



# **WORK SESSION ON DEMOGRAPHIC PROJECTIONS**

**29-31 October 2013**

**Congress Center  
Roma Eventi - Fontana di Trevi  
Piazza della Pilotta 4  
Rome**



## Summary of agenda items for the meeting:

- 1.** Opening of the meeting and welcoming remarks
- 2.** Adoption of the agenda and election of officers
- 3.** Key note lectures
- 4.** Assumptions on future migration
- 5.** Assumptions on future mortality
- 6.** Actual and potential use of demographic projections at national and international level
- 7.** National and international population projections out of the EU region
- 8.** Assumptions on future fertility
- 9.** Stochastic methods in population projections
- 10.** Household projections
- 11.** Demographic sustainability and consistency with macroeconomic assumptions
- 12.** Bayesian approaches (1)
- 13.** Bayesian approaches (2)
- 14.** Multiregional projections
- 15.** Beyond population projections by age and sex: inclusion of additional population characteristics
- 16.** Population projections by age, sex and level of education (1)
- 17.** Population projections by age, sex and level of education (2)
- 18.** Adoption of the report and closing of the meeting

# Aula Carducci | Plenary Session

9:30–10:30

Registration of participants  
and welcome coffee

10:30 – 11:20

## OPENING OF THE MEETING

Welcoming remarks by:

Antonio Golini | Istat  
Eduardo Barredo Capelot | Eurostat  
Paolo Valente | UNECE

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11:20 – 11:30

## ADOPTION OF THE AGENDA AND ELECTION OF OFFICERS

2

11:30 – 13:00

## KEYNOTE LECTURES

3

11:30 – 12:15

Probabilistic demographic projections  
Nico Keilman | University of Oslo

12:15–13:00

Population Ageing - A Threat  
to the Welfare State?  
Tommy Bengtsson | University  
of Lund

13:00–14:30

Lunch break

29 october MORNING



# Aula Carducci

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14:30 –16:00

## **ASSUMPTIONS ON FUTURE MIGRATION**

Chair: Valerio Terra Abrami | Istat

14:30 –14:45

Projections of ageing migrant populations in France: 2008-2028

Jean Louis Rallu | INED

14:45 –15:00

Introducing duration dependant emigration in DREAMs population projection model

Marianne Frank Hansen | DREAM

15:00 –15:15

Model to forecast the re-immigration of Swedish-born by background

Andreas Raneke | Statistics Sweden

15:15 –15:30

Dynamical models for migration projections

Violeta Calian | Statistics Iceland

15:30 –16:00

## **Questions & Discussion**

16:00 –16:30

Coffee break

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16:30 –18:00

## **ASSUMPTIONS ON FUTURE MORTALITY**

Chair: Graziella Caselli | University of Rome La Sapienza

16:30 –16:45

Cohort effects and structural changes in mortality trend

Edviges Coelho | Statistics Portugal, Luis Catela Nunes | Nova University of Lisbon

16:45 –17:00

Evaluation of Korean Mortality Forecasting Models

Jee Seon Baek, Mi Ock Jeong, Yun Kyoung Oh, Ji-Youn Lee, Sooyoung Kim | Statistics Korea

17:00 –17:15

Coherent forecasting of multiple-decrement life tables: compositional models for French Cause of Death data, 1925-2008

Jim Oeppen | MPIDR, Carlo Giovanni Camarda | INED

17:15 –17:30

Changing mortality trends by age and sex are challenges for assumptions on future mortality

Örjan Hemström | Statistics Sweden

17:30 –18:00

## **Questions & Discussion**

29 october AFTERNOON

# Aula Foscolo

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14:30 – 16:00

## **ACTUAL AND POTENTIAL USE OF DEMOGRAPHIC PROJECTIONS AT NATIONAL AND INTERNATIONAL LEVEL**

**Chair: Maria Graça Magalhães | Statistics  
Portugal**

14:30 – 14:50

**Indexation of the pension age to projected  
remaining life expectancy in The Netherlands**  
Coen van Duin | Statistics Netherlands

