

# Curriculum Vitae

## Xinyi Zhao

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## Research Interests

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Computational Social Science	Digital and computational demography
Gender disparities	Migration studies
Science of Science	Applied statistics
Cartography	Geographic Information System (GIS)

## Education

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<b>2021.10 - 2024.08</b>	<b>Doctorate of Philosophy in Sociology (pass with no corrections)</b> Department of Sociology and St Hugh's College, University of Oxford, Oxford, United Kingdom <ul style="list-style-type: none"><li>- Thesis title: Gender inequality in academia: Opportunities and challenges in the era of globalization and digitalization</li><li>- Jointly affiliated with International Max Planck Research School on Population Health and Data Science (IMPRS-PHDS)</li></ul> Supervisor: Prof. Ridhi Kashyap (Oxford)
<b>2020.09 - 2024.08</b>	<b>Doctoral researcher</b> Laboratory of Digital and Computational Demography and IMPRS-PHDS Max Planck Institute for Demographic Research, Rostock, Germany Supervisor: Prof. Emilio Zagheni
<b>2016.09—2019.06</b>	<b>Master of Science in Cartography and Geographical Information System</b> Nanjing University, Nanjing, China (GPA: 90.28/100) Thesis title: Spatio-temporal Dynamics Analysis of Interprovincial Migration System in China Supervisor: Prof. Yingxia Pu
<b>2012.09—2016.06</b>	<b>Bachelor of Science in Geographical Information System</b> China University of Geosciences, Wuhan, China (GPA: 3.64/5, Rank: 3/96) Thesis title: Modelling OD Flows of Bus Trip based on GPS and IC Card Data

## Work Experience

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<b>2024. 09 -</b>	<b>Adaptive Rationality Center, Max Planck Institute for Human Development</b> Postdoc Researcher
<b>2023.12 -2024.09</b>	<b>Department of Sociology and Leverhulme Centre for Demographic Science, University of Oxford</b> Research Assistant

Main responsibilities: spatial data collection and processing

**2020.01 - 2020.09**      **Department of Urban planning and Design, The University of Hong Kong**  
Full-time Research Assistant  
Main responsibilities: data collection and analysis; model programming;  
project reporting

## Research Stays

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**2025.10**      **Institute of Human-Centred Computing, Graz University of Technology**  
Visiting researcher

**2024.05**      **CEWS Center of Excellence Women and Science , GESIS – Leibniz Institute  
for the Social Sciences, Köln**  
Visiting researcher

**2023.09**      **Mannheimer Zentrum für Europäische Sozialforschung (MZES), University  
of Mannheim**  
Visiting fellow

## Publications

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### Journal:

1. **Zhao, X.**, Thoma, A.I, Hertwig, R., and Wulff, D.U. (2025). “Mapping the gender attrition gap in academic psychology”, *ArXiv*. <https://doi.org/10.48550/arXiv.2510.13273>
2. Breen, C.F, Fatehkia, M., Yan, J., **Zhao, X.**, Leasure, D.R., Weber, I., and Kashyap, R. “Mapping subnational gender gaps in internet and mobile adoption using social media data”, *Proceedings of the National Academy of Sciences (PNAS)*. <https://doi.org/10.1073/pnas.2416624122>
3. Jacobs, E., Theile, T., Perrotta, D., **Zhao, X.**, Anastasiadou, A., and Zagheni, E. (2025). “Global Gender Gaps in the International Migration of Professionals on LinkedIn”, *Population and Development Review*. <http://doi.org/10.1111/padr.70012>
4. Akbaritabar, A., Dańko, M.J., **Zhao, X.**, and Zagheni, E. (2025). “Global subnational estimates of migration of scientists reveal large disparities in internal and international flows”, *Proceedings of the National Academy of Sciences (PNAS)*. <https://doi.org/10.1073/pnas.2424521122>
5. **Zhao, X.**, Akbaritabar, A., Kashyap, R., and Zagheni, E. “Gender differences in online visibility of early career researchers”. (*R&R, Nature Communications*)  
- Awarded by 3<sup>rd</sup> place Best Poster Award and audience favorite award at Anniversary Student Poster Competition of Sociology department, University of Oxford

