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Demographic and Labour Market Policy Options for the Ageing Europe

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1. Introduction

Background

- 'Replacement migration' simulations of the UN(2000):
a need to extend them for a variety of European countries
and include alternative policy options

Aim of the study

- A simple typology of selected European countries with
respect to the expected efficiency of various demographic
and labour market policies designed to partially
counterbalance the effects of population ageing

Scope

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

- Time horizon: 2002–2052

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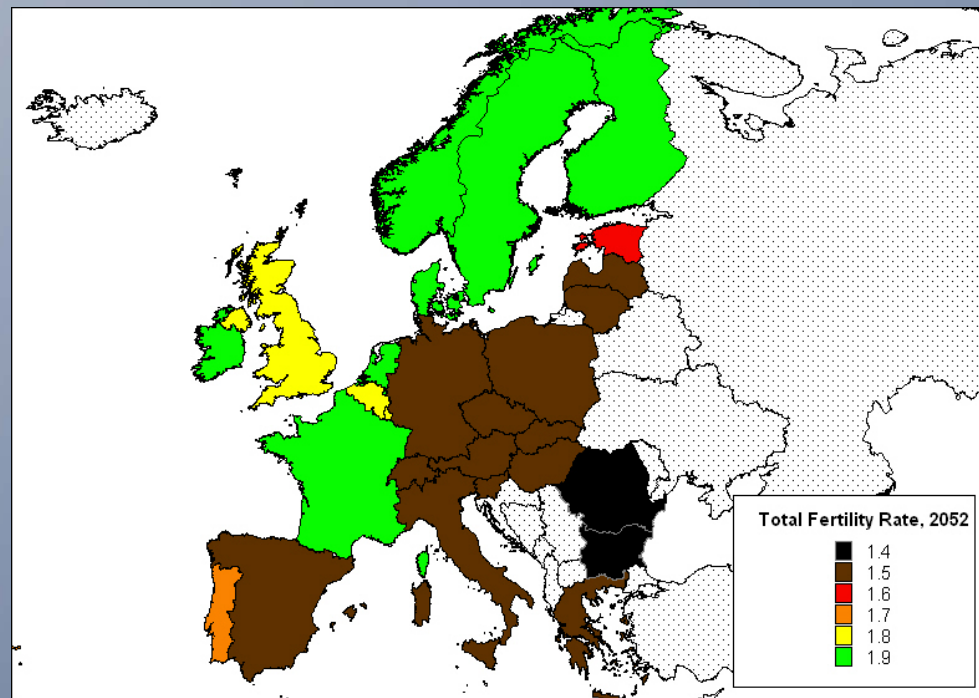Badań Migracyjnych

1. Introduction

Model

- Multi-regional model of population dynamics MULTIPOLES
  [Kupiszewski and Kupiszewska, 1998, 2005]

Data

- Demographic data: Eurostat and Council of Europe

- Labour force participation: ILO (*Laborsta* database)

- Migration modelled on two geographical levels:

  – Flows between the system of 27 countries under study (origin-destination emigration rates)

  – Scenarios for Europe account for the expected schedule of opening Western labour markets for the CEE citizens (2004-2006-2009-2011)

  – Net migration from other regions of the world (absolute numbers)

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2. Assumptions: Demographic scenarios

