

Curriculum Vitae

Philipp Boeing

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ZEW – Leibniz Centre for European Economic Research
Department for Economics of Innovation and Industrial Dynamics
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Employment

- Since 02/2020 Senior Researcher, [ZEW, Department for Economics of Innovation and Industrial Dynamics](#), Mannheim, Germany
- 11/2019 *offered:* Assistant Professor (tenure track) – *declined*, [Maastricht University, School of Business and Economics](#), The Netherlands
- 09/2017-07/2019 Assistant Professor (full-time term faculty), [Peking University, National School of Development](#), China Center for Economic Research, Beijing, China
- 11/2015-01/2020 Advanced Researcher, [ZEW, Department for Economics of Innovation and Industrial Dynamics](#), Mannheim, Germany
- 01/2014-10/2015 Researcher, [ZEW, Department for Economics of Innovation and Industrial Dynamics](#), Mannheim, Germany
- 10/2014-01/2017 External Lecturer, [Frankfurt School of Finance & Management, Economics Department](#), Frankfurt am Main, Germany
- 10/2010-12/2013 Research Associate, [Frankfurt School of Finance & Management, Economics Department](#), Frankfurt am Main, Germany

Education

- 11/2015-08/2017 Post-doc, ZEW, Department for Economics of Innovation and Industrial Dynamics
- 10/2010-10/2015 Ph.D. (Dr. rer. pol.) in Economics, Frankfurt School. Dissertation: *Innovation Made in China – Empirical Investigations into R&D, Patents, and Productivity* (summa cum laude)
- 10/2008-07/2010 M.A. in International Business, Frankfurt School. Semester abroad: Chinese Foreign Affairs University, Beijing. Research intern: China Europe International Business School (CEIBS), Shanghai. Grade: 1.3 (best in class), Thesis: 1.0
- 10/2004-03/2008 B.A. in Economics, East Asian Studies and Modern Chinese Language, Ruhr University Bochum, Germany. Grade: 1.9, Thesis: 1.0

Affiliation

- Since 10/2020 Editorial Board, [Journal of Chinese Economic and Business Studies](#)

Since 03/2020 Expert, [UNESCO Inclusive Policy Lab](#)
 Since 07/2019 Research Affiliate, [IZA - Institute of Labor Economics](#), Bonn, Germany
 Since 01/2016 Fellow, [Tsinghua University, School of Economics and Management](#),
 Research Center for Technological Innovation, Beijing, China

Research visits

02/2019 Gakushuin University, Faculty of International Social Science, Japan,
 invited by Prof. Tomohiko Inui

09/2017-07/2019 Peking University, National School of Development, China, invited by Prof.
 Xiaobo Zhang

12/2014 Melbourne University, Melbourne Institute, Australia, invited by Prof. Beth
 Webster

10/2012-12/2012 Tsinghua University, School of Economics and Management, China,
 invited by Prof. Xibao Li

10/2012 United Nations University - Maastricht Economic and Social Research
 Institute on Innovation and Technology, The Netherlands, invited by Prof.
 Pierre Mohnen

03/2012 Ludwig Maximilians University, INNO-tec, Munich, Germany, invited by
 Prof. Dietmar Harhoff

Research interest

- Economics of Innovation at the firm-level: policy evaluation, knowledge production, patents as innovation indicators, productivity returns to innovation, impact of competition and trade
- Applied micro-econometrics: use of administrative-, survey-, and listed firms' panel data
- China's economic development and its impact on Europe and Germany

Grants and awards

- German Federal Ministry of Education and Research (BMBF). Principle Investigator for research project: The effect of innovation policy on China's competitiveness and the reaction of firms in Germany. Grand period: 7/2021-6/2024
- Peking University, China Center for Economic Research Visiting Scholar Program. Full funding of Assistant Professorship. Grant period: 9/2017-7/2019
- Marie Skłodowska-Curie Global Fellowship Program. In 2016 and 2017 proposals ranked 5th (reserve list) and 6th, respectively. Seal of excellence: recommended by European Commission for funding by other sources
- Koerber Foundation, German Dissertation Award in Social Science 2016. Finalist group of top-ten dissertations
- German Research Foundation (DFG) and National Natural Science Foundation of China (NSFC). Full funding of ZEW-Zhejiang University Workshop in Hangzhou, China, 2015
- German Academic Exchange Service (DAAD). Doctoral stipend for research visit at Tsinghua University, Beijing, China. Grant period: 10/2012-12/2012
- German Academic Exchange Service (DAAD), master stipend for studies at Chinese Foreign Affairs University, Beijing, China. Grant period: 2/2010-7/2010

