, 861 - 887, DOI 10.1017/S0266466611000685

Härdle WK, Osipenko M (2012) Spatial Risk Premium on Weather Derivatives and Hedging Weather Exposure in Electricity, Energy Journal, 33, 2, doi://10.5547/01956574.33.2.7

Ahmad T, Härdle WK, Klinke S, Al Awadhi S (2012). Using Wiki to build an e-learning system in statistics in the Arabic language, Computational Statistics, DOI: 10.1007/s00180-012-0312-6 .

Guo MM, Härdle WK (2011) A Confidence Band for Expectile Functions, Advances in Statistical Analysis, http://www.springerlink.com/content/p8317t3111737qm2/ DOI: 10.1007/s10182-011-0182-1

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

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

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

Chen Y, Härdle WK, 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 WK, 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 WK, 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, Härdle WK (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 JL, Härdle WK (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 WK, Lopez Cabrera B (2010) Calibrating CAT bonds for Mexican earthquakes, J. Risk and Insurance, 77, 625 - 650 DOI: https://doi.org/10.1111/j.1539-6975.2010.01355.x

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

Giacomoni E, Härdle WK, 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 WK, 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 WJ, Härdle WK (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 WK, Kneip A. (2009) Common Functional Principal Components, Ann. Statist., 37, 1-34, doi:10.1214/07-AOS516

Borak S, Fengler M, Härdle WK (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 WK, 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 WK, 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 WK, 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 WK, Lee YJ, Schäfer D, Yeh YR (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 WK, 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 WK, Lopez Cabrera B (2008) Methodology for calibration of CAT bonds, Schmollers Jahrbuch, Journal of Applied Social Science Studies, 1-16.

Brüggemann R, Härdle WK, Mungo J, Trenkler C (2008) VAR modelling for Dynamic Semiparametric Factors of Volatility Strings, Journal of Financial Econometrics, 2008 6(3):361-381, doi:http://hdl.handle.net/10.1093/jjfinec/nbn004

Härdle WK, 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, Härdle WK (2008) A Note on the Calibration Design of Implied Volatility Surfaces, Journal of Data Science, 6, 303-312

Chen Y, Härdle WK, Seok-Oh J (2008) Nonparametric Risk Management with Generalized Hyperbolic Distributions, Journal of the American Statistical Association., 103, 910 – 923. DOI:10.1198/016214507000001003

Härdle WK, Kleinow T, Korostelev A, Logeay C, Platen E (2008) Semiparametric Diffusion Estimation and Application to a Stock Market Index, Quantitative Finance, 7, 1-12.

Benko M, Fengler M, Härdle WK, Kopa M (2007) On extracting information implied in options, Computational Statistics, 22, 543 - 553.

Härdle WK, Klinke S, Ziegenhagen U (2007) On the utility of e-learning in statistics, International Statistical Review, 75, 355 – 364

Detlefsen K, Härdle WK (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", ICFAI University Press, Hyderabad, India.

Schulz R, Brenner S, Härdle WK (2007) Realoptionen und Immobilienbewertung: Eine Umsetzungsstudie Schmalenbachs Zeitschrift für die betriebswirtschaftliche Forschung, (zfbf) 59, 1002-1028.

Fengler M, Härdle WK, Mammen E (2007) A Semiparametric Factor Model for Implied Volatility Surface Dynamics. J Financial Econometrics, 5, 2, 189-218.

Chen Y, Härdle WK, Spokoiny V (2007) Portfolio Value at Risk based on Independent Components Analysis, Journal of Computational and Applied Mathematics, 205, 594-607.

Yang L, Härdle WK, Park B, 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, Härdle WK (2006) Robust Adaptive estimation of dimension reduction space. Computational Statistics and Data Analysis, 51, 545-555.

Andriyashin A, Benko M, Härdle WK, Timofeev R, 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 WK, Hlavka Z, Stahl G (2006) On the appropriateness of inappropriate VaR models Allg. Stat. Archiv, 90/2, 273-297.

Xia Y, Härdle WK (2006) Semi-parametric Estimation of Generalized Partially Single Index Models, Journal of Multivariate Analysis 97, 1162-1184.

Yatchew A, Härdle WK (2006) Nonparametric State Price Density Estimation Using Constrained Least Squares and the Bootstrap, Journal of Econometrics, 133, 579-599.

