Toward a 21st Century Population Policy Paradigm: Fostering the Human Resource Base for Sustainable Development

Wolfgang Lutz
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In search of a new population policy approach for ageing and shrinking populations as well as for sustainable development in general.

1974 (Bucharest): Main concern about the effects of rapid population growth on development (macro).

1994 (Cairo): Emphasis of reproductive health and individual rights (micro).

2014 (and beyond): Add the macro dimension to the individual rights dimension through focus on the human resource base for sustainable development.

ICPD = RIGHTS + DEVELOPMENT

International Conference on Population and Development Beyond 2014
Focus on the Human Resource Base for Sustainable Development

- Human Resources refer to the ability of people to help themselves and help others.
- They crucially depend on age, health, education, motivation, social networks etc.
- Education is central: Learning from the first day to old age (skills and empowerment).
- Formal education (school) is only one aspect of this that is fairly easy to measure.

Main Messages of Report by Wittgenstein Centre

**Observation:** The UNECE Region is in the late middle stages of a fundamental transformation from population growth to population ageing.

**Analysis:** New analytical tools and focus: From the importance of population numbers to population quality (education and health).

**Policy:** Human capital in the form of education and health is what governments can most readily influence.
The countries of the UNECE Region constitute a globally relevant laboratory in which much has been learned since ICPD 1994

Since our region is most advanced in this global demographic transformation, we also have the challenge to come up with new 21st Century Population Policies.

*Four “hot questions”:*
1. Is population ageing a threat for the UNECE countries?
2. Is migration a threat or an opportunity for development?
3. Is fertility in the Region too low?
4. Are UNECE countries becoming less equal societies?

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**Is Population Ageing bad for Productivity Growth?**

**At the Individual Level:**
- Physical strength starts to decline around age 25.
- Speed of mental perception declines after age 30.
- Experience increases with age - up to high ages.

**At the Firm Level:**
- ICT industries are most productive and have youngest workforce.
- When controlling for industry then a good age mix is most productive.

**At the National Level:**
- Econometric studies: High proportion of 50-60 year olds is best.
- Germany: Highest median age – economically robust.
Rethinking Population Ageing

Age is not what it used to be. Science tells us that the meaning of age is changing:

• “50 is the new 40” or “70 is the new 60”.
• People all over the world do not only live longer, they are also longer in good health.
• Cognitive decline with age is shifting to higher ages, in particular for better educated people that stay mentally and physically active.
• In countries without mandatory retirement ages (e.g. the USA) the better educated voluntarily tend to work longer and longer. We derive identity from meaningful work even at higher ages.
Redefining old age dependency

$$OADR = \frac{\text{Number of people aged 65 years or older}}{\text{Number of people aged 20 to 64}}$$

the VID and IIASA: the prospective old-age dependency ratio. In the POADR, the threshold of being old is not fixed but linked to life expectancy. People are considered old when the average remaining life expectancy in their age group is less than 15 years.

$$POADR = \frac{\text{Number of people older than the old-age threshold}}{\text{Number of people aged 20 to the old-age threshold}}$$

Conventional old-age dependency ratio as projected for 2030
- more than 48%
- 38 to 47.9%
- 28 to 37.9%
- less than 27.9%
- no data
Austria 2007: Proportion of women with strong disabilities (limitations in activities of daily life)

Projections of people with disability look very different when education is factored in.
Female Labor Force Participation by Education Austria 2008

What are the key policy parameters to increase national level productivity?

- **Higher education levels** are important for maintaining economic growth in ageing societies – take account of the delay between investments and benefits.
- **Higher labor force participation** of women and men of all ages. – Possibly combined with less hours of work per week.
- **Conclusion:** The negative effects of ageing have been exaggerated. They can be largely ameliorated by these two policies: Upgrading skill levels and increases in Labor Force Participation.

Is Fertility in the Region too low?

The myth of replacement level fertility being optimal from a societal perspective:

- Current period fertility rates are downward distorted through tempo effects.
- In many countries immigration adds to the size of young labor force.
- When education is factored in (cost of education and higher productivity of educated) then TFR of 1.6-1.8 results in highest education weighted support ratio.
Figure 1: Fertility trends in the Czech Republic, 1988–2010

Figure 2: Fertility trends in Austria, 1974–2010
Period TFR, adjusted TFR, and adjusted PATFR index for first births, Spain 1980-2006

Adjusted total fertility rate (see box on the front side)
Education Weighted Support Ratio by long term TFR and level of Education

Support Ratio in year 2100

Mortality under age 5 by mothers’ education

(Source: DHS)
TFR by Level of Education

FIGURE 2: Total fertility rates by level of educational attainment. (Source: Several DHSSs)

The causes of educational differences in fertility in Sub-Saharan Africa

*John Bongaarts*

Demand for and use of contraception by level of education, average of 30 countries

Source: DHS
Assuming identical education-specific fertility trends different education scenarios make a difference of more than 1 billion people by 2050.

- CEN gives the world population trend according to the most pessimistic scenario assuming that no new schools will be built.
- FT gives the most optimistic scenario assuming that countries can achieve the rapid education expansion that South Korea achieved.

Complementing primary education with secondary education in broad segments of the population is likely to give a strong boost to economic growth.
In the Context of IPCC and IAMs the Research Community has Recently Agreed to the Definition of "Shared Socioeconomic Pathways" (SSP)

Policies that strengthen education and health can lead to:

- **Empowerment of women and men of all ages in all settings.**
- Better ability to cope with consequences of population ageing.
- Better integration of migrants and lower inequalities.
- Lower child mortality, better reproductive health and lower fertility in today’s high fertility countries.
- **Sustainable Development through higher mitigative and adaptive capacity to environmental change.**