14:50 – 15:10

**The role of population projections for  
a redefinition of the Portuguese higher  
educational institutional network**  
Le Rui Dias, Maria Filomena Mendes, M. Graça  
Magalhães, Paulo Infante | University of Évora

15:10 – 15:30

**On the use of seasonal forecasting methods to  
model birth and deaths data  
as an input for monthly population estimates**  
Jorge Bravo | University of Évora, Edviges  
Coelho, M. Graça Magalhães | Statistics  
Portugal

15:30 – 16:00

**Questions & Discussion**

16:00 – 16:30

**Coffee break**

16:30 – 18:00

## **NATIONAL AND INTERNATIONAL PROJECTIONS OUT OF THE EU REGION** **Chair: Giampaolo Lanzieri | Eurostat**

16:30 – 16:45

**Qualitative and methodological aspects of  
population projections in Georgia.**  
**Georgian Population Prospects: 1950-2050**  
Avtandil Sulaberidze, Shorena Tsiklauri | Ilia  
State University

16:45 – 17:00

**Population Prospects of Georgia**  
Nika Maglaperidze | Ilia State University

17:00 – 17:15

**Estimation of the size and vital rates of the  
Haredi (ultra-orthodox) population  
in Israel for the purpose of long-range  
population projections**  
Ari Paltil | Israel Central Bureau of Statistics

17:15 – 17:30

**Population and development scenarios for EU  
neighbor countries in the South  
and East Mediterranean region**  
George Groenewold, Joop de Beer | NIDI

17:30 – 18:00

**Questions & Discussion**

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# Aula Carducci

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9:30 – 11:00

## **ASSUMPTIONS ON FUTURE FERTILITY**

Chair: Maria Graça Magalhães | Statistics Portugal

9:30 – 9:45

Contribution of fertility model and parameterization to population projection errors

Dalkhat M. Ediev | VID

9:45 – 10:00

New family values and increased childbearing in Sweden?

Lotta Persson, Johan Tollebrant | Statistics Sweden

10:00 – 10:15

Projecting fertility by regions considering tempo-adjusted TFR, the Austrian approach

Alexander Hanika | Statistics Austria

10:15 – 10:30

Effects of childbearing postponement on cohort fertility in Germany

Olga Pötzsch, Bettina Sommer | Destatis

10:30 – 11:00

## **Questions & Discussion**

11:00 – 11:30

Coffee break

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11:30 – 13:00

## **STOCHASTIC METHODS IN POPULATION PROJECTIONS**

Chair: Rebecca Graziani | Bocconi University

11:30 – 11:45

Measuring uncertainty in population forecasts: a new approach

David A. Swanson | University of California Riverside, Jeff Tayman | University of California San Diego

11:45 – 12:00

Stochastic population forecast: an application to the Rome Metropolitan Area

Salvatore Bertino, Oliviero Casacchia | University of Rome “La Sapienza”, Massimiliano Crisci | IRPPS-CNR

12:00 – 12:15

Long-term contribution of immigration to population renewal in Canada: a sensitivity analysis using Demosim

Patrice Dion, Éric Caron Malenfant, Chantal Grondin | Statistics Canada

12:15 – 12:30

From agent-based models to statistical emulators

Jakub Bijak, Jason Hilton, Eric Silverman, Viet Dung Cao | University of Southampton

12:30 – 13:00

## **Questions & Discussion**

13:00 – 14:30

Lunch break

30 october MORNING

# Aula Foscolo

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9:30 – 11:00

## **HOUSEHOLD PROJECTIONS**

Chair: Marco Marsili | Istat

9:30 – 9:50

**Estimating the number of households: an unavoidable challenge for the statistical system**

Antonio Argüeso Jiménez, Sixto Muriel de la Riva | INE

9:50 – 10:10

**A household projection model for Belgium based on individual household membership rates, using the LIPRO typology**

Marie Vandresse | Federal Planning Bureau

10:10 – 10:30

## **Household Projections and Welfare**

Elisa Barbiano di Belgiojoso, Gian Carlo Blangiardo | University of Milan Bicocca, Alessio Menonna | ISMU, Natale Forlani | Ministero del Lavoro e delle Politiche Sociali

