

# Female labour force projections using microsimulation for six EU countries

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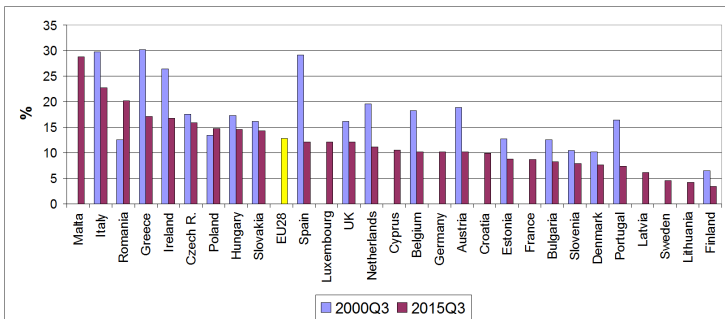
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- Further, **demographic change is accelerating**: the **old age dependency ratio** (the ratio of people aged 65 and over to people aged 15-64), which is now below 30%, is expected to rise to approximately 50% by 2050.
- These dynamics create temporal imbalances in the labour market and put strains on welfare system and younger workers, who will be responsible for supporting an ageing society.

## ...requires higher participation rates

- Female LF participation: 70.9%. Range: 56.8% (IT) – 84.2 % (SE).
- Gender participation gap: 12 ppt. Range: 22.7 ppt (IT) – 3.4 ppt (FI).



Gender participation gap, 20-64



## Country selection

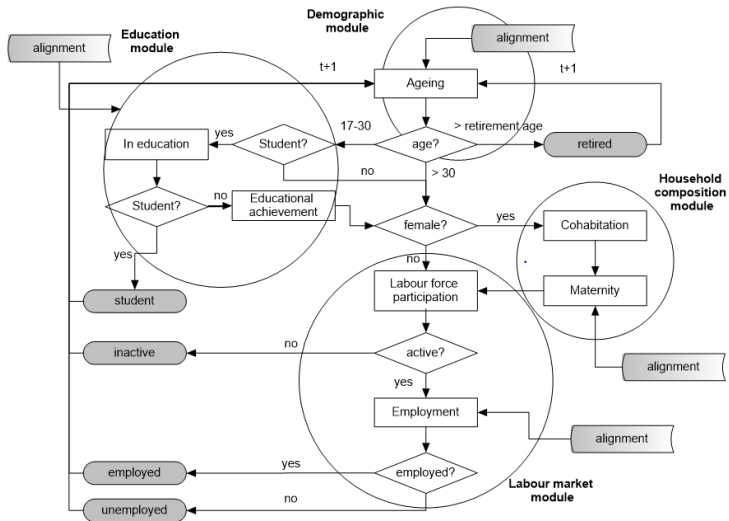
Participation sub-index of the Gender Equality Index

Country	Index	Country	Index
<b>SE</b>	<b>94.7</b>	FR	75.0
DK	85.3	BG	72.9
FI	85.3	SK	72.3
EE	83.6	RO	71.8
LV	80.8	LU	71.3
LT	79.8	PL	71.1
CY	79.6	<b>IE</b>	<b>69.8</b>
PT	78.4	<b>ES</b>	<b>69.5</b>
SI	77.4	<b>HU</b>	<b>67.5</b>
UK	77.4	BE	66.9
AT	77.0	HR	62.0
DE	75.9	<b>EL</b>	<b>59.5</b>
NL	75.6	<b>IT</b>	<b>57.1</b>
CZ	75.3	MT	56.2

Notes: The index ranges from 0 (maximum inequality) to 100 (maximum equality). Selected countries in bold

Source: European Institute for Gender Equality (2015).

# Model structure

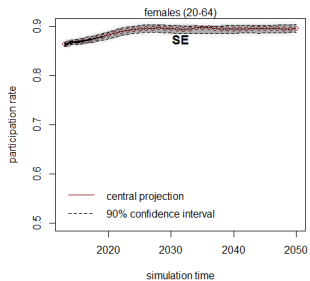
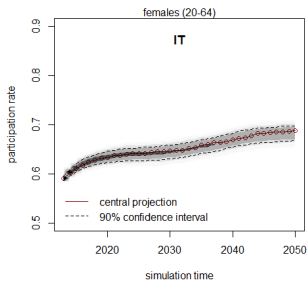
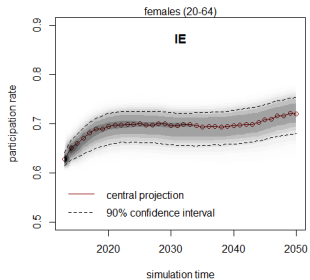
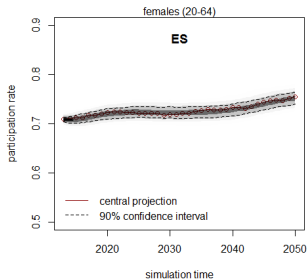