6. **Zhao, X.**, Derrick, G., Larivière, V., and Sugimoto, C. R. "Gender Differences in the Conflict between the Beginning of an Academic Career and Parenthood". (*under review*) *SocArXiv*. [https://doi.org/10.31235/osf.io/ksd6q\\_v1](https://doi.org/10.31235/osf.io/ksd6q_v1)

- Awarded by Best Poster Award at the Annual academy of International Max Planck Research School for Population, Health and Data Science

7. Yin, Y., Pu, Y., **Zhao, X.**, Chi, G., and Ye, C. (2023). "The Spatiotemporal Elasticity of Age Structure in China's Interprovincial Migration System" *Sustainability*. <https://www.mdpi.com/2071-1050/15/10/8001>

8. **Zhao, X.**, Akbaritabar, A., Kashyap, R., and Zagheni, E. (2023). "A gender perspective on the global migration of scholars" *Proceedings of the National Academy of Sciences (PNAS)*. <https://doi.org/10.1073/pnas.2214664120>

- Awarded Jan Hoem award for best paper by Max Planck Institute for Demographic Research

- Media coverage in Nature, Times Higher Education Supplement, PNAS Science Sessions Podcasts, e.g.,

[PNAS Science Sessions Podcast on "Gender gap among migrant scientists"](#). *PNAS* (July 2023)

[More female researchers than ever migrate internationally](#). *Nature* (March 2023)

[Wereldwijde mobiliteit onder vrouwelijke wetenschappers versnelt](#). *ScienceGuide* (March

[Female academics migrate shorter distances and to fewer countries than men, finds study](#).

*Physicsworld* (March 2023)

[Female scientists miss out on overseas opportunities](#). *Nature.com* (March 2023)

[Female researchers close global mobility gap on men](#). *Times Higher Education* (February 2023)

[A gender perspective on the global migration of scholars](#). *sciencenewsnet.in* (February 2023)

[A gender perspective on the global migration of scholars](#). *phys.org* (February 2023)

[A gender perspective on the global migration of scholars](#). *newswise* (February 2023)

9. **Zhao, X.**, Aref, S., Zagheni, E., and Stecklov, G. (2022). "Return migration of German-affiliated researchers: Analyzing departure and return by gender, cohort, and discipline using Scopus bibliometric data 1996-2020" *Scientometrics*. <https://doi.org/10.1007/s11192-022-04351-4>

- Media coverage in Population Europe: [Will we ever see them again?](#) *Population Europe* (Jul 2022)

10. **Zhao, X.**, Aref, S., Zagheni, E., and Stecklov, G. (2021). "Mapping academic migration of German-affiliated researchers across countries using 8 million Scopus publications from 1996 to 2020", *Abstr. Int. Cartogr. Assoc.*, 3, 327. <https://doi.org/10.5194/ica-abs-3-327-2021>

11. Pu, Y., **Zhao, X.**, Chi, G., Zhao, J., and Kong, F. (2019). "A Spatial Dynamic Panel Approach to Modelling the Space-time Dynamic of Interprovincial Migration Flows in China" *Demographic Research* 41(31): 913-948. <https://doi.org/10.4054/DemRes.2019.41.31>

12. Pu, Y., **Zhao, X.**, Chi, G., Zhao, S., Wang, J., Jin, Z., and Yin, J. (2019). "Design and Implementation of a Parallel Geographically Weighted k- Nearest Neighbor Classifier" *Computers and Geosciences* 6(127): 111-122. <https://doi.org/10.1016/j.cageo.2019.02.009>

13. **Zhao, X.**, and Pu, Y. (2018). "Space-time Spillover Effects and Driving Forces of Regional Migration Process" *Journal of Geoinformation Science* 6(29): 817-826 (in Chinese).

14. PU, Y., Deng, D., and **Zhao, X.** (2018). "The Measurement of New Urbanization Level in Sichuan Province Based on AHP-BN Methods" *Journal of Northwest Normal University* (Natural Science) 1(54): 77-83 (in Chinese).

