**Dalkhat M. Ediev**

PhD, Doktor Nauk, Docent

**E-MAIL:** [ediev@iiasa.ac.at](mailto:ediev@iiasa.ac.at); dalkhat@hotmail.com

**WEB:**  <http://www.oeaw.ac.at/vid/staff/staff_dalkhat_ediev.shtml>

**WORK:** Research Scholar at the International Institute for Applied Systems Analysis at the Wittgenstein Centre for Demography and Global Human Capital (Austria);

Professor and institute director at the North-Caucasian State Humanitarian-Technological academy (Russia).

**EDUCATION, DEGREES, EVALUATION:**

2012 Evaluated to hold a permanent position at the Vienna Institute of Demography of Austrian Academy of Sciences (27.07.2012).

2008 Doktor Nauk in Physical-Mathematical Sciences by the Russian Highest Attestation Commission (ДДН № 008510, 10.10.2008)

2002 Docent degree in mathematics by the Russian Highest Attestation Commission (ДЦ № 018209, 17.07.02)

1999 Ph.D. in “Theoretical foundations of mathematical modeling, numerical methods, and computer software” by the Russian Highest Attestation (КТ № 019305, 17.12.99)  
Defended at Moscow Institute of Physics and Technology.  
PhD thesis: "**Demographic and Economic-Demographic Potentials**"

1997 EU (TACIS) funded course in Life Insurance, Moscow State University

1993 Master of Sciences degree in applied economics and computers (ШВ № 223402, 30.06.93), Moscow Institute of Physics and Technology. Thesis: "**Modeling the Market Participants’ Behavior**"

1993 Applied mathematics and physics. Par excellence Diploma of graduating (ШВ № 223402, 30.06.93), Moscow Institute of Physics and Technology

**PROFESSIONAL ACTIVITY:**

01.09.14 to present Director of the Institute for applied mathematics and information technologies and Professor at the Mathematics chair at the North-Caucasia State Humanitarian-Technological Academy (Cherkessk, Russia)

01.06.13 to present Research scholar at the International Institute for Applied Systems Analysis at the Wittgenstein Centre for Demography and Global Human Capital (Laxenburg, Austria)

2009 to present Lecturer at the European Doctoral School in Demography (EDSD)

01.08.06-01.03.15 Senior Scientist at the Vienna Institute of Demography of Austrian Academy of Sciences

29.11.00-01.08.06 Docent of the Karachay-Cherkessian State Technological Academy (lecturing in: Theory of Probability and Statistics, Mathematical Demography, Econometrics, Simulation and Monte-Carlo Methods; supervising graduate and post-graduate research in mathematical demography; holding scholar workshop on mathematical modeling and mathematical economics)

01.09.04-01.08.06 Dean of the Distant Education Department of the Karachay-Cherkessian State Technological Academy

01.10.05-31.12.05 Researcher at the Vienna Institute of Demography of Austrian Academy of Sciences

01.06.02-01.06.03 Deputy Dean of the Distant Education Department

01.02.98-29.11.00 Senior Teacher of the Karachay-Cherkessian State Technological Academy (lecturing in: Theory of Probability and Statistics, Mathematical Demography, Econometrics, Simulation and Monte-Carlo Methods, Economic-Mathematic Methods and Models; supervising graduate and post-graduate research in mathematical demography)

23.01.00-23.05.00 Visiting Faculty at the Iowa State University, USA

01.11.94-01.11.97 Post graduate of the Moscow Institute of Physics and Technology

25.08.93-08.11.94 Assistant Teacher of the Karachay-Cherkessian State Technological Institute

**RESEARCH INTERESTS:** Population change and projections; Population ageing; Formal demography; Demography of social welfare; Demographic methods and models

**TEACHING:** Lecturing at the European Doctoral School of Demography (2009 to present); lecturing at Karachay-Cherkessian State Technological Academy (1993 to 2006);  
lecturing at North-Caucasian State Humanitarian-Technological Academy (2014 to present)