Fertility: Target TFR values assumed for 2052

Total Fertility Rate, 2052
- 1.4
- 1.5
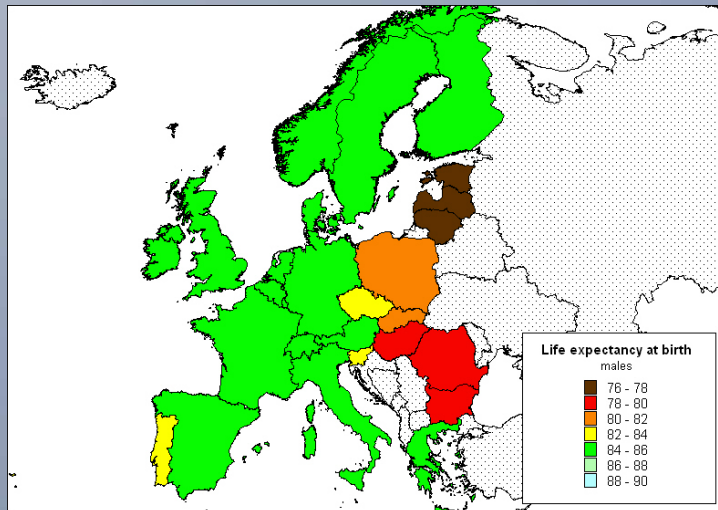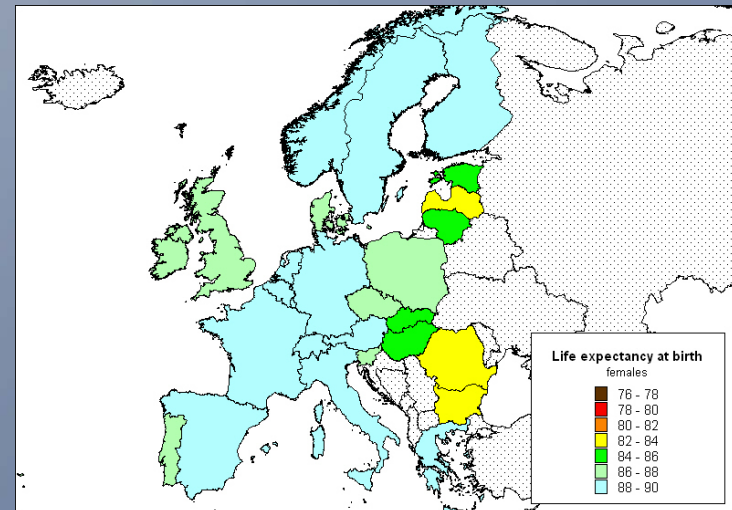- 1.6
- 1.7
- 1.8
- 1.9