- Haniel Foundation, Go-East stipend for research at Chinese European International Business School, Shanghai, China. Grant period: 7/2009-10/2009
- Frankfurt School Alumni Association, travel grant to attend Harvard Project for Asian and International Relations, Seoul, Korea. Grant period: 8/2009
- German Academic Exchange Service (DAAD), bachelor stipend for industry internship, Wuxi, China. Grant period: 2/2006-4/2006

List of publications

Articles in peer-reviewed journals

- Boeing, P., Wang, Y. 2021. [Decoding China's Covid-19 "Virus Exceptionalism": The Community-based Digital Contact Tracing in Wuhan](#). *R&D Management*, forthcoming.
- Boeing, P., Huenermund, P. 2020. [A Global Decline in Research Productivity? Evidence from China and Germany](#). *Economics Letters* **197**, 109646.
- Boeing, P., Mueller, E. 2019. [Measuring China's Patent Quality: Development and Validation of ISR Indices](#), *China Economic Review* **57**, 101331.
- Rong, Z., Wu, X., Boeing, P. 2017. [The Effect of Institutional Ownership on Firm Innovation: Evidence from Chinese Listed Firms](#), *Research Policy* **46**, 1533-1551.
- Boeing, P. and Mueller, M. 2016. [Measuring Patent Quality in Cross-country Comparison](#), *Economics Letters* **149**, 145-147.
- Boeing, P. 2016. [The Allocation and Effectiveness of China's R&D Subsidies—Evidence from Listed Firms](#), *Research Policy* **45**, 1774–1789.
- Boeing, P., Mueller, M., Sandner, P. 2016. [China's R&D Explosion—Analyzing Productivity Effects Across Ownership Types and Over Time](#), *Research Policy* **45**, 159-176.

Papers under review

- Boeing, P., Eberle, J., Howell, A. The Impact of China's R&D Subsidies on R&D Investment, Technological Upgrading and Economic Growth. Revise & resubmit with *Technological Forecasting and Social Change*.

Policy reports and expertise

- Boeing, P., Huenermund, P. 2020. [More R&D, Less Growth? China's Decreasing Research Productivity in International Comparison](#). ZEW Policy Brief, No. 20-08, Mannheim, 2020.
- Boeing, P. 2020. [Innovative China: R&D Subsidies, Patent Measures, and Productivity Returns](#). ZEW Expert Brief, No. 20-15, Mannheim, 2020.
- Duerr, N., Rammer, C., Boeing, P. [Direct investment between Germany and China from an innovation policy perspective](#) (in German), *Commission of Experts for Research and Innovation (EFI)*, contribution to the [EFI Report 2020](#). Berlin, 2020.
- Boeing, P. 2020. [Chinas Innovationspolitik – Implikationen für Deutschland](#), in: VDMA und IMPULS-Stiftung, Fünftes Ordnungspolitisches Kolloquium: Erfordert der Systemwettbewerb mit China eine neue Industriepolitik, Frankfurt am Main, 10-11, 2020.
- Boeing, P. 2019 (consultant on innovation policy). [Innovative China: New Drivers of Growth](#). World Bank Group and Development Research Center of the State Council, The

People's Republic of China. Washington, DC, 2019. (commentary on the report by [The Economist](#)).

- Boeing, P., Licht, G. 2015. [R&D Subsidies in the Chinese Economy](#), in: Sino-German Innovation Platform, Policy Briefs, German Federal Ministry of Education and Research, Berlin, 30-37.
- Boeing, P. 2015. [R&D, Patents, and Productivity](#), in: [Innovation in China](#), in: ITB Infoservice, Vol. 10. Special Edition 08/15, German Federal Ministry of Education and Research, Bonn, 34-35, 2015.
- Sandner, P., Schaefer, V., Ebinger, A., Taing, S, Boeing, P., 2012. [Chinese Champions: Patente Made in China](#), Technische Universität München (TUM), Munich Innovation Group, Munich, 2012.