**EDITORSHIP, REVIEWING, EXPERT:** ViennaYearbook of Population of Population Research (guest Editor and Reviewer), FNRS (Belgium National Scientific Funding Agency), Swedish National Scientific Funding Agency (RIKSBANKENS JUBILEUMSFOND), THE (Times Higher Education ranking), Elsevier, Journals: Demography, Demographic Research (member of the Scientific Reviewing Board), ViennaYearbook of Population of Population Research, American J of Epidemiology, European J of Population, International J of Forecasting, Genus, J of Bioeconomics, Population Studies, Biometrical Journal, Environment and Planning, Swedish National Science Fund, Demographic Studies.

**PROJECTS and GRANTS**

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| **01.06.13-** | European Union's Seventh Framework Programme (FP7/2007-2013) / ERC grant agreement no ERC2012-AdG 323947-Re-Ageing. |
| **09.2014-11.2014** | Turkish Statistical Institute: Training Course on Multi-regional Population Projections; Household Projections; and Probabilistic Population Projections. |
| **01.08.06-31.12.08** | ЕС TACIS Project «System of current estimation, analysis and forecasting of number and structure of households in the periods between censuses». |
| **01.07.07-31.08.07** | Statistik Austria: «Analysis, evaluation and adjustment of extensive models for mortality projections». |
| **01.01.05-31.12.06.** | RFFI Grant № 05-06-80432 «Developing of mathematical models and methods of assessing the reproduction parameters of a small population». |
| **2005-2009** | UNFPA: membership at the International Union for the Scientific Study of Population. |
| **2002-2003** | MacArthurs Foundation Grant № 02-73284 “Demographic losses of deported soviet peoples”. |
| **2002-2003** | Research project of the Russian Ministry of Education “Development of the demographic potentials model and its applications”. |
| **2002-2006** | EERC-Russia: JSTOR access. |
| **23.01.00-23.05.00** | Bureau of Educational and Cultural Programs of US Department of State: Regional Scholar Exchange Program. |

**PROFESSIONAL SOCIETIES:** Population Association of America (PAA),  
European Association for Population Studies (EAPS),  
International Union for the Scientific Study of Population (IUSSP),  
Asian Population Association (APA)

### Publications

***Books, booklet, dissertations and volume edited:***

1. Ediev D., M. Mamolo, M. Potancokova, S. Scherbov, T. Sobotka, K. Zeman. 2012. *European Demographic Datasheet 2012*. Vienna, Vienna Institute of Demography.
2. Coleman, D., Ediev, D.M. 2010. (Editors). *Vienna Yearbook of Population Research 2009*. Verlag der Österreichischen Akademie der Wissenschaften. 233 pp.
3. Ediev, D., A. Goujon, W. Lutz & M.A. Speringer. 2009. *From Vienna to Marrakech: 50 years of independent IUSSP conferences. 1959-2009.* Vienna, Vienna Institute of Demography. 16 pp.
4. Ediev, D.M. 2008. *Theory and applications of demographic potentials*. Dissertation for seeking the degree of Doctor of physical-mathematical sciences. Cherkessk. 356 pp.
5. Ediev, D.M. 2007. *Demographic potentials: theory and applications*. Moscow: Max-PRESS. 348 pp. In Russian.
6. Ediev, D.M. 2003. *Demographic losses of deported soviet peoples*. Stavropol: AGRUS, Stavropolservisshkola, 2003. 336 pp. In Russian
7. Ediev, D.M. 1999. *Optimization: Convex and Linear Programming*. Cherkessk: Karachay-Cherkessian State Technological Institute. 84 pp.
8. Ediev, D.M. 1999. *Demographic and Economic-Demographic Potentials*. Dissertation for seeking the degree of Candidate (PhD thesis) of physical-mathematical sciences. Moscow: Moscow Institute of Physics and Technology. 206 pp.