2. Assumptions: Demographic scenarios

Mortality: Average life expectancy assumed for 2052
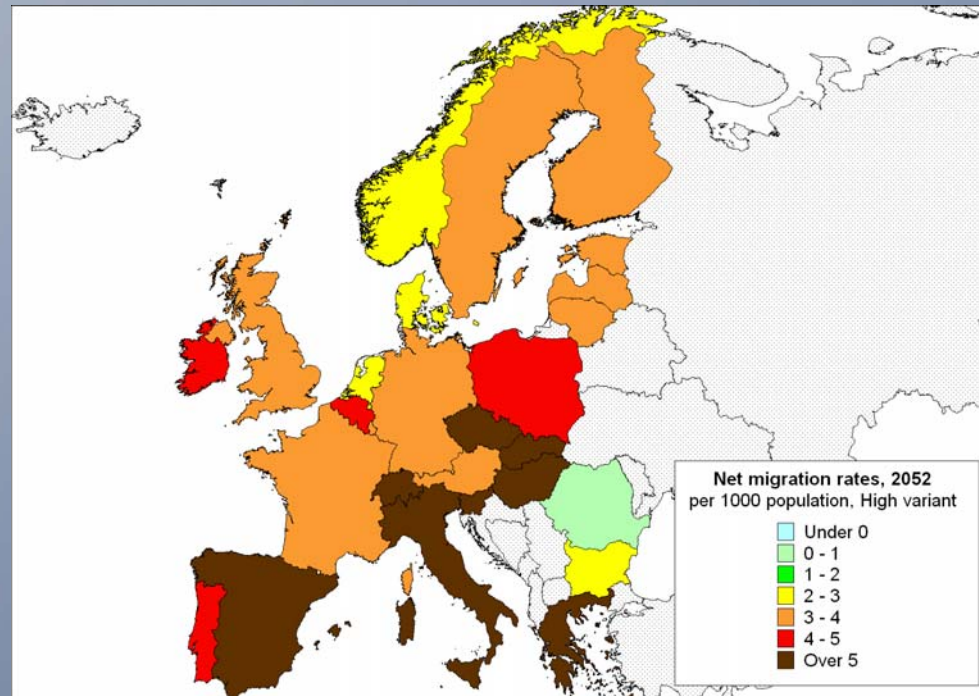
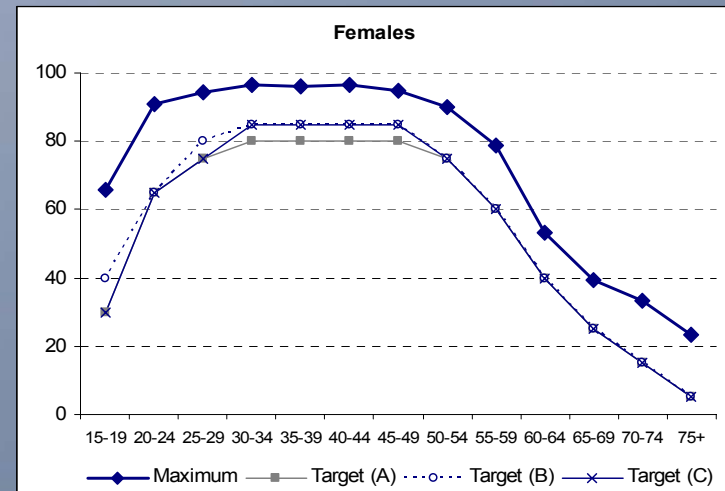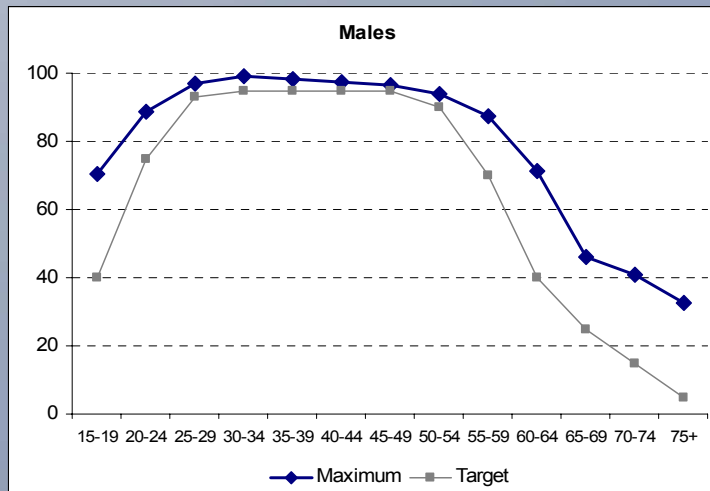*males*   *females*

2. Assumptions: Demographic scenarios

Migration: Net migration rates estimated for 2052 (per 1,000)

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2. Assumptions: Economic activity scenarios

Economic activity patterns assumed for 2052 (per cent)

Females: (A) "Low-participation countries" – BE, ES, CH, FR, GR, IE, IT, LU, PT, UK
(B) "High-participation countries" – AT, DE, DK, FI, NL, NO, SE
(C) "Central-Eastern Europe" – BG, CZ, EE, HU, LT, LV, PL, RO, SI, SK

Policy option: maximum cross-country levels from 1985-2002

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3. Simulations: Results of various policies

Policy options under study:

(1) No specific policy (Base scenario projection): Reference

(2) Migration increases from Base to High levels

(3) Fertility increases by 0.5 child per woman from 2007

(4) Economic activity increases to the 'maximum' values

(5) Combination of migration and fertility: (2)+(3)

(6) Combination of migration and economic activity: (2)+(4)

(7) Combination of fertility and economic activity: (3)+(4)

(8) Combination of all three options: (2)+(3)+(4)

Measure of efficiency:

Labour Market Support Ratio (LMSR), a proxy of the overall economic burden on the labour market

LMSR = (active 15+) / (inactive 15+)