### Proceeding:

1. **Zhao, X.**, Aref, S., Zagheni, E., and Stecklov, G. (2021). "International migration in academia and citation performance: an analysis of German-affiliated researchers by gender and discipline using Scopus publications 1996-2020" In: *Proceedings of the 18th International Conference on Scientometrics and Informetrics (ISSI 2021)*, Leuven, Belgium, July 12-15, 2021. Leuven: ISSI. <https://arxiv.org/abs/2104.12380>

2. **Zhao, X.**, and Pu, Y. (2018). "The Complex System of Interprovincial Migration Flows in China, 1985–2015" 2018 26th *International Conference on Geoinformatics*, 2018: 1-6. <https://doi.org/10.1109/GEOINFORMATICS.2018.8557095>

### Papers in progress

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1. **Zhao, X.**, and Benson Malinga John. "Polygyny–Fertility Nexus Revisited in sub-Saharan Africa: Is it Real or Spurious?" (*in progress*)

2. **Zhao, X.**, and Jiaxin Shi. "Internal migration of researchers" (*in progress*)

3. **Zhao, X.**, and Shuye Yu. "The Causal Link Between Maternal Travel Burden and Newborn Health" (*in progress*)

4. **Zhao, X.**, and Wulff, D. "Sustainable Development Goals in Psychology: A Century of Progress in Publications" (*in progress*)

5. **Zhao, X.**, and Weber, L. Gender disparity in the parenthood of German academics. (*in progress*)

### Book Chapters

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1. Kashyap, R.; Rinderknecht, R. G.; Akbaritabar, A.; Alburez-Gutierrez, D.; Gil-Clavel, B. S.; Grow, A.; Kim, J.; Leasure, D. R.; Lohmann, S.; Negraia, D. V.; Perrotta, D.; Rampazzo, F; Tsai, C.-J.; Verhagen, M. D.; Zagheni, E.; **Zhao, X.** (2023). Digital and computational demography  
In: *Research handbook on digital sociology*, 48–86. Cheltenham: Edward Elgar Publishing.

## International Conferences/workshops

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### 2025:

*Workshop: Women and Work in the 21st Century.* Berlin, Germany. September 11-12.

Oral presentation: Digital Inequality in Academia.

*11th International Conference on Computational Social Science (IC2S2).* Norrköping, Sweden. July 21-24. Poster presentation: 1) Mapping the Leaky Pipeline in Psychology: Analysis of Gender Disparities in Academic Progression; 2) Sustainable Development Goals in Psychology: A Century of Progress in Publications.

*International Conference on the Science of Science and Innovation (ICSSI).* Copenhagen, Denmark. June 16-18. Poster presentation: Mapping the Leaky Pipeline in Psychology: Analysis of Gender Disparities in Academic Progression.

*Bridging Approaches in the Sciences Studying Science.* Munich, Germany. February 18-23. Oral presentation: Mapping the leaky pipeline: Analysis of gender disparities in academic progression within psychology.

### 2024:

*Digital Inequalities Symposium for Early-Career Researchers.* Paris, France. December 19. Oral presentation: Gender Difference differences in the online visibility of early-career researchers.

*Scholarly Migration and Mobility Symposium.* Rostock, Germany. October 15. Poster presentation: Gendered patterns of global scholarly migration

*Workshop on Digital Technologies and Sustainable Development.* Oxford, UK. September 30-October 01.

*31st Nordic Association Conference.* Norrköping, Sweden. August 14-16. Oral presentation: Gender Difference differences in the online visibility of early-career researchers.

*European Population Conference (EPC) 2024.* Edinburgh Scotland, UK. June 12 – 15. Flash talk: Gender in the Conflict between the Beginning of an Academic Career and Parenthood.

*Gender Summit 2024.* Online. May 22 - 23. Oral presentation: A gender perspective on the global migration of scholars.

