

Curriculum Vitae

Personal information

First name(s) / Surname(s)

Dr. Duygu Savaşcı

Professional e-mail

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Work phone

+49 (0)40 48500 751

Nationality

Turkish

Date of birth

01/02/1980

Gender

Female

Position / Organisation Work experience

Dates

2012 - Present

Occupation or position held

Research Analyst, Sampling Unit

Main activities and responsibilities

- IEA Sampling Unit's Project Lead for PIRLS since 2012, LaNa since 2016, TIMSS between 2015 and 2019, and for Haiti National Assessment.
- Sampling design development and implementation, weighting and variance estimation in IEA's large-scale educational surveys using SAS.
- Carrying out sampling consultations and conducting trainings about sampling in complex surveys and related topics.
- Statistical analysis of large-scale assessments data.
- Involvement in IEA software development; writing the sampling requirements and testing.

Name of employer

Stichting IEA Secretariaat Nederland. IEA Hamburg (formerly IEA Data Processing and Research Center)

Type of business or sector

Non-profit research organization

Dates

2007 - 2012

Occupation or position held

Research Assistant

Main activities and responsibilities

- Research and analysis on econometric models, non- and semi-parametric methods.
- Testing model specifications: GLMM and other extensions, semi-mixed effects models.
- Computational statistics using R, Stata and Fortran.

Name of employer

The University of Göttingen

Type of business or sector

Institute for Statistics and Econometrics

Dates

2009 - 2011

Occupation or position held

Teaching Assistant

Main activities and responsibilities

- Teaching the practical courses Econometrics I and Econometrics II using Stata.
- Preparing the examination questions and scoring the examination papers.
- Consulting the students throughout the semesters.
- Leading the team of tutors for the respective courses.

Name of employer

The University of Göttingen

Type of business or sector

Institute for Statistics and Econometrics



Dates | Se

September 2011

Occupation or position held

Visiting Researcher

Main activities and responsibilities

 Research and analysis on non- and semi-parametric methods, particularly using smoothing spline technique.

• Testing model specifications: semi-mixed effects models using R.

Name of employer

The University of A Coruña

Type of business or sector

Mathematics Department

Dates

September 2009

Occupation or position held

Visiting Researcher

Main activities and responsibilities

• Research and analysis on non- and semiparametric methods.

• Conducting simulation studies using R.

Name of employer

The University of A Coruña

Type of business or sector

Mathematics Department

Dates

February - April 2007

Occupation or position held

Mathematics Teacher

Main activities and responsibilities

- Teaching Mathematics to 6th grade students.
- Preparing the examination questions and scoring the examination papers.
- Conducting parent-teacher conferences.

Name of employer

Kuşadası Nermin Metin Akar Middle School

Type of business or sector

Public School

Other Professional Activities

Current

- Instructor at the IEA-ETS Research Institute: conducting trainings about sampling in complex surveys
- Research interests: sampling implementation and design in International Large-Scale Assessments in education and complex samples

Past

- Main sampling contact for Haiti National Assessment in collaboration with the Haitian Ministry of Education and the Inter-American Development Bank
- Member of the Project Management Team TIMSS and PIRLS
- Teaching assistant at the University of Göttingen: teaching Econometrics I and Econometrics II practical courses
- Research interests: non-and semi-parametric modelling and methods

Scholarships

- 2007 2009 Georg-Christoph-Lichtenberg-Stipendiums des Landes Niedersachsen
- 2010 2011 Deutscher Akademischer Austauschdienst Project Grant



Education and training

Dates 2007 - 2012

Doctor of Philosophy - PhD, Econometrics Title of qualification awarded

Principal subjects/occupational **Econometrics**

skills covered

Name and type of organisation The University of Göttingen, Institute for Statistics and Econometrics, Faculty of providing education and training **Economic Sciences**

> 2007 - 2012 **Dates**

Title of qualification awarded Certificate in Applied Statistics, PhD Programme in Applied Statistics

and Empirical Methods

Principal subjects/occupational

Applied Statistics skills covered

Name and type of organisation The University of Göttingen, Center for Statistics, Faculty of Mathematics and providing education and training **Computer Science**

> **Dates** 2003 - 2006

Title of qualification awarded Master of Science - MSc, Statistics

Principal subjects/occupational **Statistics**

skills covered

Name and type of organisation Ankara University, Department of Statistics, Graduate School of Natural and Applied Sciences providing education and training

> **Dates** 1999 - 2003

Title of qualification awarded Bachelor of Science - BSc, Statistics

Statistics Principal subjects/occupational skills covered

Name and type of organisation providing education and training

Ankara University, Department of Statistics, Faculty of Science

Personal skills and competences

Mother tongue(s)

Turkish

Other language(s)

English, German, and French

Computer skills and competences

- Statistics and econometrics: good command of R, SAS and Stata, intermediate level of SPSS and Fortran, basic level of Matlab, C++, OxMetrics
- Production of technical and scientific documentation: LaTeX
- Project management, bug tracking: JIRA, Mantis Bug Tracker
- Querying databases: basic level of SQL
- Office related applications: MS Office (Word, Excel, and PowerPoint)
- Markup language: basic level of HTML



Publications

Savaşcı, D., Tieck, S., (2018), Description of Sampling Design and Weighting. Haiti National Evaluation 2017. Submitted to Haitian Ministry of National Education.

Twele, N., Beyer, C.W., Meinck, S., Neuschmidt, O., Savaşcı, D., Gonzalez, E., (2018), Résultats Préliminaires de l'Evaluation Nationale 2017 en Haïti. *Published online by Cadre de Liaison Inter-Organisations, Haiti*.

Weber, S., Tieck, S., Savaşcı, D., (2018), Weighting procedures. *International Civic and Citizenship Education Study* 2016 *Technical Report. IEA*, *Amsterdam*, 99-115.