Contribution to edited volumes

- Boeing, P. (2021) 'Innovative China: R&D Subsidies, Patent Measures, and Productivity Returns' in Klenk, J., Waschek, F. (eds.), *China's Role in a New World Order, Science, Trade and International Relations* (in German). Baden-Baden, Tectum Publishers, pp. 33-50.

Current research projects (selection)

- Effectiveness and efficacy of R&D subsidies: Estimating treatment effects with one-sided non-compliance; with [Bettina Peters](#) (ZEW and University of Luxembourg)
- Competition from China in the Product and Input Markets and Innovation in Germany; with [Loren Brandt](#) (University of Toronto), [Pierre Mohnen](#) (University of Maastricht, UNU-MERIT), [Elisabeth Mueller](#) (German Graduate School)
- The impact of IPR policy on productivity in China; with [Loren Brandt](#) (University of Toronto), [Bettina Peters](#) (ZEW and University of Luxembourg), [Xiaobo Zhang](#) (Peking University)
- Patent quantity, quality and policy: Evidence from Chinese Administrative Data; with [Xiaobo Zhang](#) (Peking University) and Ge Yin (Peking University)

List of presentations

Invited seminars

- 2021 Sinology (Würzburg)
- 2020 China Center (Technical University Berlin). Applied Microeconomics and Organization Seminar (Goethe University and Frankfurt School, Frankfurt). Fraunhofer ISI (Karlsruhe). University of Duisburg-Essen (Duisburg)
- 2019 Organization, Strategy and Entrepreneurship (Maastricht University). Industrial Organization (Central University of Finance and Economics, Beijing). Trade (NSD) (Peking University). Innovation (Tokyo University). Economics (Gakushuin University, Tokyo). Policy (Chinese Academy of Science and Technology for Development, Beijing)
- 2018 Management (NSD) (Peking University, Beijing). Development (NSD) (Peking University, Beijing). Innovation and Entrepreneurship (SEM) (Tsinghua University, Beijing). Policy (Chinese Academy of Science, Beijing)
- 2017 China Economics and Business (Julius-Maximilians University, Wuerzburg). Economics and Technology (Mercator Institute for China Studies, Berlin)

- 2016 Policy (Chinese Academy of Science, Beijing). Development (NSD) (Peking University, Beijing)
- 2015 East-Asian Economics (University of Duisburg-Essen). Science and Technology (National Bureau of Statistics, Beijing). Economics (GIGA Institute, Hamburg). Innovation & Entrepreneurship (SEM) (Tsinghua University, Beijing). Development (NSD) (Peking University, Beijing). Management (Zhejiang University, Hangzhou), Policy (Chinese State Information Center, Beijing), Quantitative and Technical Economics (Chinese Academy of Social Science, Beijing)
- 2014 Melbourne Institute (Melbourne University). Chinese Students and Scholars Association (Mannheim University). Innovation & Entrepreneurship (SEM) (Tsinghua University, Beijing). Quantitative and Technical Economics (Chinese Academy of Social Science, Beijing). Trade (NSD) (Peking University, Beijing). Policy (Chinese State Information Center, Beijing)
- 2012 Economics (SEM) (Tsinghua University, Beijing). Economics (Chinese Foreign Affairs University, Beijing). Policy (Chinese State Information Center, Beijing). Innovation and Entrepreneurship (SEM) (Tsinghua University, Beijing). Public Policy (UNU-Merit, Maastricht). Economics (Frankfurt School). INNO-tec (Ludwig Maximilians University, Munich)
- 2011 Quantitative and Technical Economics (Chinese Academy of Social Science, Beijing). Policy (Chinese State Information Center, Beijing). Economics (Frankfurt School)