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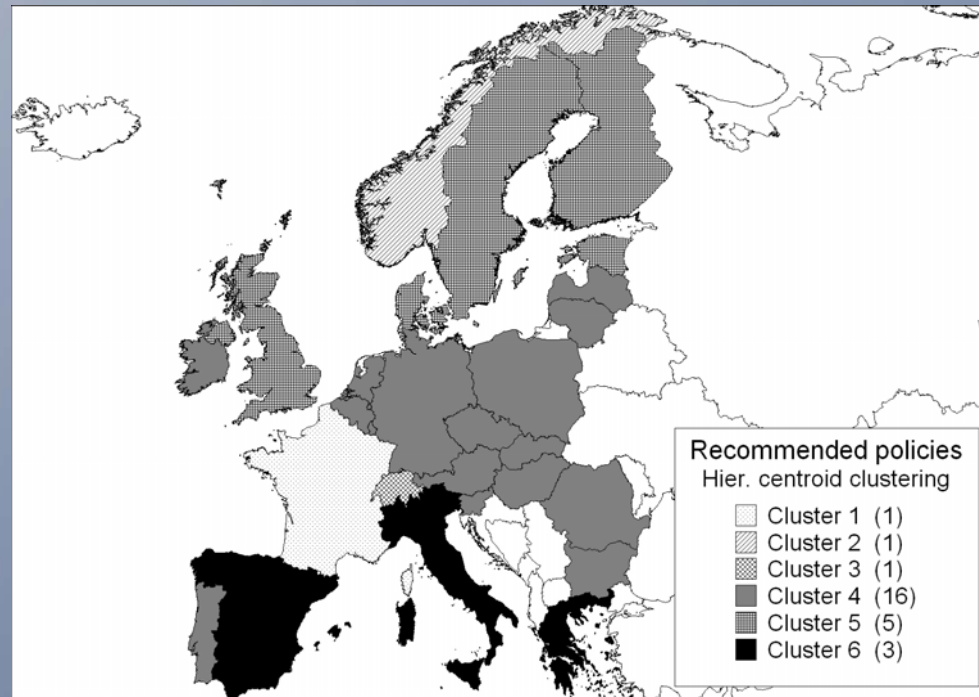
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3. Simulations: Results of various policies

Average LMSR trajectories for 27 countries, outcome of policy options (1)–(8)
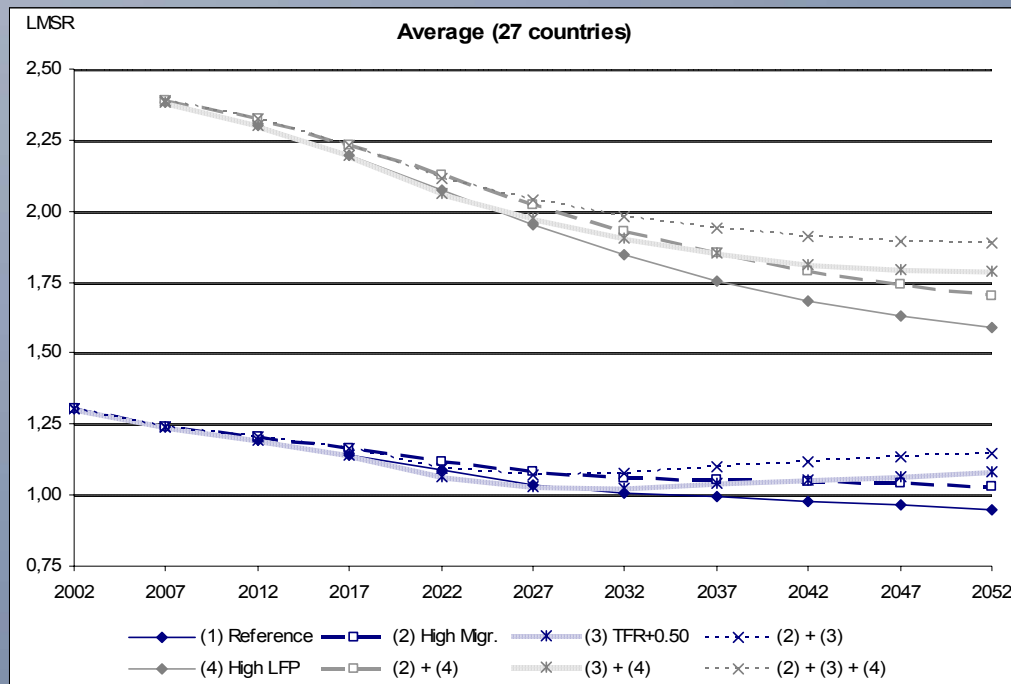
3. Simulations: Results of various policies