***Contributions to collections and book chapters:***

1. Yépez-Martínez, B., J. López-Colás, D. Ediev, J. A. Módenes. 2013. Proyecciones de Hogares y previsión de demanda de viviendas en Venezuela. In: Cavenaghi, S. M. *Estimaciones y proyecciones de población en América Latina: desafios de una agenda pendiente (Serie e-Investigaciones de ALAP, N. 2), Rio de Janeiro : ALAP*. P. 175-211. - [link](http://www.alapop.org/2009/index.php?option=com_content&view=article&id=1210&Itemid=573)

2. Gisser, R., Ediev, D. 2012. Österreiches Familien 2032 – neue Aspekte. In: Lutz, W., Strasser, H. (Eds.) *Österreich 2032. Festschrift zum 80. Geburtstag von Gerhart Bruckmann*. Wien 2012. Pp. 63-102.

3. Ediev, D.M. 2009. Demographic problems and prospects of Russian Far East. In: Scientific-Expert Board at the Head of the Council of Federation of Federal Assembly of Russia. *Far Easter region in socio-political space of Russia: problems and ways to their solution*. Moscow: 2009. P. 44-52.

4. Tebuev Dj. B., Ediev D. M. 2007. Application of simulation modelling to estimating efficiency of life table constructing methodology. In: *Demographic studies. No. 13. Mortality. Tendencies, methods, forecasts.* Moscow: Max-Press. P. 175-191.

5. Ediev D. M. 2004. Estimation of the population of Crimean Tatars based on materials of post-war population censuses of USSR. In: Danilova I. A., Denisenko M. B. (Eds.) *Population and Crises: regional and ethnic peculiarities of demographic development in Russia and USSR*. Moscow: Max-Press. – Vol. 10. P. 138-150.

