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1. Aim and scope

Aims of the study:

• To analyse relations between international migration, population ageing and labour force dynamics for selected European countries in 2002–2052 using the ‘replacement migration’ concept

• To evaluate on that basis various policy options regarding population, migration, and labour force

Scope:

• 27 European countries: EU (without Cyprus and Malta), plus Bulgaria, Romania, Norway and Switzerland

• Time horizon: 2002–2052
2. Background

• ‘Replacement migration’ report of the UN (2000) and its critique (Espenshade, 2001; Coleman, 2002)
• Other similar studies (Lesthaeghe et al., 1988; Wattelaar & Roumans, 1991; Gesano, 1994; Feld, 2000; McDonald & Kippen, 2000)
• What this study adds:
  – It focuses on a wide selection of European countries, including Central and Eastern Europe
  – It partially addresses the critique of the UN report by including scenarios of economic activity and produce ‘replacement’ simulations for targets of various aggregate demo-economic indicators
3. Data, model, and assumptions

Data:
• Demographic data: Eurostat and Council of Europe
• Labour force participation: ILO (Laborsta)

Model:
• Multi-regional model of population dynamics “MULTIPOLES” (Kupiszewski & Kupiszewska, 1998)

Assumptions:
• Demographic and labour force scenarios for 2002–2052: presented yesterday in the first session on demographic projections by Prof. Marek Kupiszewski
• ‘Replacement migration’ computed in addition to the Base forecast scenario
4. Simulations performed

Four ‘replacement’ scenarios, with non-decreasing:

• **Total size of the population**

• **Potential Support Ratio (PSR)**
  Number of persons aged 15–64 to the population aged 65+

• **Economic Elderly Support Ratio (EESR)**
  Ratio of the size of the economically active population aged 15-64 to the economically inactive population aged 65+
  – measures the economic burden of the retired on the active pop.

• **Labour Market Support Ratio (LMSR)**
  Ratio of the size of the economically active population aged 15+ to the economically inactive one (also 15+)
  – measures the overall economic burden on the labour market
5. Results

‘Replacement’ in 27 countries: non-decreasing population

Cumulated ‘replacement’ volume 2002–2052: 32.8 million
5. Results

‘Replacement’ in 27 countries: non-decreasing PSR

Cumulated ‘replacement’ volume 2002–2052: 839.6 million
5. Results

‘Replacement’ in 27 countries: non-decreasing EESR

Cumulated ‘replacement’ volume 2002–2052: 653.1 million
5. Results

‘Replacement’ in 27 countries: non-decreasing LMSR

Cumulated ‘replacement’ volume 2002–2052: 470.7 million
5. Results

Buying Time: ‘Maximum labour participation’ scenario

- Historical (1985–2002) cross-country maximum patterns of economic activity projected for the whole simulation period

- Results – no decline of LMSRs below its 2002 levels until:
  - the end of the simulation period (2052) for 21 countries,
  - 2047–2052 for four countries (CZ, ES, NL, SK),
  - 2042–2047 for Portugal,
  - 2022–2027 for Switzerland.
6. Conclusions

- **Most of the simulations (again!) yielded implausible magnitudes of the ‘replacement migration’**

- **Plausible policy options:**
  - Increase fertility – the long-term solution (Lesthaeghe, 2000). Problems: how to do it, and when it will start to work (negative population momentum, Lutz *et al.*, 2003)?
  - Increase labour force participation (Coleman, 2002) – a good option in the mid-term (< 50 years), ameliorating negative outcomes of ageing before any fertility policies give results.
  - Immigration: not a ‘solution against the negative outcomes of population ageing’, rather an instrument to cover labour shortages in certain sectors (Korcelli, 2003)
  - Raising the awareness of the ageing problems in the society