Conferences and workshops

- 2021 Eu-SPRI (Oslo)
- 2020 Governance and Emerging Technological Change in China, IN-EAST (University of Duisburg-Essen)
- 2019 ZEW-FDZ-Data User Workshop (Mannheim), 8th ZEW/MaCCI Conference on the Economics of Innovation and Patenting (Mannheim)
- 2018 Reform and Opening of China's S&T and Innovation System: 1978-2018 (Chinese Academy of Science, Beijing). Beijing Humboldt Forum (University of International Business and Economics, Beijing)
- 2017 Recent Research on Innovation and Entrepreneurship in China and Europe (ZEW, Tsinghua University, Beijing). 4th International Consortium for China Studies (Peking University, ZEW, Mannheim). Entrepreneurship, Innovation and Development (Stockholm School of Economics, Peking University, Beijing). Economics of Innovation and Patents (ZEW, Mannheim). Annual Meeting American Economic Association (Chicago)
- 2016 Confucian Institute (Goethe University, Frankfurt). 3rd International Consortium for China Studies (Fudan University, Shanghai). Annual Meeting Chinese Economist Society Europe/UK (University of Duisburg-Essen). Development, Trade, and Investment (Peking University, Stockholm School of Economics, Stockholm). Koerber Foundation (Berlin). From Europe to China: Exploring new Frontiers in Economics of Innovation and Entrepreneurship (Tsinghua University, ZEW, Mannheim). To be an Innovative China: Risk, Institutions and Paths (University of Duisburg-Essen)
- 2015 Chinese-German Workshop on Innovation and High-tech Entrepreneurship (ZEW, Zhejiang University, Hangzhou). SEEK Conference (ZEW, Mannheim). Beijing Humboldt Forum (University of International Business and Economics, Beijing). 2nd International Consortium for China Studies (Oxford University). Chinese Economist Society, North America Conference (Ann Arbor). MEIDE conference by OECD, Worldbank, and UNU-

- Merit (New Delhi). German Association for Asian Studies – junior group meeting (Rothenfels)
- 2014 Asia Pacific Innovation Conference (University of Technology, Sydney). Annual Meeting of the German Economic Association (VfS) (Helmut Schmidt University, Hamburg). International Schumpeter Society (University of Jena). ZEW Economic Forum (Mannheim). Sino-German Innovation Platform (German Federal Ministry of Education and Research, Chinese Ministry of Science and Technology, Beijing). Institutions in the Development of East-Asia (University of Duisburg-Essen)
- 2013 Euro Asia Management Studies Association (University of Duisburg-Essen). Chinese Global Association (Jacobs University, Bremen). Annual Meeting of the German Economic Association (VfS) (University of Duesseldorf). Annual Meeting European Association for Research in Industrial Economics (University of Evora). Annual Meeting of the European Economic Association (University of Gothenburg). DRUID (ESADE, Barcelona). Spring Meeting Young Economists (University of Aarhus)
- 2012 Intangibles, Innovation Policy and Economic Growth (RIETI, Tokyo). GLOBELICS (Zhejiang University, Hangzhou). Annual Meeting of the German Economic Association (VfS) (Goettingen), International Workshop on Chinese Productivity (Tsinghua University, Beijing). DRUID (Copenhagen Business School). DRUID Academy (Cambridge University)
- 2011 Innovation: From Europe to China (Kiel Institute for the World Economy). Academy ASIA (Federal Center for Political Education, Munich). Innovation and Invention: China and Global Influences (Oxford University). DRUID Academy (University of Aalborg)

Teaching

Courses

- 2018 Economics of Innovation, 48h, Peking University. Elective graduate course in National School of Development and [Yenching Academy](#). Research-based course incl. lectures, paper presentations, and term paper
- 2016 Business Economics – Innovation Made in China, 44h, Frankfurt School. Elective course in Masters in Finance, Management, and International Business. Research-based multimodal teaching incl. lectures, moderated group work: case studies and paper presentations, final exam
- 2015 Economics of Innovation and China's Development, 44h, Frankfurt School. Elective course in Masters in Finance, Management, and International Business. Research-based multimodal teaching incl. lectures, individual coaching for development of research proposals, paper presentations, final paper
- 2014 China's Economic Development, 22h, Frankfurt School. Compulsory course in Asia Specialization in Master in International Business. Research-based multimodal teaching incl. lectures, case studies, student presentations, final exam
- 2013 Innovation Management, Intellectual Property Rights, 4h, Frankfurt School. Compulsory course in Master in International Business. Textbook-based lecturing
- 2012 International Economics, Lectures on Trade Theory, 22h, Frankfurt School. Compulsory course in Bachelor in Business Administration. Textbook-based lecturing