Wang Q, Härdle WK (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 WK, 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, Härdle, WK (2004) Semiparametric Regression Analysis under Imputation for Missing Response Data. Journal of the American Statistical Association, 99(466), 334-34.

Härdle WK, Huet S, Mammen E, Sperlich S. (2004) Bootstrap Inference in Semiparametric Generalized Additive Models, Econometric Theory, 20(2), 265-300.

Feldmann D, Härdle WK, Hafner C, Hoffmann M, Lepski O, 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 WK, Villa C (2003) The Dynamics of Implied Volatility: A Common Principle Components Approach. Review of Derivative Research, 6, 179-202.

Liang H, Härdle WK (2003) Partial Linear Models with heteroscedastic variances. Journal of Japanese Society of Computational Statistics, 15, 89-104

CHEN SX, Härdle WK, Ming L (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 WK (2003) Does male age have an influence on the risk of spontaneous abortion ? American Journal of Epidemiology, 157, 815-824.

Härdle WK, Herwatz H, Spokoiny V (2003) Time Inhomogeneous Multiple Volatility Modelling, Financial Econometrics, 1, 55-95. https://doi.org/10.1093/jjfinec/nbg005

Härdle WK, Horowitz J, Kreiss JP (2003) A Review of the Bootstrap for Time Series. International Statistical Review, 71, 435-459.

Yang L, Sperlich S, Härdle WK (2003) Derivative Estimation and Testing in Generalized Additive Models. J Statistical Planning and Inference, 115, 521-542.

Delecroix M, Härdle WK, Hristache M (2003) Efficient Estimation in Conditional Single-Index Regression. J Mult Analysis, 86, 1, 213-226.

Golubev Y, Härdle WK (2002) On adaptive estimation in partial linear models. Math. Methods of Statistics, 11, 98-117.

Aydinli G, Härdle WK, Kleinow T, Hizir S (2002) MD*Rex: Linking XploRe to Standard Spreadsheet Applications. Comp Statist, 3, 329 - 341. DOI: 10.1007/s001800200110

Fengler M, Härdle WK, 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 RC, Härdle WK, Mammen E (2002) Estimation in an additive Model when the components are linked parametrically. Econometric Theory, 18, 886-912.

Härdle WK, Sperlich S, Spokoiny V (2001) Structural Tests in Additive Regression. J. Amer. Stat. Assoc., 96, 1333-1347.

Härdle WK, Mammen E, Proenca I. (2001) A Bootstrap Test for Single Index Models. Statistics, 35, 427-451.

Härdle WK, Kleinow T, Tschernig R (2001) Web Quantlets for Time Series Analysis. Annals of the Institute of Statistical Mathematics, 52, 1-18

Hall P, Härdle WK, Kleinow T, Schmidt P (2000) On Semiparametric Bootstrap Approach to Hypothesis Tests a. Confidence Intervals for Hurst Coefficients. Statistics of Stochastic Processes, 3, 263-276.

Golubev Y, Härdle WK (2000) On the second order minimax estimation in partial linear models. Math. Methods of Statistics, 9, 2, 160 - 175.

Härdle WK, Hafner C (2000) Discrete Time Option pricing with flexible volatility Estimation. Finance and Stochastics 4, 2, 189-207 https://doi.org/10.1007/s007800050011

Härdle WK, Horowitz J (2000) Internet-Based Econometric Computing. J. Econometrics, 95, 333-345, https://doi.org/10.1016/S0304-4076(99)00041-X

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

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

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

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

Yang LJ, Härdle WK, Nielsen JP (1999) Nonparametric Autoregression with multiplicative Volatility and Additive Mean. J. Time Series Analysis,20, 579-604..

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

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

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

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

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

Härdle WK, Tsybakov AB, Yang LJ (1998) Nonparametric Vector Auto-regression. J. Stat. Planning. Inference, 68, 221-245.

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

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

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

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

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

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

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

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

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

Linton OB, Härdle WK (1996) Estimation of Additive Regression Models with known Links. Biometrika, 83, 529-540.

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

Härdle WK, Steiger W (1995) Optimal Median Smoothing. Alg 296 Applied Statistics, 44, No.2, 258-264.

Härdle W, 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 WK, Tsybakov AB (1995) Additive Nonparametric Regression on Principal Components. Journal of Nonparametric Statistics, 5, 157-184.

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

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

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

Härdle WK, Marron JS (1994) Fast and Simple Scatterplot Smoothing. Computational Statistics and Data Analysis, 20, 1-18.