Savaşcı, D., Tieck, S., (2016), Description of Sampling Design and Weighting. Haiti National Evaluation 2016. Submitted to Haitian Ministry of National Education.

Proenca, I., Sperlich, S., Savaşcı, D., (2015), Semi-mixed effects gravity models for bilateral trade. *Empirical Economics*, 48: 361-387.

Savaşcı, D., (2011), Three studies on semi-mixed effects models. *The University of Göttingen, Göttingen State and University Library*. Link: https://ediss.uni-goettingen.de/handle/11858/00-1735-0000-000D-F1E3-3

Savaşcı, D., H. Aydogdu, H., (2010), Age and block replacement policies in renewal processes. *Selcuk Journal of Applied Mathematics*, 11 (1): 81-94.

Savaşcı, D., (2006), Yenileme Süreçlerinde Yaş ve Blok Değiştirme Stratejileri. *Ankara University Open Archive System*. Link: https://dspace.ankara.edu.tr/xmlui/handle/20.500.12575/29103

ILSA Gateway contributions

Savaşcı, D., (2017), PIRLS 2011 & PIRLS 2016 Sample Design. *Published online by International Large-Scale Assessment (ILSA) Gateway*. Link: https://ilsa-gateway.org/

Savaşcı, D., (2017), TIMSS 2015 & TIMSS Advanced 2015 Sample Design. Published online by International Large-Scale Assessment (ILSA) Gateway.

Teaching and Presentations

Teaching at the Workshops

Sampling, Weighting and Variance Estimation in ILSA Workshop for the team from the Oman Ministry of Education, Hamburg (virtual event), Germany, May 25-25, 2021, and June 1-2, 2021

Sampling in International Large-scale Assessment Studies for IERI (IEA-ETS Research Institute) Summer Academy, Hamburg, Germany, September 16–18, 2019

Sampling in International Large-scale Assessment Studies for IERI (IEA-ETS Research Institute) Summer Academy, Hamburg, Germany, September 27–28, 2017

IEA's International Database Analyzer Training at the PIRLS 2016 National Research Coordinators Meeting, Riga, Latvia, June 22, 2017

Sampling Workshop for the team from the Haiti Ministry of Education, Hamburg, Germany, November 14-15, 2016

Complex Sampling in Large-Scale Assessments in Education Workshop for the team from the Georgia Ministry of Education, Hamburg, Germany, November 16-20, 2015



Hierarchical Linear Modelling with TIMSS and PIRLS Data, Hamburg, Germany, November 25-29, 2013

Hierarchical Linear Modelling with TIMSS and PIRLS Data, Hamburg, Germany, April 15-19, 2013

Teaching at the University of Göttingen

Econometrics 2 (in English), University of Göttingen, Summer Semester 2010, and Summer Semester 2011,

Econometrics 1 (in English), University of Göttingen, Winter Semester 2009/10, and Winter Semester 2010/11

Presentations

Important Sampling Related Matters, PIRLS 2021 Data Management Seminar, Hamburg (virtual event), Germany, 2020

Introduction to Within-school software & Important Sampling Related Matters, PIRLS 2021 Field Test Data Management Seminar, Hamburg, Germany, 2019

Important Sampling Related Matters, TIMSS 2019 Data Management Seminar, Hamburg, Germany, 2018

Important Sampling Related Issues, TIMSS 2019 Field Test Data Management Seminar, Hamburg, Germany, 2017

Important Sampling Related Issues, PIRLS 2016 Data Management Seminar, Hamburg, Germany, 2015

TIMSS Advanced Windows Within School Software, TIMSS and TIMSS Advanced 2015 Data Management Seminar, Hamburg, Germany, 2015

TIMSS Advanced Windows Within School Software, TIMSS and TIMSS Advanced 2015 Field Test Data Management Seminar, Hamburg, Germany, 2013

Nonparametric Small Area Estimation Using Penalized Spline Regression, Mixed Effects Models and its Applications, The University of Göttingen, Germany, 2010

Financial Time Series, Institute for Statistics and Econometrics, The University of Göttingen, Germany, 2009

Semi-Parametric, and Semi-Mixed Effects Models, Center for Statistics Summer School, Hannoversch Münden, Germany, 2008

Bayesian Inference for Generalized Additive Mixed Models Based on Markov Random Field Priors, Elements of Statistical Consulting, The University of Göttingen, Germany, 2008

Cluster Analysis in Multivariate Statistics, Graduate Seminar in Applied Statistics and Econometrics, The University of Göttingen, Germany, 2007

Semiparametric Models, Graduate Seminar in Applied Statistics and Econometrics, The University of Göttingen, Germany, 2007

Age and Block Replacement Policies in Renewal Processes, Graduate Seminar in Applied Statistics and Econometrics, The University of Göttingen, Germany, 2007



Sampling Consultations

Consulted over 60 IEA institutional members, encompassing mostly research institutes, universities, and ministries of education from around the world for the IEA studies TIMSS, PIRLS and ICCS. These consultations took place in the National Research Coordinators (NRC) Meetings, each of the meetings in a host country with the rest of the member countries attending.

Progress in International Reading Literacy Study (PIRLS) since 2012 Attended 13 NRC meetings in the following host countries: Germany (4), Slovenia, Ireland, Malta, Finland, Hong Kong, Morocco, Latvia, Taiwan, Italy.

Trends in International Mathematics and Science Study (TIMSS) since 2013 Attended 9 NRC meetings in the following host countries: Germany (4), Canada, Australia, Spain, Sweden, Cyprus.

International Civic and Citizenship Education Study (ICCS) in 2015 Attended 1 NRC meeting in Estonia.