Seminars

- 2019 Innovation Made in China: A Look from Germany, 2h, ZEW. Master of International Business Faculty Program
- 2012 Regional Integration, 22h, Frankfurt School, Compulsory seminar in Bachelor in Business Administration. Co-discussion of paper presentations
- 2012 Cultural Diversity in Asia and Europe, 8h, Frankfurt School. Compulsory specialization seminar in Master in International Business. Co-discussion of paper presentations

Excursion

- 2011 Research Excursion in China, 2-weeks full time, Frankfurt School. Compulsory in Asia specialization in Master in International Business. Organization of the excursion and supervision of 20 students, incl. visits of government, academic, and business units in Beijing, Shanghai, and Anhui province

Executive lectures and panel discussions

- 2021 Sino-German Center at Frankfurt School, Virtual Roundtable (Frankfurt). Leibniz Association/German Federal Parliament: Leibniz in the Bundestag (Berlin)
- 2020 Leibniz Association: Book a Scientist (Berlin)
- 2019 German Federal Parliament (Bundestag) Committee on Education, Research and Technology Assessment and Koerber Foundation (Berlin). Impuls Foundation (VDMA) "Colloquium on Regulatory Policy" (Eltville). Boehringer Ingelheim (Beijing)
- 2018 BASF Innovation Campus Shanghai (Shanghai). German Mechanical Engineering Industry Association (VDMA), China Summit (Shanghai)
- 2014 German Federal Ministry of Education and Research and Chinese Ministry of Science and Technology, Third German-Chinese Innovation Conference (Beijing). ZEW Economic Forum "China: A World Leader in Technology – Wishful Thinking or Reality?" (Mannheim)

Referee for journals

CESifo Economic Studies, China: An International Journal, China Economic Review, Economics of Innovation and New Technology, Homo Oeconomicus, Industrial and Corporate Change, Journal of Marketing Research, Journal of Productivity Analysis, Journal of Regional Science, Journal of Small Business Management, Quarterly Journal of Finance, Regional Studies, Research Policy, Scientometrics, Small Business Economics, Social Science Quarterly, Technovation, Technological Forecasting and Social Change, The European Journal of Finance, World Development

Further didactical and academic training

- 2021 Difference-in-differences, Scott Cunningham (Baylor University)
- 2020 Causal Machine Learning, Michael Lechner (University of St. Gallen)
- 2018 Empirical Strategies, Xiaolan Lei (Peking University). The Chinese Economy: Reform and Development, Yiping Huang (Peking University)
- 2016 Cost and Production, Jan de Loecker (KU Leuven). Frugal Instrumental Variables, Francois Laisney (University of Strasbourg and ZEW). Tobit and Selection Models, Francois Laisney (University of Strasbourg and ZEW). Advanced Microeconomics, Yossi Spiegel (Tel Aviv University and ZEW)

- 2015 Advanced Empirical Methods in Environmental and Innovation Economics, ZEW-Summer Workshop for Young Economists, Mark Roberts (Pennsylvania State University), Antoine Dechezleprêtre (London School of Economics), Dirk Czarnitzki (KU Leuven). China Competences in Research and Academic Collaborations (ZEW, Mannheim)
- 2014 Academic Presentations (ZEW, Mannheim). Matching and Difference-in-Differences Estimators, Michael Lechner (University of St. Gallen). Linear Static and Dynamic Panel Data Models, Bettina Peters (ZEW, Mannheim)
- 2012 Competition and Innovation Ph.D. Summer School (KU Leuven and ZEW, Mannheim)
- 2011 Econometrics Summer School (London School of Economics). Economics of Innovation Ph.D. Summer School (Universidad Carlos III, Madrid)
- earlier Advanced Chinese Class (Fudan University, Shanghai). Case Study Competition on Strategic & Financial Performance (Siemens, Frankfurt). Summer School on M&A and Cross-Cultural Management (Ernst & Young, Stuttgart). Chinese Class (Tongji University, Shanghai)