*RC28 Spring Meeting 2024.* Shanghai, China. May 17 - 19. Oral presentation: Gender in the Conflict between the Beginning of an Academic Career and Parenthood.

*2024 Population Association of America (PAA).* Columbus Ohio, US. April 17 - 20.

Flash talk:

Gender Difference differences in the online visibility of early-career researchers.

Gender Difference in Trajectories of Childbearing and Doctoral Degree Pursuit Among Researchers.

**2023:**

*Quetelet 2023 Seminar: Unconventional Data Sources for Population.* Louvain-la-Nauve, Belgium. November 09 – 10. Oral presentation: Gender differences in the online visibility of early-career researchers.

*The Third Asian Population Forum.* Shanghai, China. October 31 – November 01. Oral presentation: Gendered patterns of global scholarly migration: Evidence on mobile Researchers from bibliometric data.

*knowledge Societies – 4th Conference of the Academy of Sociology.* Bern, Switzerland. August 28 - 30. Oral presentation: Gender differences in the online visibility of early-career researchers: Are men more likely to gain mentions on Twitter and benefit more?

*The 9th International Conference on Computational Social Science (IC2S2).* Copenhagen, Denmark. July 17 – 20. Poster presentation: Gender differences in the online visibility of early-career researchers.

*knowledge Societies – 4th Conference of the Academy of Sociology.* Bern, Switzerland. August 28 - 30. Oral presentation: Gender differences in the online visibility of early-career researchers: Are men more likely to gain mentions on Twitter and benefit more?

*The 20th IMISCOE Annual Conference.* Warsaw, Poland. July 3 – 6. Oral presentation: Gendered patterns of global scholarly migration: Evidence on mobile researchers from bibliometric data.

*The 2<sup>nd</sup> MigrantLife Symposium.* St-Andrews, UK. June 29-30. Oral presentation: Gendered patterns of global scholarly migration: Evidence on mobile researchers from bibliometric data & Case study in moving-out and return researchers with German affiliations.

*knowledge Societies – 4th Conference of the Academy of Sociology.* Bern, Switzerland. August 28 - 30. Oral presentation: Gender differences in the online visibility of early-career researchers: Are men more likely to gain mentions on Twitter and benefit more?

*2023 Population Association of America (PAA).* New Orleans, USA. April 12 - 15. Poster presentation: Gendered patterns of global scholarly migration: Evidence on mobile researchers from bibliometric data.

*The workshop on “Detecting and Mitigating Bias in Migration Research”.* Córdoba, Spain. March 30 - 31. Oral presentation: Identifying and Mitigating Bias in the Study of Scholarly Migration using Bibliometric Data

*Popdays 2023- Giornate di Studio sulla Popolazione.* Rome, Italy. Feb 01 - 03. Oral presentation: Gender differences in the online visibility of early-career researchers: Are men more likely to gain mentions on Twitter and benefit more?

*2023 Population Association of America (PAA)*. New Orleans, USA. April 12 - 15. Oral presentation: Gendered patterns of global scholarly migration: Evidence on mobile researchers from bibliometric data.

**2022:**

*The 28th Annual Population Postgraduate Conference*. Florence, Italy. October 26 - 28. Oral presentation: Gendered patterns of global scholarly migration: Evidence on mobile Researchers from bibliometric data.

*VI Portuguese Conference of Demography*. Lisbon, Portugal. October 13 - 14. Oral presentation: Gendered patterns of global scholarly migration: Evidence on mobile researchers from bibliometric data.

*British Society for Population Studies 2022 Conference*. Winchester, UK. September 05 - 07. Oral presentation: Gendered patterns of global scholarly migration: Evidence on mobile researchers from bibliometric data.

*2022 Annual Meeting of the American Sociological Association*. Los Angeles, USA. October 13 - 14. Oral presentation: Gendered patterns of global scholarly migration: Evidence on mobile researchers from bibliometric data.

*European Population Conference (EPC) 2022*. Groningen, Netherland. June 29 - July02. Oral presentation: Return migration in academia: an analysis of German-affiliated researchers by gender, cohort and discipline using Scopus publications 1996-2020.

