



Wittgenstein Centre

FOR DEMOGRAPHY AND
GLOBAL HUMAN CAPITAL

A COLLABORATION OF IIASA, VID/ÖAW, WU

Introduction to the WIC Data Explorer

Jakob Eder – WIC Summer School 2016



I I A S A

International Institute for
Applied Systems Analysis

www.iiasa.ac.at



ÖAW

AUSTRIAN
ACADEMY OF
SCIENCES

WU

WIRTSCHAFTS
UNIVERSITÄT
WIEN VIENNA
UNIVERSITY OF
ECONOMICS
AND BUSINESS

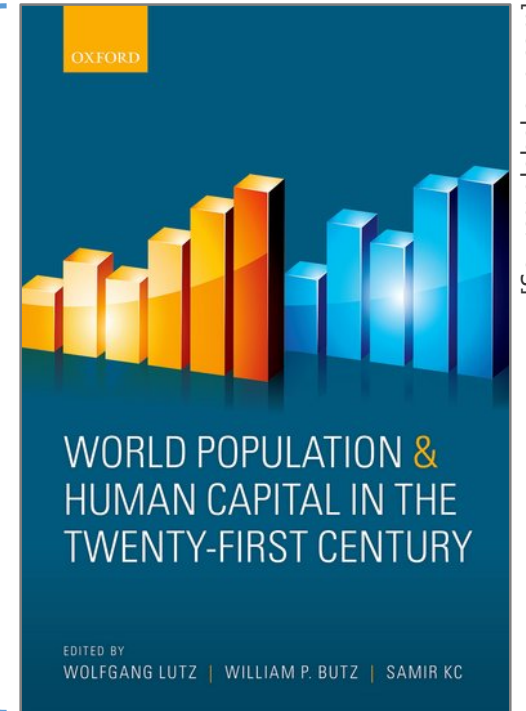
Agenda

- Introduction to the WIC Data Explorer
- Demo and hands on
- Using data from the Explorer for graphs in MS Excel or maps in QGIS
- Topics for student's presentations on Wednesday, 15.06.2016



Objectives and Scope

- Making WIC data publicly available
 - Free and easy access
 - Provide data, maps, and education graphs
 - Additional and updated information to [Lutz et al. 2014](#)
- Increase outreach
- Target group
 - Researchers
 - Other experts
 - Not so much the general public

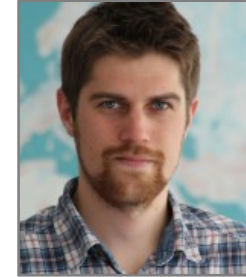




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People Involved and Contact Info

- Concept and Coordination
 - [Anne Goujon](#), [Ramon Bauer](#), [Jakob Eder](#)
- Data
 - [Samir K.C.](#)
- Web Interface
 - [Guy Abel](#)
 - Built with [R Shiny](#)
 - Code on [GitHub](#)
- General Inquiries
 - data@wittgensteincentre.org