***Peer-reviewed papers and review:***

1. Ediev, D.M., M.M. Yüceşahin. 2016. Contribution of migration to replacement of population in Turkey. *Migration Letters* 13(3): 377-392. - [link](http://www.tplondon.com/journal/index.php/ml/article/view/583)
2. Scherbov, S. and D.M. Ediev. 2016. Does selection of mortality model make a difference in projecting population ageing? *Demographic Research* 34(2): 39-62. - [link](http://www.demographic-research.org/volumes/vol34/2/)
3. Ediev, D.M. 2014. Why increasing longevity may favour a PAYG pension system over a funded system: Increasing longevity and pension systems. *Population Studies.* 68(1): 95-110. - [link](http://www.tandfonline.com/eprint/2SETxqvtYbbpFwaFE9dt/full)
4. Ediev, D.M., D. Coleman and S. Scherbov. 2014. New Measures of Population Reproduction for an Era of High Migration. *Population, Space and Place.* 2014 – V.20. №7. P. 622-645. - [link](http://onlinelibrary.wiley.com/doi/10.1002/psp.1799/abstract)
5. Ediev, D.M. 2013. Mortality compression in period life tables hides decompression in birth cohorts in low-mortality countries. *Genus* 69(2): 53-84. - [link](http://scistat.cilea.it/index.php/genus/article/view/451)
6. Ediev, D.M. 2013. Decompression of period old-age mortality: when adjusted for bias, the variance in the ages at death shows compression. *Mathematical Population Studies.* 20(3): 137-154. - [link](http://www.tandfonline.com/doi/full/10.1080/08898480.2013.816218#.U6rx_k2KCJc)
7. Ediev, D.M., S. Yavuz and M.M. Yüceşahin. 2012. Private households in Turkey: Big changes ahead. *Population Review*. 51(1): 28-49. - [link](http://muse.jhu.edu/login?auth=0&type=summary&url=/journals/population_review/v051/51.1.ediev.html)
8. Ediev, D.M. 2011. Life Expectancy in Developed Countries Is Higher Than Conventionally Estimated. Implications from Improved Measurement of Human Longevity. *Journal of Population Ageing*. 4(1-2): 5-32. - [link](http://www.springerlink.com/content/lu61j0v1k1951253/)
9. Ediev, D.M. 2011. Robust Backward Population Projections Made Possible. *International Journal of Forecasting*. 27(4): 1241-1247. - [link](http://www.forecasters.org/ijf/journal-issue/455/article/6851)
10. Scherbov, S. and Ediev, D.M. 2011. Significance of life table estimates for small populations: Simulation-based study of standard errors. *Demographic Research*, 24(22): 527-550. - [link](http://www.demographic-research.org/volumes/vol24/22/)
11. Ediev, D.M. 2010. On the reproductive value and the spectrum of a population projection matrix with implications for dynamic population models. *Theoretical Population Biology*, 78(2): 67-70. - [link](http://www.sciencedirect.com/science/article/pii/S0040580910000638)
12. Ediev, D.M. 2009. On the definition of the reproductive value: response to the discussion by Bacaёr and Abdurahman. *Journal of Mathematical Biology*, 59(5): 651-657. - [link](http://link.springer.com/article/10.1007%2Fs00285-008-0246-3)
13. Ediev, D.M. 2008. Book review: Robert Schoen (ed.): *Dynamic Population Models*. *European Journal of Population*, 24(1): 119-124. – doi: 10.1007/s10680-007-9140-8.
14. Ediev, D.M. 2007. On an extension of R.A. Fisher's result on the dynamics of the reproductive value. *Theoretical Population Biology*, 72(4): 480-484. - [link](http://www.sciencedirect.com/science/article/pii/S0040580907000238)
15. Ediev, D.M. 2006. On the role of mean age of the parent at childbearing in long-term demographic dynamics. *Voprosy Statistiki*, No.11 (2006). P. 23-31. In Russian.
16. Ediev D. M. 2006. On spectral and asymptotic properties of general discrete population models // *Izvestia VUZov. Severokavkazsky region (Natural Sciences series)*, No. 4 (2006): 7-16. In Russian
17. Tebuev Dj. B., Ediev, D.M. 2006. On modeling the survival processes under incompleteness of data and small population size. *Izvestia TRTU.* No. 3 (58): 296-299. In Russian
18. Ediev, D.M. 2005. On a Model of Estimating the Optimal Strategies of Recovering the Demographic Losses of Russia. *Mathematical Modeling,* Vol. 17, №10 (2005): 113-126. In Russian
19. Ediev, D.M. 2005. On Non-Extendibility of the Class of Monotonic Measures of the Population’s Age Structure Convergence to the Structure of Asymptotically Equivalent Stable Population. *Izvestia VUZov. Severo-Kavkazsky Region (Natural Sciences series)*, No. 1 (2005): 32-33. In Russian
20. Ediev, D.M. and Tebuev Dj. B. 2005. On the combined method of estimating the life table for a small population. *Izvestia VUZov. Severo-Kavkazsky Region (Natural Sciences series)*, No. 2 (2005): 27-31. In Russian
21. Ediev, D.M. 2004. On Comparing the Age Structures of Real Populations. *Voprosy Statistiki*, No.10 (2004). P. 16-27. In Russian (Review article)
22. Ediev, D.M. 2004. On Monotonic Measures of the Population’s Age Structure Convergence to the Structure of Asymptotically Equivalent Population. *Izvestia TRTU.* No. 8 (2004). P. 302-303. In Russian
23. Ediev, D.M. 2003. On Monotonic Convergence to Stability. *Demographic Research,* Vol.8, Article 2. P. 31-60. - [link](http://www.demographic-research.org/volumes/vol8/2/8-2.pdf)
24. Ediev, D. M. 2003. The Concept of Demographic Potential and Its Applications. *Mathematical Modeling*. Vol. 15, No. 12 (Dec., 2003): 37-74. In Russian (Review article)
25. Ediev, D.M. 2002. On Conditions of Monotonic Convergence of Population Structure to the Structure of Stable Equivalent Population in Quadratic Distance within the Model of Reproduction of Demographic Potential. *Izvestia VUZov. Severo-Kavkazsky Region (Natural Sciences series)*, No. 4 (2002): 3-6. In Russian
26. Ediev, D.M. 2001. Application of the Demographic Potential Concept To Understanding the Russian Population History and Prospects: 1897-2100. *Demographic Research,* Vol.4, Article 9: 289-336. - [link](http://www.demographic-research.org/volumes/vol4/9/4-9.pdf)

