CURRICULUM VITAE

Personal Data

Name:	Chen Zhou
Birth:	May 27, 1981, Qingdao, China
Nationality:	Chinese
Address:	Economics and Research Division De Nederlandsche Bank P.O. Box 98 1000 AB, Amsterdam The Netherlands
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Employments

11/2015 – now	Senior Economist, Economics and Research Division, De Nederlandsche Bank
01/2016 – now	Associate Professor, Erasmus School of Economics, Erasmus University Rotterdam
12/2013 – now	Research Fellow, Tinbergen Institute
09/2008 – 10/2015	Economist, Economics and Research Division, De Nederlandsche Bank
10/2009 – 12/2015	Assistant Professor, Erasmus School of Economics, Erasmus University Rotterdam

Education

09/2004 – 11/2008

Ph.D. in Economics, Erasmus University Rotterdam, The Netherlands
Supervised by Prof. dr. Laurens de Haan and Prof. dr. Casper de Vries

09/2001 – 07/2003

Master in Probability and Statistics, Peking University, Beijing, China

09/1997 – 07/2001

Bachelor in Probability and Statistics, Peking University, Beijing, China

Research interests

Financial stability; risk management; financial regulation; Extreme Value Theory (EVT)

Research Grant/Awards

1. EUR fellowship on the project “The evolution of tail risks in financial markets”, 150,000 euro, 2016-2019.

2. EUR fellowship on the project "Systemic Risk in the Financial System: Defined, Measured and Assessed", 200,000 euro, 2010 – 2013.
3. William F. Sharp Best Paper Award, 5th International Finance and Banking Society conference, Nottingham, United Kingdom, June 26-28, 2013.
4. The 2010 EWG-EPA Best Young Researcher Award. EWG-EPA Conference on "Global Trends in the Efficiency and Risk Management of Financial Services", Chania, Greece, July 2-4, 2010.

Professional activities

Editorial duty

Associate Editor of *Extremes,* 2015-

Scientific program committees

10th Extreme Value Analysis conference, 2017
7th International Finance and Banking Society conference, 2015
6th International Finance and Banking Society conference, 2014
16th European Young Statistician Meeting, 2008

Organizing committees

Extreme TiDE seminar series (jointly with Juan-Juan Cai and John Einmahl)
10th Extreme Value Analysis conference, 2017

Publications

1. van Oordt, M.R.C. and Zhou, C. (2017) Estimating systematic risk under extremely adverse market conditions. ***Journal of Financial Econometrics***, accepted.
2. Zhou, C. (2017) Discussion on "Elicitability and backtesting: Perspectives for banking regulation". ***Annals of Applied Statistics***, accepted.
3. Zhou, C. (2017) Book review: quantitative risk management: concepts, techniques and tools. ***Extremes***, **20**, 489-491.
4. Oesting, M., Schlather, M. and Zhou, C. (2017) Exact and fast simulation of max-stable processes on a compact set using the normalized spectral representation. ***Bernoulli***, forthcoming.
5. de Haan, L., Mercadier, C. and Zhou, C. (2016) Adapting extreme value statistics to financial time series: dealing with bias and serial dependence. ***Finance and Stochastics***, **20**(2), 321-354.
6. van Oordt, M.R.C. and Zhou, C. (2016) Systemic risk of European banks: regulators and markets. In: *Effective Macroprudential Instruments in Macroeconomic Policy Making*, Series 5. Edited by P. Mizen, M. Rubio and P. Turner. Cambridge University Press. Forthcoming.
7. Einmahl, J., de Haan, L. and Zhou, C. (2016) Statistics of heteroskadastic extremes, ***Journal of the Royal Statistical Society, Series B***, **78**(1), 31-51.
8. van Oordt, M.R.C. and Zhou, C. (2016) Systematic tail risk, ***Journal of Financial and Quantitative Analysis***, **51**(2), 685-705.
9. Cai, J., Einmahl, J., de Haan, L. and Zhou, C. (2015) Estimation of the marginal expected shortfall: the mean when a related variable is extreme, ***Journal of the Royal Statistical Society, Series B***, **77**(2), 417-442.
10. Sun, P. and Zhou, C. (2014) Diagnosing the Distribution of GARCH Innovations, ***Journal of Empirical Finance***, **29**, 287-303.