10:30 – 11:00

## **Questions & Discussion**

11:30 – 11:30

## **Coffee break**

11:30 – 13:00

## **DEMOGRAPHIC SUSTAINABILITY AND CONSISTENCY WITH MACROECONOMIC ASSUMPTIONS**

Chair: Elisabetta Barbi | University of Rome “La Sapienza”

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11:30 – 11:50

**Ageing alone? The future of the Portuguese population in discussion**

Filipe Ribeiro, Lídia Patrícia Tomé, Maria Filomena Mendes | University of Évora

11:50 – 12:10

**Integrating labor market in population projections**

Juan Antonio Fernández Cordon | CSIC - Spanish Council for Scientific Research, Joaquín Planelles Romero | Institute of Statistics and Cartography of Andalusia

12:10 – 12:30

**Economic factors and net migration assumptions for EU countries – how to incorporate lessons from the recent economic crisis?**

Pawel Strzelecki | Warsaw School of Economics

12:30 – 13:00

## **Questions & Discussion**

13:00 – 14:30

## **Lunch break**



# Aula Carducci

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14:30 –16:00

## **BAYESIAN APPROACHES (1)**

**Chair: Graziella Caselli | University of Rome “La Sapienza”**

14:30 –14:50

### **Bayesian functional models for population forecasting**

Han Lin Shang, Arkadiusz Wisniowski, Jakub Bijak, Peter W.F. Smith, James Raymer | University of Southampton

14:50 –15:10

### **Towards stochastic forecasts of the Italian population: an experiment with conditional expert elicitations**

Francesco Billari | University of Oxford, Gianni Corsetti, Marco Marsili | Istat, Rebecca Graziani, Eugenio Melilli | Bocconi University

15:10 –15:30

### **Expert-Based stochastic population forecasting: a bayesian approach to the combination of the elicitations**

Francesco Billari | University of Oxford, Rebecca Graziani, Eugenio Melilli | Bocconi University

15:30 –16:00

## **Questions & Discussion**

16:00 –16:30

## **Coffee break**

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16:30 –18:00

## **BAYESIAN APPROACHES (2)**

**Chair: Rebecca Graziani | Bocconi University**

16:30 –16:50

### **Bayesian probabilistic projection of international migration rates**

Jonathan Azose, Adrian E. Raftery | University of Washington

16:50 –17:10

### **Bayesian probabilistic population projections: do it yourself**

Hana Ševčíková, Adrian E. Raftery | University of Washington, Patrick Gerland | UNPD

17:10 –17:30

### **Bayesian mortality forecasts with a flexible age pattern of change for several European countries**

Christina Bohk, Roland Rau | University of Rostock

17:30 –18:00

## **Questions & Discussion**

# Aula Foscolo

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14:30 – 16:00

## **MULTIREGIONAL PROJECTIONS**

Chair: Valerio Terra Abrami | Istat

14:30 – 14:45

### **Examining the Role of International Migration in Global Population Projections**

Guy Abel, Nikola Sander | VID,  
Samir K.C | IAASA

14:45 – 15:00

### **Subnational population projections for Turkey, 2013-2023**

Sebnem Bese Canpolat, Baris Ucar, M. Dogu Karakaya | Turkish Statistical Institute

15:00 – 15:15

### **An alternative projection model for interprovincial migration in Canada**

Patrice Dion | Statistics Canada

15:15 – 15:30

### **A Space-Time extension of the Lee-Carter model in a hierarchical bayesian framework: modelling and forecasting provincial mortality in Italy**

Fedele Greco, Francesco Scalone | University of Bologna

15:30 – 16:00

## **Questions & Discussion**

16:00 – 16:30

## **Coffee break**

16:30 – 18:00

## **BEYOND POPULATION PROJECTIONS BY AGE AND SEX: INCLUSION OF ADDITIONAL POPULATION CHARACTERISTICS**

Chair: Elisabetta Barbi | University of Rome “La Sapienza”

16:30 – 16:45

### **Projecting inequality: the role of population change**

Ingrid Schockaert, Patrick Deboosere | Vrije University of Bruxelles, Rembert De Blander, André Decoster | KU Leuven University