Härdle WK, Ibragimov I, Tsybakov AB (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 WK, Nussbaum M (1994) Kernel Estimation: the Equivalent Spline Smoothing Method. Publications de l'Institute de Statistique Université de Paris, XXXVIII, 61-86.

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

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

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

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

Härdle WK, Ibragimov I, Tsybakov AB (1993) Ob Effektivnom ozenivani usrednennoi proiswodnoi. Journal Russian Academy of Sciences, 48, 550-552.

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

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

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

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

Härdle WK, Tsybakov AB (1993) How sensitive are Average Derivatives ? Journal of Econometrics, 58, 31-48.

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

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

Härdle WK, Hart J, Marron JS, Tsybakov AB (1992) Bandwidth Choice for Average Derivative Estimation. Journal of the American Statistical Association, 87, 218-226.

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

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

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

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

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

Härdle WK, Marron JS (1991) Bootstrap Simultaneous Error Bars for Nonparametric Regression. Annals of Statistics, 19, 778-796.

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

Härdle WK, Carroll RJ (1990) Biased Crossvalidation for a Kernel Regression Estimator and its Derivatives. Östereichische Zeitschrift für Statistik und Informatik, 20, 53-64.

Härdle WK, Marron JS (1990) Semiparametric comparison of regression curves. Annals of Statistics, 18, 63-89.

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

Härdle WK, Marron JS, Wand M (1989) Bandwidth choice for density derivatives. Journal of the Royal Statistical Society, 52, 223-232.

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

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

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

Carroll RJ, Härdle WK (1989) A note on second order effects in a semiparametric context. Statistics, 20, 179-186.

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

Härdle WK, Tsybakov AB (1988) Robust Nonparametric Regression with Simultaneous Scale Curve Estimation. Annals of Statistics, 16, 120-135.

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

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

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

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

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

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

Härdle WK (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 WK, Kubli F (1986) Fetal cerebral function and intrauterine hypoxia in sheep fetuses. Biological Research in Pregnancy, 7, 164-170.

Härdle WK, Tuan PD (1986) Some Theory on M-smoothing of time series. J. Time Series Analysis 7, 191-204. DOI: 10.1111/j.1467-9892.1986.tb00502.x

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

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

Marron JS, Härdle WK (1986) Random approximations to an error criterion of nonparametric statistics. Journal of Multivariate Analysis, 20, 91-113.

Collomb G, Härdle WK (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 WK (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 WK (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 WK, Marron JS (1985) Optimal Bandwidth Selection in Nonparametric Regression Function Estimation. Annals of Statistics, 13, 1465-1481.

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

Härdle WK, Gasser T (1985) On Robust Nonparametric Estimation of Derivatives of Regression Functions. Scandanavian Journal of Statistics, 12, 233-240.

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

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

Härdle WK, Gasser T, 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 WK, Luckhaus S (1984) Uniform Consistency of a Class of Regression Function Estimators. Annals of Statistics, 12, 612-623.

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

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

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

Härdle WK, Aderjan R (1983) Klassifikation von Digoxin- Blut und Gewebe-konzentrationen 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

Zinovyeva E, Reule RCG, Härdle WK (2023) Understanding Smart Contracts: Hype or Hope? "FinTech Research and Applications: Challenges and Opportunities", Transformations in Banking, Finance and Regulation series). World Scientific Publishing, https://doi.org/10.1142/q0375

Spilak B, Härdle WK (2022) Tail-risk protection: Machine Learning meets modern Econometrics, In: Lee, CF., Lee, A.C. (eds) Encyclopedia of Finance. Springer, Cham. https://doi.org/10.1007/978-3-030-91231-4_94

Lin MB, Khowaja K, Chen CYH, Härdle WK (2021) Blockchain mechanism and distributional characteristics of cryptos. Forthcoming in: Book Series: Advances in Quantitative Analysis of Finance & Accounting (AQAFA) , Vol. 18, DOI： 10.6293/AQAFA.202112_(18).0006

Khowaja k, Shcherbatyy M, Härdle WK (2021) Surrogate Models for Optimization of Dynamical Systems, Springer Lecture Notes (E Mammen, M Reiss eds.) for the 60th birthday of V Spokoiny

Wu DD, Härdle WK (2020) Service Data Analytics and Business Intelligence, Computational Statistics, https://doi.org/10.1007/s00180-020-00968-2