11. Zhou, C. (2013) The impact of imposing capital requirement on systemic risk, ***Journal of Financial Stability***, **9**(3), 320-329.
12. de Haan, L., de Vries, C.G. and Zhou, C. (2013) The number of active bidders in internet auctions, ***Journal of Economic Theory***, **148**(4), 1726-1736.
13. Cai, J., de Haan, L. and Zhou, C. (2012) Bias correction in extreme value statistics with index around zero, ***Extremes***, **16**(2), 173-201.
14. van Oordt, M.R.C. and Zhou, C. (2012) The simple econometrics of tail dependence, ***Economics Letter***, **116**(3), 371-373.
15. Huurman, C., Ravazzolo, F. and Zhou, C. (2012) The power of weather, ***Computational Statistics and Data Analysis***, **56**(11), 3793-3807.
16. de Haan, L., Ferreira, A. and Zhou, C. (2011) Exceedance probability of the integral of a stochastic process, ***Journal of Multivariate Analysis***, **105**(1), 241-257.
17. de Haan, L. and Zhou, C. (2011) Extreme residual dependence for random vectors and processes, ***Advances in Applied Probability***, **43**(1), 217-242.
18. Galati, G., Poelhekke, S. and Zhou, C. (2011) Did the crisis affect inflation expectations? ***International Journal of Central Banking***, **7**(1), 167-208.
19. Zhou, C. (2010) Are banks too big to fail? Measuring systemic importance of financial institutions, ***International Journal of Central Banking***, **6**(4), 205-250.
20. Zhou, C. (2010) Dependence structure of risk factors and diversification effects, ***Insurance: Mathematics and Economics***, **46**(3), 531-540.
21. Zhou, C. (2010) The extent of the maximum likelihood estimator for the extreme value index, ***Journal of Multivariate Analysis***, **101**(4), 971-983.
22. de Haan, L., de Vries, C.G. and Zhou, C. (2009) The expected payoff to Internet auctions, ***Extremes***, **12**(3), 219-238.
23. Zhou, C. (2009) Existence and consistency of the maximum likelihood estimator for the extreme value index, ***Journal of Multivariate Analysis***, **100**(4), 794-815.
24. Zhou, C. (2008) A 2-step estimator of the extreme value index, ***Extremes***, **11**(3), 281-302.
25. Buishand, A., de Haan, L. and Zhou, C. (2008) On spatial extremes: with application to a rainfall problem, ***Annals of Applied Statistics*, 2**(2), 624-642.
26. de Haan L. and Zhou, C. (2007) On extreme value analysis of a spatial process, ***Revstat***, **6**(1), 71-81.
27. de Vries, C.G. and Zhou, C. (2006) Discussion of "Copulas: Tales and facts", by Thomas Mikosch, ***Extremes***, **9**, 23-25.

Policy publications

Zhou C. and Tarashev N. (2013) Looking at the tail: price-based measure of systemic importance. ***BIS Quarterly Review***, June 2013. Bank for International Settlement.

Public opinion and media attention

1. Danielsson, J. and Zhou, C. Why risk is hard to measure? **VoXEU**, April 25, 2015. Based on the working paper "Why risk is so hard to measures?"
2. Tracy Alloway 'Capital requirements increase systemic risk' Discuss. **Financial Times Alphaville**, Aug 6, 2010. Based on the working paper "Why the micro-prudential regulation fails?"

Working Papers

1. de Haan, L. and Zhou, C. (2017) *Trend in extreme value indices*.
2. Leng, X., Peng, L., Wang, X. and Zhou, C. *Endpoint estimation for observations with normally distributed measurement errors.*
3. Cui, H., Tan, K.S., Yang, F. and Zhou, C. (2017) *Asymptotic analysis of portfolio diversification.*
4. Xiao, X. and Zhou, C. (2017) *Systematic and idiosyncratic jump risks in the expected stock returns.*
5. Muns, S. and Zhou, C. (2016) *The impact of bank size, capital strucgture and asset dependence on social welfare.*
6. Xiao, X. and Zhou, C. (2016) *Entropy-based implied volatility and its information content*.
7. Galati, G., Gorgi, Z., Moessener, R. and Zhou, C. (2016) *Deflation risk in the euro area and central bank credibility*. DNB Working Paper No. 509.
8. Danielsson, J. and Zhou, C. (2015) *Why risk is so hard to measure?*
9. van Oordt, M. and Zhou, C. (2014) *Systemic risk and bank business model*. DNB Working Paper No. **442**.
10. Qin, X. and Zhou, C. (2013) *Systemic risk allocation for system with a small number of banks*. DNB Working Paper No. **378.**
11. Moore, K., Sun, P., de Vries, C.G. and Zhou, C. (2013) *The Cross-Section of Tail Risks in Stock Returns*. Working paper.
12. Moore, K. and Zhou, C. (2012) *"Too big to fail" or "Too non-traditional to fail"? The determinants of banks' systemic importance.* DNB Working Paper No. **347**.
13. Galati, G. Lewis, J., Poelhekke, S. and Zhou, C. (2011) *Have market views on the sustainability of fiscal burdens influenced monetary authorities' credibility?* DNB Working Paper No. **304**.
14. Garita, G. and Zhou, C. (2009) *Can open capital markets help avoid currency crises?* DNB Working Paper No. **205**.