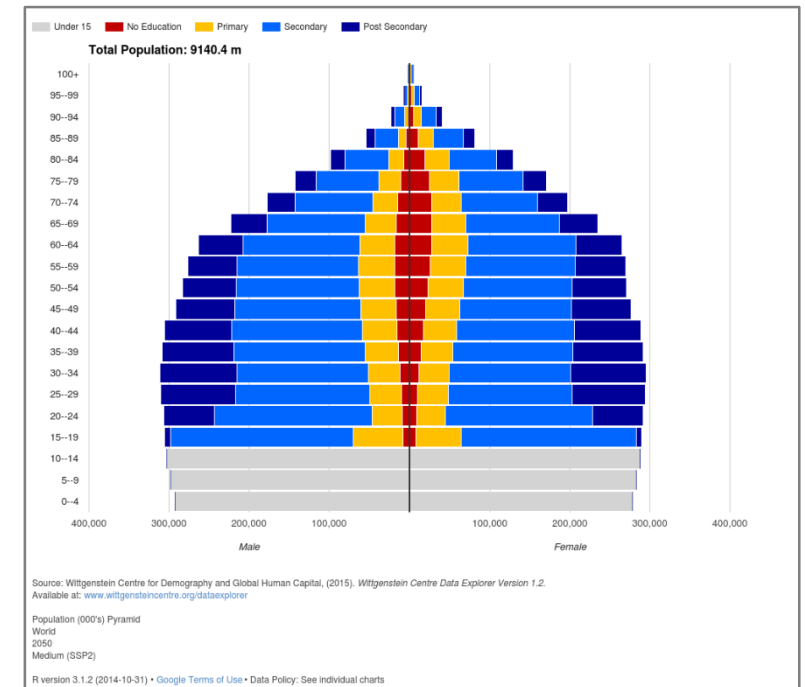


[Source (5): WIC]



Features

- Data Explorer
 - 31 Indicators (Population & Human Capital Stocks, Demographic Changes, New Aging Indicators)
 - 7 Scenarios
 - (1970) 2010 to 2100
 - World, major regions, 171 countries
- Graphic Explorer
 - Population pyramids by education
 - Population development charts by education
 - Maps
 - Country profiles



[Source: wittgensteincentre.org/dataexplorer]

Wittgenstein Centre Data Explorer

witt.null2.net/shiny/wic/

Data Explorer

Graphic Explorer

About

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Explore, select and download data of the global population projections by age, sex and education published by Lutz, Butz, and K.C. (2014). Access the executive summary

Selection

Data

Assumptions

1. Indicators

Indicator Type

Population & Human Capital Stocks

Indicator

Population Size (000's)

2. Geography

Country

Type or click for countries

Region

World

☐ Include countries of selected regions

3. Breakdown

Sex

Both

Age

All

☐ Include all age groups

4. Time Horizon

Scenario

Medium (SSP2)

Year

1970 1975 1980 1985 1990 1995

2000 2005 2010 2015 2020 2025

2030 2035 2040 2045 2050 2055

2060 2065 2070 2075 2080 2085

2090 2095 2100

☒ Include all times

View Data

Download

Entry Page

Wittgenstein Centre Data Explorer

Explore, select and download data of the global population projections by age, sex and education published by Lutz, Butz, and K.C. (2014). Access the executive summary [here](#).

Selection Data Assumptions

Show 25 entries Search:

[Back to Selection](#)

Area	Year	Population
World	1970	3680743
World	1975	4059409
World	1980	4434144
World	1985	4796692
World	1990	5284926
World	1995	5703704
World	2000	6099653
World	2005	6482242
World	2010	6870862
World	2015	7247920
World	2020	7611734
World	2025	7949728
World	2030	8256115
World	2035	8531008
World	2040	8772198
World	2045	8976492

Indicator Details:

Population Size (000's)
De facto population in a country, region, or region classified by sex and by five-year age groups. Available in all scenarios and at all geographical scales. Figures are presented in thousands.

Source for 1970 to 2010: [UN Population Division, World Population Prospects 2010](#)

Scenario Details:

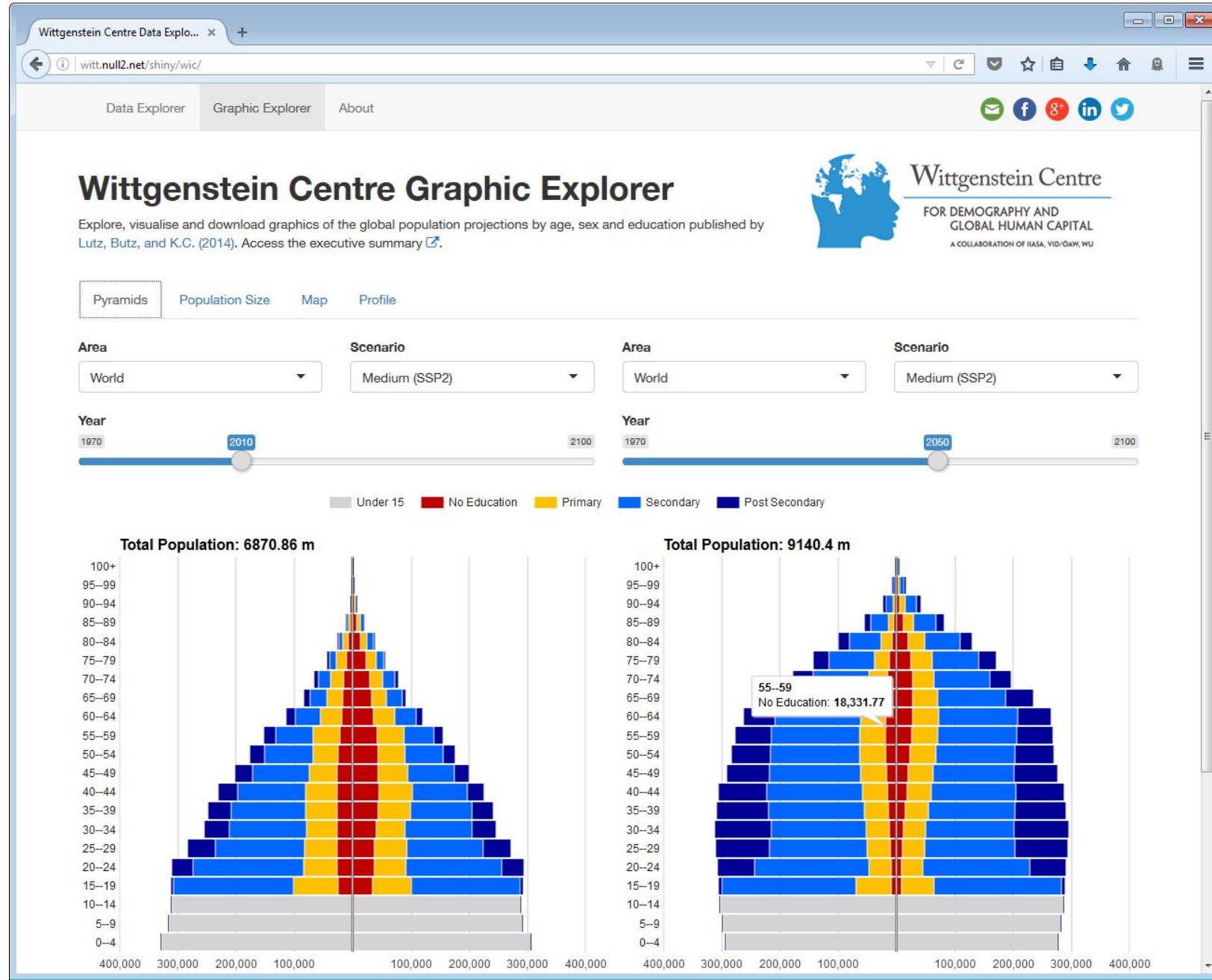
Medium (SSP2)
Population Component of Medium (SSP2): This is the middle of the road scenario that can also be seen as the most likely path for each country. It combines for all countries medium fertility with medium mortality, medium migration, and the Global Education Trend (GET) education scenario.

Access Data:

[Download](#)