*2022 Population Association of America (PAA 2022)*. Atlanta, USA (online). April 06-09. Oral presentation: Gender Inequality in International Scholarly Migration: Evidence on German-Affiliated Researchers From 8 million Scopus Publications.

**2021:**

*The 30th International Cartographic Conference T*. Florence, Italy (online). December 14-18. Oral presentation: Gendered patterns of global scholarly migration: Mapping academic migration of German-affiliated researchers across countries using 8 million Scopus publications from 1996 to 2020.

*2021 International Population Conference (IPC)*. Hyderabad, India (online). December 5-10. Oral presentation: The interplay between scholarly migration, gender, career stages, and citations: Evidence on German-affiliated researchers from 8 million Scopus publications.

*Migration and Mobility Research in the Digital Era (MIMODE 2021)*. Lyon, France (online). October 27. Oral presentation: The interplay between migration, gender, career stages, and citations: Evidence on German-affiliated researchers from Scopus publications.

*Workshop “Methodological Innovations in Research on Spatial Mobility: Potentials and Pitfalls.* Berlin, Germany (online). September 27. Oral presentation: The interplay between migration, gender, career stages, and citations: Evidence on German-affiliated researchers from Scopus publications.

*Flash Talk Competition at the Conference “New Data for the New Challenges of Population and Society “: 3-min talk.* Padua, Italy (online). September 22-24. Oral presentation: The interplay between scholarly migration, gender, career stages, and citations: Evidence on German-affiliated researchers from 8 million Scopus publications.

*The 7th International Conference on Computational Social Science (IC2S2).* Zurich, Switzerland (online). July 27-31. Oral presentation: The interplay between migration, gender, career stages, and citations: Evidence on German-affiliated researchers from Scopus publications.

*The 18th International Conference on Scientometrics & Informetrics (ISSI).* Leuven, Belgium (online). July 12-15. Oral presentation: International migration in academia and citation performance: an analysis of German-affiliated researchers by gender and discipline using Scopus publications 1996-2020.

**2018:**

*The 58th European Regional Science Association (ERSA) Congress.* Cork, Ireland. August 28-31. Oral presentation (Young Scientist Session): Modeling and Interpreting the Space-time Dynamics of Migration System: A case of Interprovincial Migration in China, 1985-2015.

*The 4th Asian Population Association (APA) Conference.* Shanghai, China. July 11-14. Oral presentation: Modeling and Interpreting the Space-time Dynamics of Migration System: A case of Interprovincial Migration in China, 1985-2015.

*The 26th International Conference on Geoinformatics.* Kunming, China. June 28-30. Oral presentation: Modeling and Interpreting the Space-time Dynamics of Migration System: A case of Interprovincial Migration in China, 1985-2015.

**2017:**

*The Asia GIS Conference 2017.* Hong Kong, China. January 5-7. Oral presentation: Design and implementation of parallel geographically weighted k-nearest 2017 neighbor classifier.

**2016:**

*The 33rd International Geographical Congress.* Beijing, China. August 21-25. Poster presentation: The design and implementation of parallel gwk-NN classifier.

## Teaching Service

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1. Teaching the session “Migration of Scientists” on course “ Migration & Society”  
University of Rostock & MPIDR, 2024
2. Co-organizing a preconference training workshop on: “Using bibliometric data in demographic

research”

European Population Conference, 2022

3. Teaching a training workshop on “Spatial Data Analysis”  
10th Forum on Spatially Integrated Humanities and Social Science, 2019

## Reviewing Service

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1. Peer reviewing for *Population and Development Review* 2025
2. Peer reviewing for *Comparative Migration Studies* 2024
3. Peer reviewing for *Quantitative Science Studies* 2024
4. Peer reviewing for *F1000Research* 2024
5. Peer reviewing for *Information Processing and Management* 2023
6. Peer reviewing for *Higher education policy* 2022
7. Reviewing for scientific journals and conferences: **The Web Conference 2021** (sub-reviewer)

## Awards and Honors

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### 2024:

3rd Place and audiences’ favorite poster at Anniversary Student Poster Competition of Department of Sociology, University of Oxford

### 2023:

Jan M. Hoem Paper Award, awarded to best paper by early career researcher in Max Planck Institute for Demographic Research

Best Poster Award at the Annual academy of International Max Planck Research School for Population, Health and Data Science

### 2021:

Student Travel Award for the 18th International Conference on Scientometrics & Informetrics (ISSI)

International Max Planck Research School for Population, Health and Data Science / Departmental/ Leverhulme Centre for Demographic Science Scholarship

### 2013-2019:

First prize of Excellent Master Thesis of Surveying and Mapping in Jiangsu province (2019)

First prize of Excellent Paper at China Annual Conference on Theories and Methods of Geographic Information Science (2017)

Second Prize Scholarship at Nanjing University (2018, 2017)

Second prize of Excellent Postgraduates' Thesis at Geography Postgraduates Forum in Jiangsu province (2016)

First Prize Scholarship at Nanjing University (2016)

Outstanding Graduate at China University of Geosciences (2016)

Grand prize of the 14th Challenge Cup National College Student Curricular Academic Science and Technology Works Completion in Hubei province (2015)

Presidential Scholarship at China University of Geosciences (2014, 2013)

Outstanding works award of the Winter Vacation Social Practice at China University of Geosciences (2014)

Second prize of College Physics Competition at China University of Geosciences (2014)

Third prize of Golden Idea Competition at China University of Geosciences (2013)

## **Additional Training**

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2022:

Advanced Methods for Causal Inference	Max Planck Institute for Demographic Research
12th Winter School on Longitudinal Social Network Analysis	University of Linköping

2021:

European summer school for Scientometrics 2021	University of Vienna
Data visualization – the art/skill cocktail	Max Planck Institute for Demographic Research
Online webinar: Applied Regression Modeling	University of Greifswald
Population Grids & their Integration with Remote Sensing Data National Aeronautics and Space for Sustainable Development & Disaster Management	Earth Science Applied Science (NASA)

2020:

Demographic Methods	Max Planck Institute for Demographic Research
Digital and Computational Demography	Max Planck Institute for Demographic Research
Population Health	Max Planck Institute for Demographic Research
Basic Statistics for Demographers	European Doctoral School of Demography
Professional Development for Presentation	Max Planck Institute for Demographic Research

2017:

Understanding Complexity	University of Michigan-Peking University Joint Institute
Advanced Quantitative Methodology	University of Michigan-Peking University Joint Institute

## **Certificates**

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1. Information system project manager (senior)

2. Software developer
3. MapGIS development engineer

## **Academic Memberships**

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1. Nature Humanities & Social Sciences Editorial Community
2. IMSCOE (International Migration Research Network) PhD Academy
3. International Union for the Scientific Study of Population (IUSSP)
4. Population Association of America (PAA)
5. Migration Oxford

## **Computer and Language Skills**

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Proficient in programming (Python, R, C++, C#, JavaScript, Matlab)

Experienced in using professional software (ArcGIS, MapGIS, Erdas, GeoDa, SPSS, Flex)

Languages: Proficiency in written and verbal English; native in Chinese

## **Referees**

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Prof. Dr. Emilio Zagheni

Professor and Institute Director, Max Planck Institute for Demographic Research

[zagheni@demogr.mpg.de](mailto:zagheni@demogr.mpg.de)

Prof. Dr. Ridhi Kashyap

Professor of Demography & Computational Social Science, University of Oxford

[ridhi.kashyap@nuffield.ox.ac.uk](mailto:ridhi.kashyap@nuffield.ox.ac.uk)

Dr. Samin Aref

Assistant professor Department of Mechanical & Industrial Engineering, University of Toronto

[aref@mie.utoronto.ca](mailto:aref@mie.utoronto.ca)

Dr. Aliakbar Akbaritabar

Research Scientist and Deputy Head, Max Planck Institute for Demographic Research

[akbaritabar@demogr.mpg.de](mailto:akbaritabar@demogr.mpg.de)