Chen CYH, Härdle WK (2017) Data Science and Digital Society. Proceedings of the 11th International Conference on Business Excellence, pp. 669 - 675, ISSN 2558-9652, DOI: https://sciendo.com/article/10.1515/picbe-2017-0071

Chen S, Chen CYH, Härdle WK, Lee TM, Ong B (2017) A first econometric analysis of the CRIX family, in Handbook of Blockchain, Digital Finance and Inclusion, Vol 1, Cryptocurrency, FinTech, InsurTech, and Regulation, David LEE Kuo Chuen, Robert Deng, eds. ISBN: 9780128104415, Academic Press, Elsevier

Zbonakova L, Härdle WK, Wang W (2017) Time Varying Quantile Lasso. p 331-353, in Applied Quantitative Finance (Härdle, Chen, Overbeck eds) Springer Verlag, DOI 10.1007/978-3-662-54486-0

Linton M, Teo EGS, Bommes E, Chen CYH, Härdle WK (2017) Dynamic Topic Modelling for Cryptocurrency Community Forums. p 355-372, Applied Quantitative Finance (Härdle, Chen, Overbeck eds) Springer Verlag, DOI 10.1007/978-3-662-54486-0

Härdle W K, Phoon KF, Lee D (2017) Credit Rating Score Analysis. p 223-244 Applied Quantitative Finance, (Härdle WK, Chen YH, Overbeck L eds), Springer Verlag, DOI 10.1007/978-3-662-54486-0

Borke L, Härdle WK (2018) Q3-D3-LSA, Handbook of Big data Analytics, (Härdle, Lu, Shen eds), Springer Verlag, ISBN 978-3-319-18284-1, DOI: 10.1007/978-3-319-18284-1

Zieba M, Härdle WK (2018) Beta-boosted ensemble for big credit scoring data. Handbook of Big Data Analytics (Härdle, Lu, Shen, eds), Springer Verlag, ISBN 978-3-319-18284-1

Härdle WK, Huang C, Chao SK (2016) Factorisable Sparse Tail Event Curves with Expectiles. Oberwolfach Report No. 12/2016: New Developments in Functional and Highly Multivariate Statistical Methodology: 26-29, DOI: 10.4171/OWR/2016/12

Härdle WK, Trimborn S (2015) CRIX or evaluating Blockchain based currencies. Oberwolfach Report No. 42/2015 „The Mathematics and Statistics of Quantitative Risk“ DOI: 10.4171/OWR/2015/42

Chao SK, Härdle WK, Wang W (2015) Quantile Regression in Risk Calibration. in Handbook for Financial Econometrics and Statistics, Cheng-Few Lee, ed., Springer Verlag, DOI: 10.1007/978-1-4614-7750-1_54.

Trück S, Weron R, Härdle WK (2015) The Relationship between Spot and Futures CO2 Emission Allowance Prices in the EU-ETS, in Gronwald and Hintermann (eds) Emission Trading Systems as a Climate Policy Instrument - Evaluation and Prospects, MIT Press. DOI:10.7551/mitpress/9780262029285.003.0008

Härdle WK, Lopez Cabrera and Ritter M (2014) Forecast based pricing of weather derivatives. Handbook on The Macroeconomics of Global Warming, Semmler, W. and Bernard, L. (eds), Oxford University Press ISBN 9780199856978, doi: 10.1093/oxfordhb/9780199856978.013.018

Härdle WK, Prastyo DD, Hafner Ch (2014) Support Vector Machines with evolutionary feature Selection for Default Prediction, Handbook of Applied Nonparametric and Semi-parametric Econometrics and Statistics, J. Racine, R. Su, and Aman Ullah (eds) Oxford University Press, New York.p 346 - 373, ISBN. 978-0-19-985794-4

Fan Y, Härdle WK, Wang W, Zhu L (2014) Composite Quantile Regression for the Single Index Model, Oberwolfach Reports, 48/2013, 27 - 30 DOI: 10.4171/OWR/2013/48

Härdle WK, Prastyo DD (2014) Embedded Predictor Selection for Default Risk Calculation: A South East Asian Industry Study, Handbook of Asian Finance Vol 1, Financial Markets and Sovereign Wealth Funds, Editors David Lee and Greg N. Gregoriou, Elseveier / Academic Press, p 131-148

