Population Projections and Policy: Why Education Matters

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World Population Program

Major Current Research Topics

1) Reassessing Ageing from a Population Perspective
2) Ageing Trajectories of Health: Longitudinal Opportunities and Synergies
3) Population Dynamics and Global Human Capital
4) Human Capital and Economic Performance
5) Forecasting Adaptive Capacity to Climate Change
6) IIASA-JRC Centre of Expertise on Population and Migration

Source: http://www.iiasa.ac.at/web/home/research/researchPrograms/WorldPopulation/Research/ResearchIntro.html
My history with IIASA/POP

• YSSP participant in 2009 at POP

• Work at POP since 2009 in various positions and at varying intensity

• Dissertation 2012 at Vienna University of Economics and Business (supervisor: Prof. Wolfgang Lutz)

  Europe’s future human capital: population projections by age, sex, education, labor force participation and health status

• Currently involved in IIASA-JRC Centre of Expertise on Population and Migration
My research interests

• Labor supply in ageing societies
• Measuring population ageing and its consequences
• Health and ageing
• Population projections

Regional focus: Europe and (South-east) Asia
Education-specific labor force projections

- Global picture: population growth and population aging
- Both developments are directly connected to developments of labor supply
- Labor force projections by age and sex common -> total size of labor force and changes in age-composition
- BUT: the size the labor force is only one characteristic and is referring to the **QUANTITY** of active persons
- There is also a **QUALITY** dimension (human capital, i.e. education and health)
Education-specific labor force projections

• QUALITY dimension proxied by the highest level of educational attainment

• Several reasons to add the education dimension

(1) Anticipated changes in the educational composition of the population (cohort replacement; migration)

(2) Differentials in labor force participation (LFP) by education

(3) Education and productivity
Labour force participation rates for all EU28 countries combined, by age and sex, 2015

Source: Eurostat database (indicator lfsa_argaed), based on EU LFS
Labour force participation rates for all EU28 countries combined, by education, age, and sex, 2015

- ILO Definition of labor force: economically active population (employed and unemployed)
- Projections run for each country separately (EU27, except Malta)

Source: Eurostat database (indicator lfsa_argaed), based on EU LFS
Total labor force, EU26, by scenario, with and without education

Largest difference with/without education, constant scenario: 4.1%

2008: 237.8 mio.

Absolute size of the six largest labor forces, ages 15+, 2008 vs. 2053

Projected population by age, sex and education: Example of Korea

Composition of the Korean labor force by educational attainment, 2010 to 2050
(scenario: female=male participation rates by 2050)

Thank you!

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