Typology (hierarchical clustering, centroid method) based on nine variables:
(0) LMSR in 2002, and (1)–(8) LMSR simulated for 2052 in individual variants

Recommended policies
Hier. centroid clustering

Cluster 1 (1)
Cluster 2 (1)
Cluster 3 (1)
Cluster 4 (16)
Cluster 5 (5)
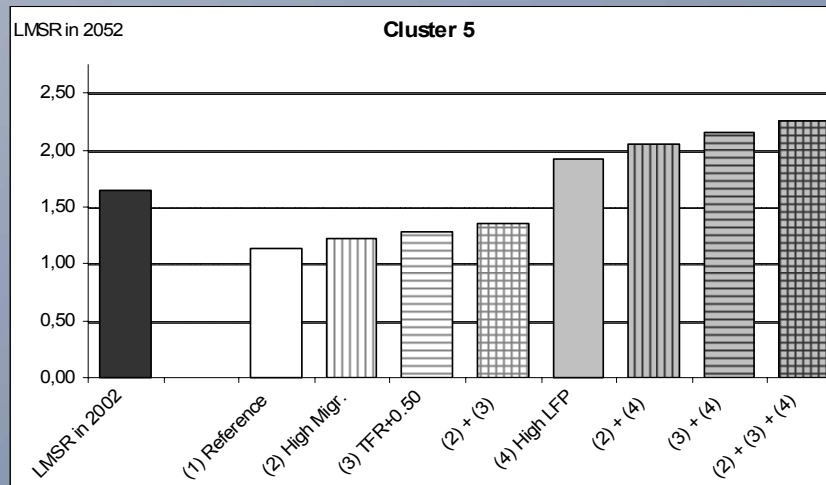Cluster 6 (3)

3. Simulations: Results of various policies

Results for Cluster 4 (a majority of European countries)
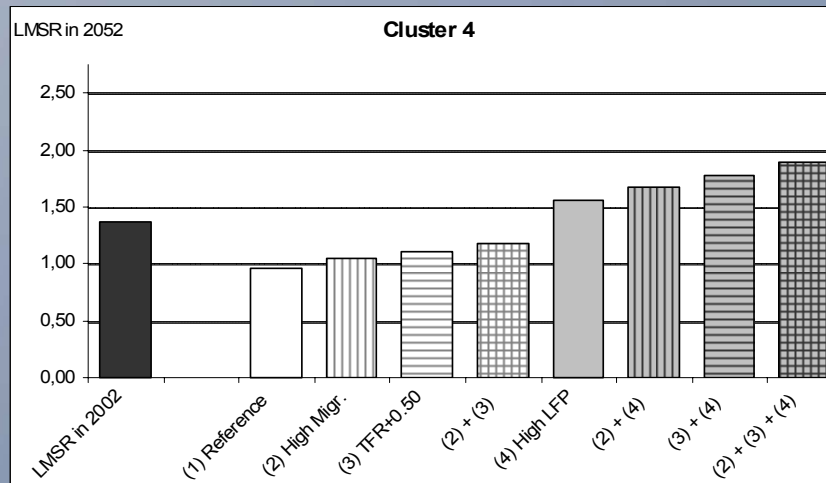
- A visible LMSR decline is expected, to the average level below 1.0
- Only a significant increase of economic activity would help sustain the current average LMSR level by 2052
- All options yield average target LMSR > 1.0, the ones involving an increase of economic activity result in LMSR > 1.5

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3. Simulations: Results of various policies