☐ Include ISO Country Codes

Data View



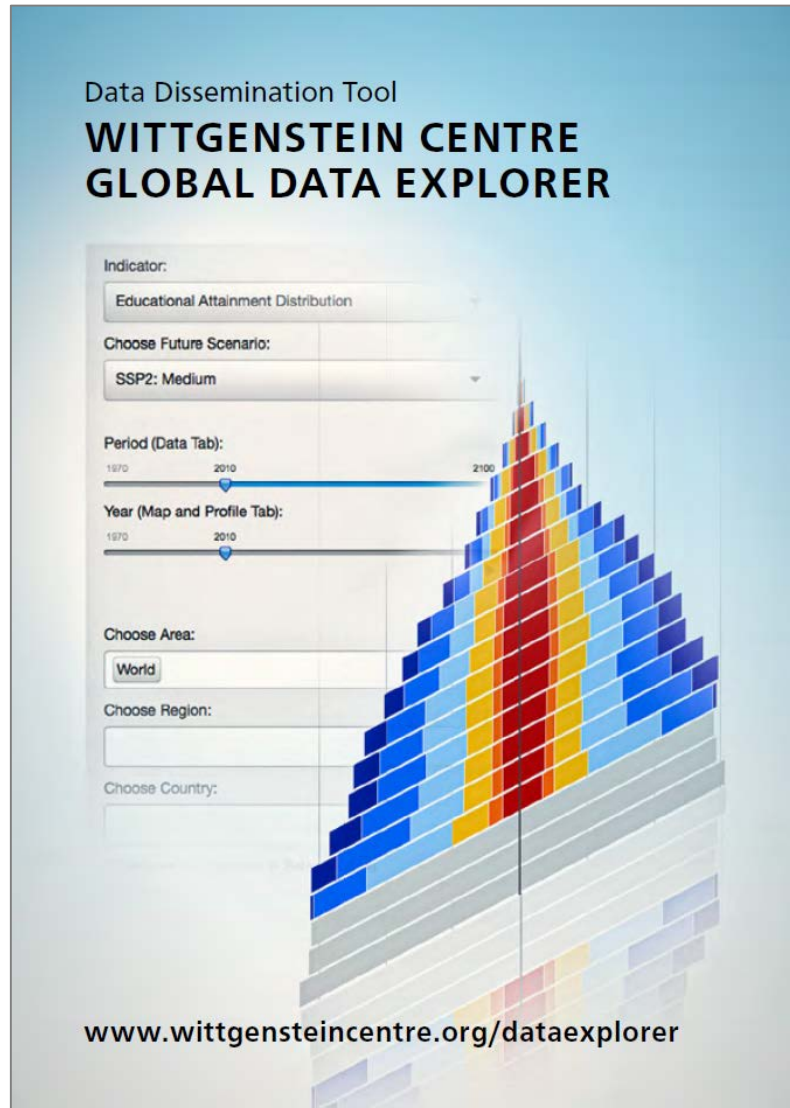
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Graphical View

Postcards



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WITTGENSTEIN CENTRE GLOBAL DATA EXPLORER

The data dissemination tool of the Wittgenstein Centre for Demography and Global Human Capital

Browse, select, visualize and download the new dataset of population projections by **age, sex, and educational attainment** for 195 countries over the period 1970–2100, including:

First global population projections of educational attainment by age and sex

Based on expert assumptions on future trends in fertility, mortality, migration and education

→ www.wittgensteincentre.org/dataexplorer

For **more information** on data, assumptions and analysis, see: *World Population and Human Capital in the Twenty-First Century*. Edited by Wolfgang Lutz, William P. Butz, and Samir KC. Published by Oxford University Press (Summer 2014).



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The Wittgenstein Centre for Demography and Global Human Capital is a collaboration among the World Population Program of the International Institute for Applied Systems Analysis (IIASA), the Vienna Institute of Demography of the Austrian Academy of Sciences (VID/OAW), the Demography Group and the Research Institute on Human Capital and Development of the Vienna University of Economics and Business (WU)

[Source (2): WIC]



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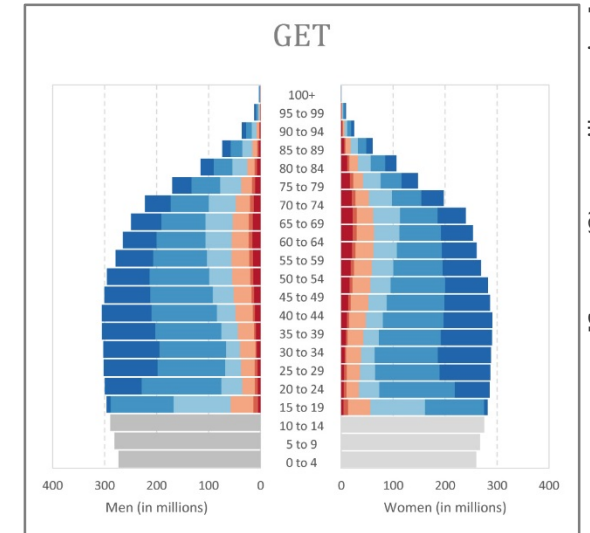
DEMO