***Other selected publications:***

1. Ediev, D.M. 2014. Shift and Compression of Mortality at Old Age: A Conservative Scenario. IIASA Interim Report IR-14-004. - [link](http://www.iiasa.ac.at/publication/more_IR-14-004.php)
2. Ediev, D.M. 2011. A note on the compression of mortality. Vienna, Vienna Institute of Demography of Austrian Academy of Sciences. *European Demographic Research Paper* 3/2011. - [link](http://www.oeaw.ac.at/vid/download/edrp_3_11.pdf)
3. Ediev, D.M. 2011. At Modal Age at Death, the Hazard Rate is Determined by its Derivative. Vienna, Vienna Institute of Demography of Austrian Academy of Sciences. *Working paper WP* 08/2011. - [link](http://www.oeaw.ac.at/vid/download/WP2011_08.pdf)
4. Ediev, D.M. 2008. On the Theory of Distortions of Period Estimates of the Quantum Caused by the Tempo Changes. Vienna Institute of Demography, European Demographic Research Paper 3/2008. - [link](http://www.oeaw.ac.at/vid/download/edrp_3_08.pdf)
5. Ediev, D.M. 2008. Extrapolative Projections of Mortality: Towards a More Consistent Method. Part I: The Central Scenario. Vienna, Vienna Institute of Demography of Austrian Academy of Sciences. Working paper WP 03/2008. 50 pp. - [link](http://www.oeaw.ac.at/vid/download/WP2008_03.pdf)
6. Ediev, D., D. Coleman, and S. Scherbov. 2007. Migration as a Factor of Population Reproduction. Vienna Institute of Demography European Demographic Research Papers 1/2007. 57 pp. - [link](http://www.oeaw.ac.at/vid/download/edrp_1_07.pdf)
7. Ediev D. M. 2007*.* On Projecting the Distribution of Private Households by Size*. Vienna*, Vienna Institute of Demography of Austrian Academy of Sciences. Working paper WP 04/2007. 54 pp. - [link](http://www.oeaw.ac.at/vid/download/WP2007_04.pdf)
8. Ediev, D. and R. Gisser. 2007. Reconstruction of the historical series of life tables and of age-sex structures for the Austrian population in 19th-first half of 20th centuries // *Vienna Yearbook of Population Research*. 2007: 327-355. (Non-refereed section.)
9. Ediev, D.M. 2007. An approach to improve the consistency of mortality projections obtained by the Lee-Carter method // Eurostat methodologies and working papers. Work session on demographic projections. Bucharest, 10-12 October 2007. Luxembourg: Office for Official Publications of the European Communities. P. 101-115.
10. Scherbov, S. and Ediev, D.M. 2007. Probabilistic household projections based on an extension of headship rates method with application to the case of Russia // Eurostat methodologies and working papers. Work session on demographic projections. Bucharest, 10-12 October 2007. Luxembourg: Office for Official Publications of the European Communities. P. 277-291.
11. Ediev D. M. 2006. Age structure of Russian Mortality: Continuity of Change? Reflection of the crisis mortality structure in the average demographic potential dynamics. *Mortality in countries of the former USSR. Fifteen years after break-up: change or continuity?* Kiev, 2006. P. 55-66.
12. Ediev D. M. 2006. Method of monitoring the demographic processes using the results from the theory of demographic potential. *Demographic crisis as a threat to regional development in Russia: ways to overcome. Proceedings of Russian scholar conference.* Moscow: Social Development Foundation. P. 280-283.