Results for Cluster 5 (Northern Europe, except Norway)

LMSR in 2052   **Cluster 5**

- LMSR levels are higher than in Cluster 4, but would also decline
- Only a significant increase of economic activity would help sustain the current average LMSR level by 2052
- All options yield target LMSR > 1.0, the ones increasing economic activity produce LMSR > 1.5 (alone), or LMSR > 2.0 (in combination)

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# 3. Simulations: Results of various policies

Results for Cluster 6 (Southern Europe, except Portugal)
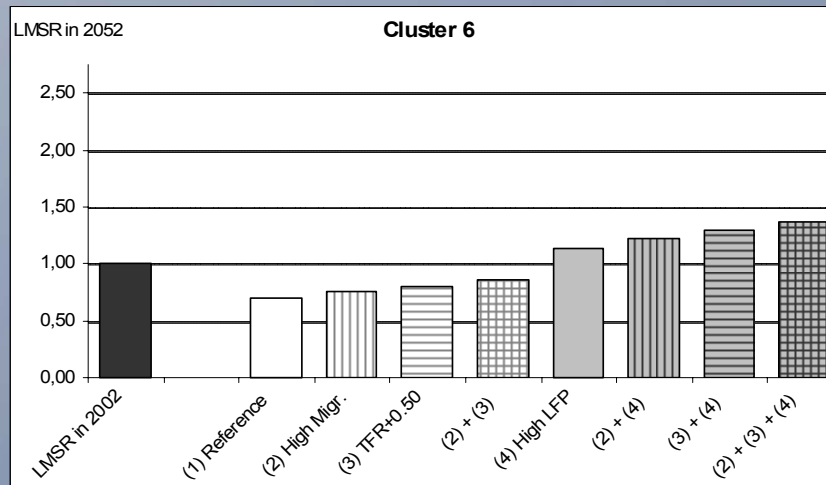
- LMSR, already very low (~ 1.0), is foreseen to further deteriorate
- Only a significant increase of economic activity would help sustain the current LMSR by 2052, but on very low levels (< 1.5)
- The options without economic activity increase yield target average LMSR still less than 1.0

3. Simulations: Results of various policies

Results for Cluster 1 (France)

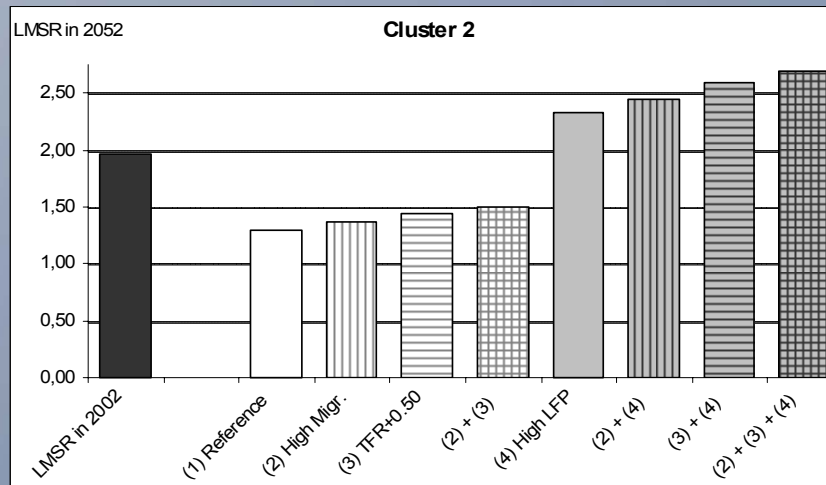LMSR in 2052 — Cluster 1
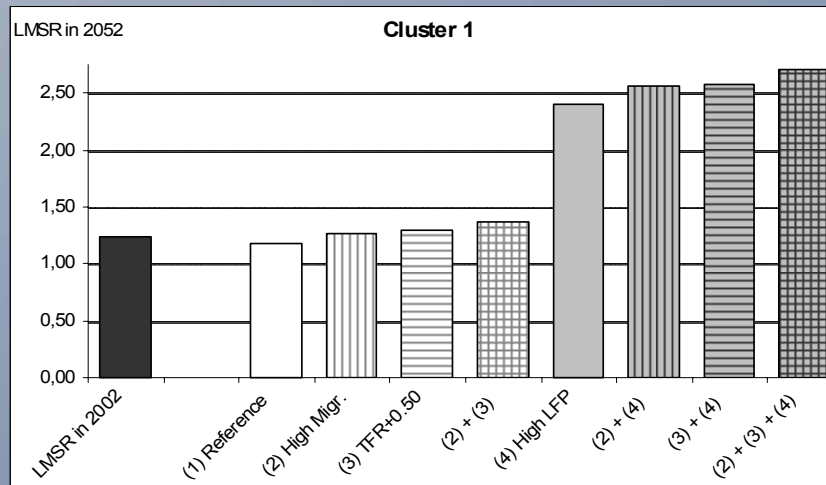
- The expected LMSR decline is not dramatic
- Any policy option would help sustain the current LMSR level by 2052
- All options yield target LMSR values > 1.0, the ones involving an increase of economic activity even result in LMSR > 2.0