16:45 – 17:00

### **The impact of Canadian immigrant selection policy on future imbalances in labour force supply by broad skill levels**

Alain Bélanger | INRS Urbanisation Culture Société Research Centre

17:00 – 17:15

### **Microsimulation of language characteristics and language choice in multilingual regions with high immigration**

Alain Bélanger, Patrick Sabourin | INRS Urbanisation Culture Société Research Centre

17:15 – 17:30

### **A method for projecting economically active population. The case of Andalusia**

Silvia Bermúdez, Juan Antonio Hernández, Joaquín Planelles | Institute of Statistics and Cartography of Andalusia

17:30 – 18:00

## **Questions & Discussion**

20:30

## **Social dinner**

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# Aula Carducci | Plenary Session

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9:30–10:45

## **POPULATION PROJECTIONS BY AGE, SEX AND LEVEL OF EDUCATION (1)**

Chair: Anne Clemenceau | Eurostat

9:30 – 9:45

The scientific base of the new Wittgenstein Centre Global Human Capital Projections: defining assumptions through an evaluation of expert views on future fertility, mortality and migration

Wolfgang Lutz | IIASA, ÖAW/VID, WU

9:45 – 10:00

### **Developing Expert-Based assumptions on future fertility, mortality and migration**

Guy Abel, Stuart Basten, Regina Fuchs, Alessandra Garbero, Anne Goujon, Samir K.C., Elsie Pamuk, Fernando Riosmena, Nikola Sander, Tomáš Sobotka, Erich Striessnig, Kryštof Zeman | IIASA, ÖAW/VID, WU

10:00 – 10:15

### **The impact of alternative assumptions about migration differentials by education on projections of human capital**

Nikola Sander, Guy J. Abel, Samir K.C | IIASA, ÖAW/VID, WU

10:15 – 10:45

### **Questions & Discussion**

10:45 – 11:15

### **Coffee break**

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11:15 – 12:30

## **POPULATION PROJECTIONS BY AGE, SEX AND LEVEL OF EDUCATION (2)**

Chair: Anne Clemenceau | Eurostat

11:15 – 11:30

Estimating transition age schedules for long-term projection of global educational attainment

Bilal Barakat | IIASA, ÖAW/VID, WU

11:30 – 11:45

### **Results of the New Wittgenstein Centre Population Projections by age, sex and level of education for 171 countries**

Samir K.C., Sergei Scherbov, Erich Striessnig, Wolfgang Lutz | IIASA, ÖAW/VID, WU

11:45 – 12:00

### **Labor force projections for Europe by age, sex, and highest level of educational attainment, 2008 to 2053**

Elke Loichinger | IIASA, ÖAW/VID, WU

12:00 – 12:30

### **Questions & Discussion**

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12:30 – 13:30

## **ADOPTION OF THE REPORT AND CLOSING OF THE MEETING**

Chair: Paolo Valente | UNECE

Adoption of the report

Closing of the meeting

31 octoberMORNING

# TIMETABLE SUMMARY

Aula Carducci

## 29 october | 10:30 - 13:00

1. Opening of the meeting and welcoming remarks
2. Adoption of the agenda and election of officers
3. Key note lectures

## 29 october | 14:30 - 18:00

4. Assumptions on future migration
5. Assumptions on future mortality

## 30 october | 9:30 - 13:00

8. Assumptions on future fertility
9. Stochastic methods in population projections

## 30 october | 14:30-18:00

12. Bayesian approaches (1)
13. Bayesian approaches (2)

## 31 october | 9:30-13:30

16. Population projections by age, sex and level of education (1)
17. Population projections by age, sex and level of education (2)
18. Adoption of the report and closing of the meeting

Aula Foscolo

## 29 october | 14:30 - 18:00

6. Actual and potential use of demographic projections at national and international level
7. National and international population projections out of the EU region

## 30 october | 9:30 - 13:00

10. Household projections
11. Demographic sustainability and consistency with macroeconomic assumptions

## 30 october | 14:30-18:00

14. Multiregional projections
15. Beyond population projections by age and sex: inclusion of additional population characteristics



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