Academic service

- 2021 Federal Ministry of Economics and Technology, Expert-Workshop on Digitalization and the Future of the Social Market Economy. Exchange between MERICS and Economic Research Institutes on China's Economy and Economic Policy
- 2020 Referee for German Academic Exchange Service (DAAD)
- 2019 Science Forum, German Embassy China (co-organization). Referee for German Research Foundation (DFG). Referee for German Academic Exchange Service (DAAD)
- 2018 Peking University, World Bank Guest-Lecture (organization). Beijing Humboldt Forum, Domestic Chair of ZEW-Session: Market and Public Incentives to invest in Innovation, University of International Business and Economics, Beijing (co-organization). Co-referee for German Academic Exchange Service (DAAD)
- 2017 Workshop "Recent Research on Innovation and Entrepreneurship in China and Europe", ZEW, Tsinghua University, Beijing (co-organization). Conference "International Consortium for China Studies (ICCS)", Peking University, ZEW, Mannheim (organization)
- 2016 Workshop "From Europe to China: Exploring new Frontiers in Economics of Innovation and Entrepreneurship", Tsinghua University, ZEW, Mannheim (organization)
- 2015 Workshop "Sino-German Workshop on Innovation and High-tech Entrepreneurship", ZEW, Zhejiang University, Hangzhou (funding application and co-organization). Membership application of ZEW, International Consortium of China Studies (ICCS) of National School of Development, Peking University (organization). ZEW Economic Policy Lecture by Yao Yang, Peking University, Dean National School of Development (organization)
- 2014 ZEW Visit by Wu Xiaobo, Zhejiang University, Dean School of Management (organization). ZEW Visit by Chinese Scientists, 5th Meeting of Nobel Laureates in Lindau (co-organization). ZEW Visit by Chinese State Information Center, China Economic Information Network (organization). Memorandum of Understanding with Zhejiang University, Hangzhou, China (co-organization). Conference of International Schumpeter Society, Session "Innovation in Emerging Economies – China" (organization). ZEW Economic Forum 2014 "China: A World Leader in Technology – Wishful Thinking or Reality?", (co-organization). Organization of research seminars, ZEW Department for Economics of Innovation and Industrial Dynamics, 2014-2017

Internships

Six internships in manufacturing, consulting and research. China and Germany, 2005-2010

Media

Auslandszeitschrift der Bundesrepublik, [China.Table](#), [CGTN](#), [CNBC](#), [Deutschland Funk](#), [Deutsche Welle](#), [Die Welt](#), [Frankfurter Allgemeine Zeitung: Der Volkswirt](#), [Neue Züricher Zeitung](#), [Neue Züricher Zeitung am Sonntag](#), [Wirtschaftswoche: Der Volkswirt](#), Xinhua News Agency, ZEW News

Languages

German, English, Chinese

Personal information

Date of birth September 4th 1982. German citizen. Married. Two children

References

[Prof. Loren Brandt](#), University of Toronto, Canada, Department of Economics. Research fields: Economic development and productivity, Economic history, Chinese economy. Top three journals: *American Economic Review*, *Journal of Political Economy*, *Journal of Economic Literature*

[Prof. Bettina Peters](#), Centre for European Economic Research (ZEW), Mannheim, Germany, Department Economics of Innovation and Industrial Dynamics and University of Luxembourg. Research fields: Productivity and employment effects of innovation, dynamics in firm innovation, internationalization of R&D activities. Top three journals: *RAND Journal of Economics*, *Review of Economics and Statistics*, *International Journal of Industrial Organization*

[Prof. Xiaobo Zhang](#), National School of Development, Peking University; Senior Research Fellow at the International Food Policy Research Institute (Washington, DC); Editor-in-Chief China Economic Review. Research fields: Chinese economy and development economics, including innovation and entrepreneurship. Top three journals: *The Journal of Political Economy*, *The Journal of International Economics*, *The Journal of Public Economics*