Chernozukhov V, Härdle WK, Horowitz J, Ritov Y (2013) Mathematical Statistics of partially identified objects, Oberwolfach Reports, DOI: 10.4171/OWR/2013/19

Härdle WK, Okhrin O, Wang W (2013) HMM and HAC, Advances in Intelligent Systems and Computing, 190, 341-348. DOI : 10.1007/978-3-642-33042-1_37

Xia Y, Härdle WK, Linton O (2012) Optimal Smoothing for a Computationally and Statistically Efficient Single Index Estimator in Exploring Research Frontiers in Contemporary Statistics and Econometrics, Van Keilegom, I. and Wilson, W. (eds), Springer Verlag, p 229 - 261

Härdle WK, Mori Y, Symanzik J (2012) Computational Statistics, the Journal History , Wiley Interdisciplinary Reviews (WIREs) : Computational Statistics, doi:

doi: WIREsComputStat2012.doi:10.1002/wics.1206

Härdle WK, Schulz R, Wang W (2012) Prognose mit nichtparametrischen Verfahren in: Prognoserechnung, 7. Auflage ed. Mertens, Physica Verlag.p 167-181.

Benth FE, Härdle WK, 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 WK, Hoffmann L, 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 WK, Schienle M (2011) Nonparametric Estimation of Risk neutral Densities. in: Handbook of Computational Finance, Duan, Gentle, Härdle, eds., Springer Verlag. DOI 10.1007/978-3-642-17254-0_11

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

Härdle WK, Silyakova E (2011) Volatility Investing with Variance Swaps. in: Handbook of Computational Finance, Duan, Gentle, Härdle, eds., Springer Verlag. also appeared as Härdle WK, 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 WK (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 WK, 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 WK, 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 WK, Mysickova A (2009) Numerics of Implied Binomial Trees, in Applied Quantitative Finance (2nd. Edition) W. Härdle, N. Hautsch, L. Overbeck (eds), Springer Verlag

Härdle WK, Okhrin O, 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 WK, Hautsch N, 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, Härdle WK (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 WK, Handel M (2008) Time Dependent Relative Risk Aversion, in Risk Assessment: Decisions in Banking and Finance (Contributions to Economics); Bol, Georg; Rachev, Svetlozlar; Würth, Reinhold (Eds.), Physica Verlag, ISBN-10: 3790820490, 15-46,

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

Unwin A, Theus M, Härdle WK (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, Härdle WK (2008) Computational Statistics and Data Visualization. In: Handbook of Data Visualization. Springer Verlag, Heidelberg, ISBN 978-3-540-33036-3, 4-12.

Čížek P, Härdle WK (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 WK, Ziegenhagen U (2007) E-Learning interkulturell. Humboldt-Spektrum, 2007,3, 50-53

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

Giacomini E, Härdle WK (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, Härdle WK (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 WK, Uhlig H (2005) Ökonomisches Risiko. Humboldt-Spektrum, 2005,1, 18-23

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

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

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

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

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

Härdle WK, Jeong SO (2005) Nonparametric Productivity Analysis in: Statistical Tools in Finance and Insurance, Cizek, Härdle, Weron Springer Verlag.

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

Härdle WK, Klinke S, 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 WK, Mori Y (2004) Computational Statistics and Data Analysis. In: Handbook of Computational Statistics, Concepts and Methods Springer Verlag, Heidelberg.

Burnecki K, Härdle WK , Weron R (2004) Simulation of risk processes. Chapter in the Encyclopedia of Actuarial Science, Volume X, ed. Teugels, Sundt, Wiley,

Chen Y, Härdle WK, Schulz R (2004) Prognose mit nichtparametrischen Verfahren in: Prognoserechnung, 6. Auflage ed Mertens, Physica Verlag.

Blaskowitz O, Härdle WK, Schmidt P (2004) Skewness and Kurtosis trades in: Handbook: Computational and Numerical Methods in Finance, ed. S. T. Rachev Birkäuser Verlag.

Aydinli G, Härdle WK, Neuwirth E (2003) Computational Statistics with Spreadsheets Towards Efficiency, Reproducibility and Security. Proceedings of the Interface 2003 conference, Utah, CD Rom

Aydinli G, Härdle WK, Rönz B (2003) e-learning/e-teaching in statistics: a new challenge. Proceedings of the IASE conference, Korea, CD Rom

Tamine J , Cizek P, Härdle WK (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 WK, Kreiss JP (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 WK, Kamps U, Witzel R (2003) e-stat: Views, Methods, Applications. ISI 2003, Berlin Proceedings, CD ROM, Book 2 82-85.