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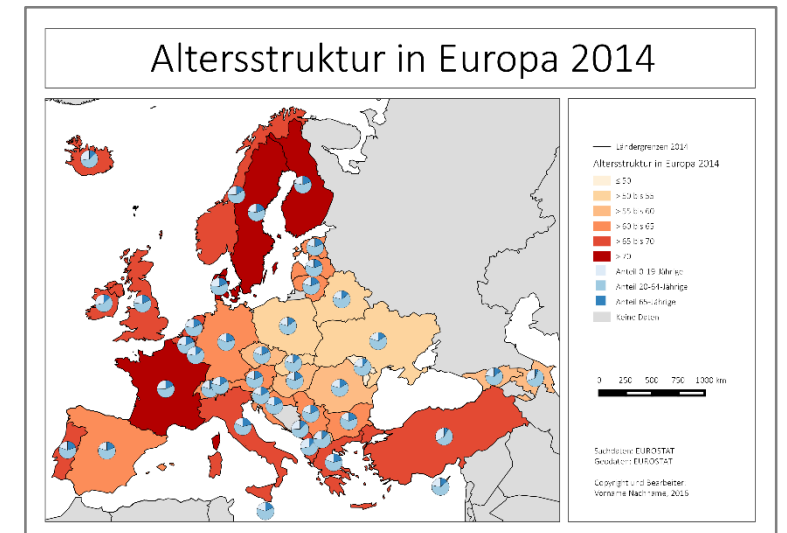


Using Data in MS Excel or QGIS

- Either: Producing graphs in MS Excel
 - Multi-state population pyramids
 - Index-diagrams
- Or: Producing maps in QGIS
 - Global or regional scale



[Source (2): own illustration]



Student's Presentations

- Short presentations (~5 minutes) + discussion (~5 minutes) on Wednesday, 15.06.2016
- Should include data from the WIC Data Explorer
- Topics
 - Can be chosen freely or follow our suggestions
 - We would like to learn from your expertise! Relating to your own research or interesting demographic facts from your home country is most welcome
- Presenting alone or in groups of 2 to 3 people
- Presentation style
 - Pecha Kucha *light* (10 slides, 30 seconds per slide)

Pecha Kucha Presentations

- Pecha Kucha: Japanese for chit-chat
- Keeps presentations fast-paced, concise, and makes sure every speaker stays within the time limit
- Originally 20 slides and 20 seconds per slide, we adjust this to 10 slides and 30 seconds per slide
- Set your timer in PowerPoint to 30 seconds per slide
 - Make sure what you want to say about your topic
 - Make sure that you don't need more than 30 seconds per slide
 - Practice!

Suggested Topics - Fertility

- Fertility
 - **Fertility and Education:** The fertility of differently educated women
 - **Fertility in Africa:** Outliers and cross-country comparison
 - **Expected drivers of fertility decline in higher fertility countries:** The role of increasing education level.
 - **When will higher-fertility countries experience fertility declines towards replacement level?**
 - **Comparisons of fertility scenarios in WIC explorer and probabilistic projections in UN World Population Prospects 2015:** An exploration.

Suggested Topics - Mortality

- Mortality
 - Country- and regional-specific differences in levels and trends of life expectancy

Suggested Topics - Ageing

- Mortality
 - **New Measures of Ageing:** Old-age Dependency Ratio vs. Prospective Old-age Dependency Ratio
 - **New Measures of Ageing:** Share of Population 65+ vs. Share of people with remaining life expectancy below 15 years

Suggested Topics - Human Capital

- Human Capital
 - **Education in Population Projections:** Comparing different SSP-Scenarios
 - **Demographic Momentum:** Examples of clearly visible education inertia/momentum
 - **Mean Years of Schooling vs. Educational Attainment:** Comparing populations with similar Mean Years of Schooling, but very different attainment profiles

Thank you for your attention!

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