Presentations at conferences/workshops/seminars (in last two years)

1. Invited talk in Workshop on Dependence Modeling, Aegina, Greece, Sept 13-14, 2018 (Scheduled).
2. Invited talk in Workshop on Extreme and Rare Events, Paris, France, May 24-25, 2018 (Scheduled).
3. Invited talk in Risk Analytics Day, Toronto, Canada, May 14, 2018 (Scheduled).
4. Invited seminar, University of Zagreb, Zagreb, Croatia, May 2018 (Scheduled).
5. Invited talk in the 10th CMStatistics Conference, London, Dec 16-18, 2017 (Scheduled).
6. Invited Extreme TiDE seminar, TU Delft, Delft, The Netherlands, Dec 11, 2017 (Scheduled).
7. Invited seminar, KU Leuven, Leuven, Belgium, Nov 23, 2017.
8. Invited seminar, Central Planning Bureau, Den Haag, The Netherlands, Oct 3, 2017.
9. Invited talk in the "Risk Day" conference at ETH Zurich, Zurich, Switzerland, Sept 15, 2017.
10. Invited talk in the Workshop on Risk Measurement and Regulatory Issues in Business, Montreal, Canada, Sept 11-14, 2017.
11. Invited seminar, University of Waterloo, Waterloo, Canada, Sept 5, 2017

12. Plenary talk in 6th Mathematics in Finance (MiF) Conference, Skukuza, South Africa, 8-12 Aug, 2017.
13. 2017 Joint Statistical Meetings, Chicago, United States, July 29-Aug 3, 2017.
14. Invited talk in the 10th Extreme Value Analysis conference, Delft, The Netherlands, June 26-30, 2017.
15. 20th Annual Conference of the Swiss Society for Financial Market Research, Zurich, Switzerland, March 31, 2017.
16. The Midwest Finance Association annual conference, Atlanta, United States, March 1-4, 2017.
17. Invited talk in the Workshop on Risk Quantification and Extreme Values in Applications, Lausanne, Switzerland, Feb 15-17, 2017.
18. Invited talk in 10th ICSA international conference, Shanghai, China, Dec 19-22, 2016.
19. Invited talk in 9th CFE-ERCIM Conference, Seville, Spain, Dec 9-11, 2016.
20. Invited talk in the Workshop on Extremes and Risks in Higher Dimensions, Leiden, The Netherlands, Sept 12-16, 2016.
21. 2016 Asian Meeting of the Econometric Society, Kyoto, Japan, Aug 11-13, 2016.
22. Invited seminar, Bank of Canada, Ottawa, Canada, Aug 4, 2016.
23. 2016 Joint Statistical Meetings, Chicago, United States, July 30-Aug 4, 2016.
24. 20th International Congress on Insurance: Mathematics and Economics, Atlanta, United States, July 24-27, 2016
25. Invited seminar, University of Waterloo, Waterloo, Canada, July 14, 2016.
26. World Congress in Probability and Statistics, Toronto, Canada, July 11-15, 2016.
27. Invited talk in the Symposium on Financial Engineering and Risk Management (FERM), Guangzhou, China, June 12-13, 2016.
28. Invited seminar, Toulouse School of Economics, Toulouse, France, March 24, 2016.
29. The Midwest Finance Association annual conference, Atlanta, United States, March 3-5, 2016.

Teaching

Master level courses

Quantitative Risk Management, ESE, Erasmus University Rotterdam
Market and systemic risk management, Duisenberg School of Finance

Bachelor level courses

Probability Theory, ESE, Erasmus University Rotterdam
Microeconomics and markets, RSM, Erasmus University Rotterdam

Executive course and other mini course

Statistics for Data Science and Business Analytics, ESE, Erasmus University Rotterdam
Mini course on extreme value analysis, Norges Bank

Doctoral students

Graduated

Maarten van Oordt (Oct 2013, first job placement: Bank of The Netherlands; second job placement: Bank of Canada)

Pengfei Sun (Oct 2013, first job placement: Deutsche Bank)
Kyle Moore (Oct 2013, first job placement: London School of Economics)
Sander Muns (Jan 2016, first job placement: Central Planning Bureau)
Xiao Xiao (Feb 2017, first job placement: Erasmus University Rotterdam)

Upcoming
Jochem Oorschot (expected 2021)