Härdle WK, Müller M (2003) Exploring Credit Data. In: Credit Risk, Eds: Bol, Nakhaeizadeh, Rachev, Ridder, Vollmer, 157-173. Physica Verlag.

Härdle WK, Schulz R, Sofyan H, Werwatz A, Witzel R (2002) MD*Immo. Online Preisprognose für Berliner Einfamilienhäuser. Humboldt-Spektrum, 2002, 4, 42-44.

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

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

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

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

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

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

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

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

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

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

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

Härdle WK, Sperlich S (1998) Financial Calculations on the Net. Finanz-marktanalyse und -prognose, 53-56 Editor: Bol, Nakhaeizadeh, Vollmer, Physica Verlag.

Härdle WK, Yang, LJ (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 T, Klinke S, Härdle WK (1996) A New Generation of a Statistical Computing Environment on the Net COMPSTAT Proceedings Barcelona Physica Verlag, Heidelberg. ISBN 3-7908-0953-5

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

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

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

Härdle WK, Kötter T (1994) XploRe - An Interactive Computing Environment. SoftStat '93, Advances in Statistical Software 4, 261-266.

Härdle WK, Klinke S, Müller M (1994) Applied Nonparametric Smoothing Techniques. ''Computational Statistics''(ed. Dirschedl, Ostermann), Physica Verlag.

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

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

Härdle WK, Tsybakov AB (1991) Remarks on Sliced Inverse Regression. Discussion of a paper by Ker-Chau Li. Journal of the American Statistical Assoication, 86, 333-335.

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

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

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

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

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

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

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

Härdle WK (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 WK (1987) XploRe - a Computing Environment for eXploratory Regression. Statistical Data Analysis based on the L1 norm (Y.Dodge, ed.) North Holland.

Härdle WK (1986) What regression model should be chosen when the statistician misspecifies the error distribution ? ''Function Estimates'', ed. JS Marron, Amer. Math. Soc. Contemporary Mathematics Series.

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

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

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

Härdle WK, Mattern R (1983) Mathematische Modellierung der Eliminationsphase 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, Härdle WK (1983) Experimentelle Untersuchungen zum Verlauf der Alkoholkurve in der späten Eliminationsphase., in "Fortschritte der Rechtsmedizin" ed. H.Froberg, J.Barz, J.Bösche, R.Käppner, R.Mattern. Springer Verlag Heidelberg.

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

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

Härdle WK, 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

Khowaja K, Saef D, Sizov S, Härdle WK (2024) Data Analytics Driven Controlling: bridging statistical modeling and managerial intuition . Management and Marketing, RR 20240310

ZUO XR, CHEN YT, Härdle WK (2024) Emoji-driven Sentiments in Cryptocurrency Markets: Integrating Visual and Textual Contexts, Management and Marketing Journal, submitted 20240212

Saef D, Nagy O, Sizov S, Härdle WK (2024) Understanding Jumps in High Frequency Digital Asset Markets, Digital Finance, RR 20240219

LIN MB, CHEN, CYH, Härdle WK (2024) What Drives Crypto's Volatility Persistence? A Data Analytic Probe on Ethereum Journal of Operations Management, submitted 20240201

NI XW, LIN MB, Schillebeeckx S, Härdle WK (2024) On SGX’s Voyage to Corporate Sustainability: Exploring Emerging Topics in Multi-Industry Corpora. Singapore

Economic Review, submitted 20231101, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4686328

Härdle WK, REN R, WANG ZJ, WU WB (2023) A Network View on a Portfolio Risk Decomposition,, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4308825 J Business Economics Statistics RR 20240208

Teng HW, Härdle WK, Osterrieder J (2023) Mitigating Digital Asset Risks, Submitted 200921 Financial Innovation RR 20240103 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4594467

WANG R, Poti C, Härdle WK (2023) Assessing Cryptocurrency Network Risk, submitted Quantitative Finance RR 20231201 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4574619

Woitschig P, Härdle WK, Uddin GS, Xie TJ (2023) The Energy Consumption of the Ethereum-Ecosystem, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4526732 Energy Journal submitted 20231205, rejected

Agakishiev I, Petukhina A, Kozmik K, Kopa M, Härdle WK (2024) Multivariate probabilistic forecasting of electricity prices with trading applications. submitted to Energy Economics , ENEECO-D-23-01361, RR 20240211 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4527675