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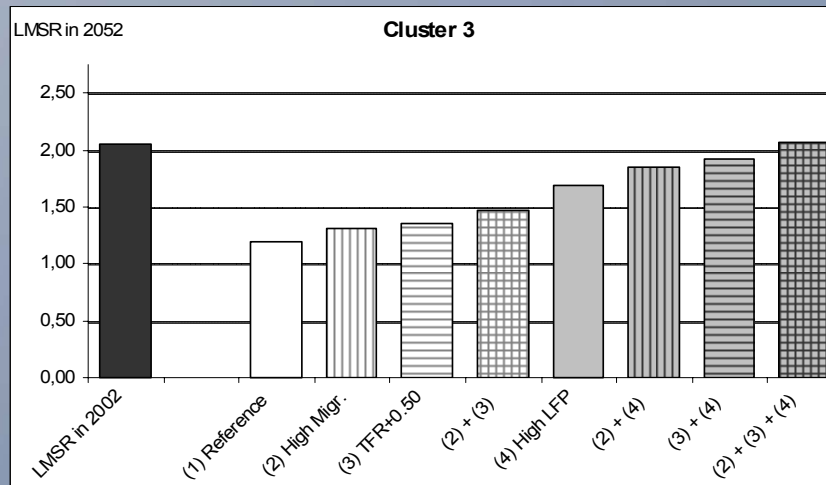# 3. Simulations: Results of various policies

Results for Cluster 2 (Norway)

- High LMSR decline is expected, but starting from a very high level
- Only a significant increase of economic activity would help sustain the current LMSR level by 2052
- All options yield target LMSR values > 1.0, the ones involving an increase of economic activity even result in LMSR > 2.0

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3. Simulations: Results of various policies

Results for Cluster 3 (Switzerland)

- High LMSR decline is expected, but starting from a very high level
- No policy option would help sustain the current LMSR level by 2052 (due to high economic activity) but the triple combination
- All options yield target LMSR values > 1.0, the ones involving an increase of economic activity produce LMSR > 1.5

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4. Concluding remarks

- Europe is diverse with respect to demographic and labour market perspectives of particular countries

- Increasing migration alone is either insufficient, or impossible ($\rightarrow$ 'replacement migration' studies)

- The TFR increase alone, even as high as by 0.5, would not solve the ageing-related problems by 2052, but is necessary to stabilise the population structure in the longer run

- In most of the countries, there is still high potential left in increasing labour force participation

- Ideally, various policies should be combined in a coherent manner (e.g., with respect to reconciling increasing female labour participation and fertility)

- Increasing the retirement age is certainly another option (not explicitly discussed here, covered by other studies)

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Thank you for your attention!

More details about the project and its results:

«www.cefmr.pan.pl»

An article on our projections is also forthcoming in vol. 22 (2006) of
European Journal of Population / Revue Européenne de Démographie