13. Ediev D. M. 2005. Long-Term Effects of Childbearing Postponement. Vienna, Vienna Institute of Demography of Austrian Academy of Sciences. Working paper WP 09/2005. 18 pp. - [link](http://www.oeaw.ac.at/vid/download/WP2005_9.pdf)
14. Ediev D. M. 2005. On modeling the optimal strategies of overcoming the demographic crisis of Russia. In: *Population policy: State of the art and perspectives: IV Valentey readings*. Moscow, Moscow State University. P. 46-51.
15. Ediev D. M. 2005. On using the demographic potentials concept in developing the multi-level system of monitoring and controlling the efficiency of demographic policy. In: *Population policy: State of the art and perspectives: IV Valentey readings*. Moscow, Moscow State University. P. 51-54.
16. Ediev D. M. 2005. Application of the demographic potential concept to estimating the Lotka’s coefficient in the system of monitoring the small-sized population. In: *Population policy: State of the art and perspectives: IV Valentey readings (book 2).* Moscow, Moscow State University. P. 256-262.
17. Tebuev Dj. B., Ediev D. M. 2005. On the optimal choice of standard life table in the Brass model when estimating the life tabke for a small population. *Investigated in Russia (Demographic section)*, 155: 1630-1636. <http://zhurnal.ape.relarn.ru/articles/2005/155.pdf>.
18. Ediev D. M. 2004. Demographic Losses of Deported Soviet Peoples. *Population and Society*. No. 79 (2004). P. 1-4. In Russian
19. Ediev D. M. 2004. Demographic Losses of Deported Soviet Peoples. *Demoscope Weekly*. No. 147 – 148 (Feb. 23 – Mar. 7, 2004). <http://demoscope.ru/weekly/2004/0147/tema01.php> In Russian
20. Ediev D. M. 2003. International Migration as a Factor of Overcoming the Depopulation of Russia. In: Migration and National Security. Moscow: Moscow State University, 2003. P. 62-72. In Russian
21. Ediev D. M. 2003. Migration in the Caucasus Region: Trends, Determinants, and Perspectives. // The European Council. *Migration policies on the eve of the EU enlargement: what challenges for future co-operation within the East European region*. (Kiev, Oct. 9-10.) P. 61-100.
22. Ediev D. M. 2002. On Conditions of Monotonic Convergence of Population Structure to the Structure of Stable Equivalent Population in Kullback Distance Within the Model of Reproduction of Demographic Potential. *Investigated in Russia (Demographic section)*, 17: 182-190. <http://zhurnal.ape.relarn.ru/articles/2002/017.pdf> In Russian
23. Ediev D. M. 2002. Interrelations between the Spectrum of Leslie Matrix and the Age  
    Pattern of Demographic Potentials. *Investigated in Russia (Demographic section)*, 74е: 815-823. <http://zhurnal.ape.relarn.ru/articles/2002/074е.pdf>
24. Ediev D. M. 2001. Reconstruction of the US Immigration History: Demographic Potential Approach. *Investigated in Russia (Demographic section)*, 140е: 1619-1635. <http://zhurnal.ape.relarn.ru/articles/2001/140e.pdf>
25. Ediev D. M. 2001. Aggregate Population Forecasting With the Use of Demographic Potentials Technique. *Investigated In Russia (Demographic section)*, 38e: 408-431. <http://zhurnal.ape.relarn.ru/articles/2001/038e.pdf>
26. Ediev D. M. 1996. Economic Analysis of Demographic Dynamics. *Modeling the Processes of Management and Information Processing*. Moscow: Moscow Institute of Physics and Technology, 76-80.

Date: April 3, 2014