Agakishiev I, Härdle WK, Pele DP (2023) Cryptocurrency liquidity forecasting. Submitted to Handbook of Blockchain Analytics (CHEN, LIU, Härdle eds.), Springer Handbooks

Häusler K, Härdle WKH (2023) ETF construction on CRIX. Financial Innovation, RR 20240208

LU MJ, Horvath M, WANG XJ, Härdle WK (2023) Spectral Risk for Digital Assets. submitted Review of Quantitative Finance and Accounting RR 20240110 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4414080

Melzer A, Lopez Cabrera B, Härdle WK (2021) Joint Tensor Expectile Regression for Electricity Day-Ahead Price Curves. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3363167

TIAN MZ, TAI LN, Tao L, PAN JX, TANG ML; YU KM, Härdle WK (2023) Fully nonparametric inverse probability weighting estimation with non ignorable missing data and its extension to missing quantile regression. Computational Statistics and Data Analysis, 20230303 submitted

LIN MB， WANG BL, Hafner Ch, Bocart F, Härdle WK (2023) 代 DAI Digital Art Index: A Robust Price Index for Heterogeneous Digital Assets, Management Science submitted 20230120

LU W, WANG YF, LIN MB, REN R, Härdle WK (2023) Cross-exchange Crypto Risk: A High-frequency Dynamic Network Perspective. International Review of Financial Analysis, RR 20231204 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4308825

Bag R, Spilak B, Winkel J, Härdle WK (2022) Quantinar: a blockchain p2p ecosystem for honest scientific research. submitted to Computational Statistics RR 20231219 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4275797

TENG HW, Härdle WK (2022) Financial analytics of inverse BTC options in a stochastic volatility world, Management Science, 20230929 submitted, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4238213

XIA HY, Härdle WK (2022) The Tail Risk Co-movement of Quasi-municipal Bond: What Can We Learn from China's Chengtou Bond Market? International Review of Financial Analysis, 20221001 submitted

LI W, Härdle WK, Lessmann S (2022) A Data-driven Case-based Reasoning in Bankruptcy Prediction. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4209433

HU J, Härdle WK (2022) Networks of News and Cross-Sectional Return, Journal of Financial and Quantitative Analysis, RR 20220505

Spilak B, Härdle WK (2023) Risk Budget Portfolios With Convex Non-negative Matrix Factorization, European Journal Finance, submitted 20220407 , https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4474100

Spilak B, Härdle WK (2023) Portfolio Tail-Risk Protection With Non-linear Latent Factors. submitted 20230407 , https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4483490

Feng YH, Härdle WK (2021) A data-driven P-spline smoother and the P-Spline-GARCH models, Econometrics and Statistics, RR 20210906

Ni XW, Härdle WK, Xie TJ (2023) CRRIX - A Machine Learning Based Regulatory Risk Index for Cryptocurrencies. , International review of financial analysis, RR 20230201

HU J, KUO WY, Härdle WK (2021) Risk of Bitcoin Market: Volatility, Jumps, and Forecasts, European Journal of Finance, submitted 20210901

Härdle WK, Xu X (2022) Localizing Multivariate CAViaR . Statistica Sinica, 20230630 RR

Wesselhöfft N, Härdle WK (2021) Estimating low sampling frequency risk measures by high-frequency data, Journal of Financial and Quantitative Finance. submitted

Härdle WK, Schulz R, Xie TJ (2023) Cooling Measures and Housing Wealth: Evidence from Singapore, Singapore Economic Review, RR 20230829

Zharova A, Mihoci A, Härdle WK (2018) Academic Ranking Scales in Economics: Prediction and Imputation, AStA Advances of Statistical Analysis, RR 20180608

CHEN S, Härdle WK, Schienle, M (2022) High-dimensional Statistical Learning Techniques for time varying Limit Order Book Networks, Management Science, RR 20210520

Zbonakova L, Li XJ, Härdle WK, Wang W (2019) Penalized Adaptive Method in Forecasting with Large Information Set and Structural Change, SFB DP 2017-023 , submitted to J Econometrics

CHAO SK, Härdle WK, Pham-Thu H (2020) A conditional Value at Risk Analysis on Credit Default Swaps, SFB 649 DP 2014-26, submitted to "CMStatistics: 20 years anniversary - Invited papers EcoSta journal”