## Modules specification

Outcome	Determinants
student	age, gender, region
education	age, gender, region
consensual union	age, student(t-1), education, participation(t-1), cohabitation(t-1), children(t-1), region, retired(t-1)
maternity	age, student(t-1), education, participation(t-1), cohabitation(t-1), children(t-1), region, <b>fertility rate</b> , <b>public childcare</b> , <b>parental leave benefits</b> , <b>part-time rate</b>
participation: women with kids 0-3	age, student(t-1), education, participation(t-1), cohabitation(t-1), region, <b>public childcare</b> , <b>parental leave benefits</b> , <b>part-time rate</b> , <b>post-crisis dummy</b>
participation: women with kids 4-12	age, student(t-1), education, participation(t-1), cohabitation(t-1), region, <b>part-time rate</b> , <b>post-crisis dummy</b>
participation: women without kids 0-12	age, student(t-1), education, participation(t-1), cohabitation(t-1), region, <b>post-crisis dummy</b>
participation: men	age, student(t-1), education, participation(t-1), region, <b>post-crisis dummy</b>
employment	age, gender, student(t-1), education, participation(t-1), <b>unemployment rate</b> , region, <b>post-crisis dummy</b>

- Estimation sample: EU-SILC longitudinal 2005-2011.
- Initial populations: EU-SILC cross-sectional 2012.
- Simulation: 2013-2050.
- Individuals enter the simulation at age 17 (first age observed in EU-SILC data is 16).

## Baseline: participation rates



## Baseline: comparison

<b>Outcome:</b>	<b>Participation rate (%)</b>			<b>Participation rate (%)</b>		
<b>Model:</b>	<b>Eurostat</b>	<b>CSM</b>	<b>MSM</b>	<b>Eurostat</b>	<b>CSM</b>	<b>MSM</b>
Age group:	15-64	15-64	18-64	55-64	55-64	55-64
Time:	2013	2060	2050	2013	2060	2050
	%	%	%	%	%	%
Greece	67.7	75.4	77.3	42.4	78.0	76.8
Spain	74.2	78.9	79.3	54.2	82.5	76.9
Hungary	64.7	73.0	72.8	41.8	77.5	75.1
Ireland	69.7	68.2	75.2	57.3	64.6	77.5
Italy	63.4	65.2	75.2	45.4	69.0	70.9
Sweden	81.3	82.3	86.3	77.7	78.9	95.1

*Notes: Labour force participation (male and female population).*

*Source: Our computation and Ageing Report (EC, 2015)*

## Baseline drivers scenarios

- "Swedish demograhcy": Evolution of the demographic structure by age and gender as in Sweden.

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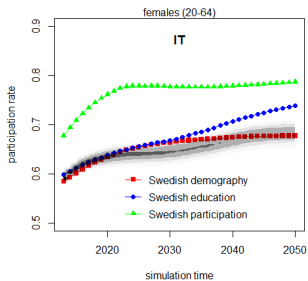
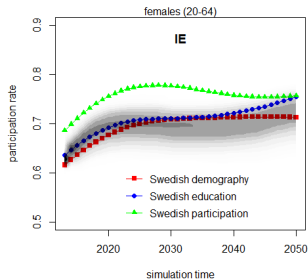
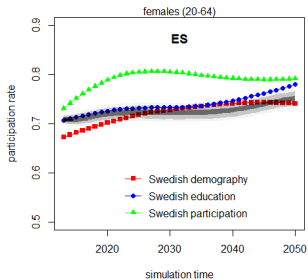
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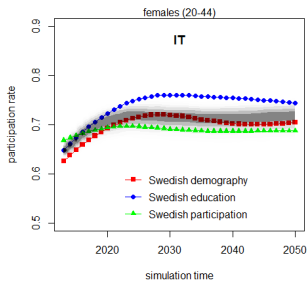
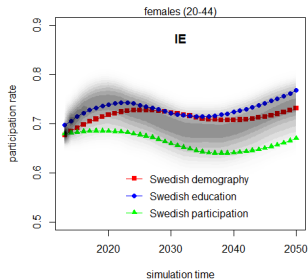
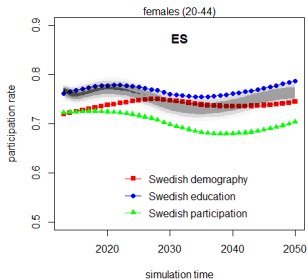
- "Swedish demography": Evolution of the demographic structure by age and gender as in Sweden.
- "Swedish education": Distribution of educational attainments is the same as in Sweden.
- "Swedish participation": All covariates have the same effect as in Sweden, with respect to participation.  
Aim: disentangle the effects of individual characteristics from composition effects: Differences in outcomes must be attributed to composition effects only.

## Results: Baseline drivers /1



Females, 20-64

## Results: Baseline drivers /2

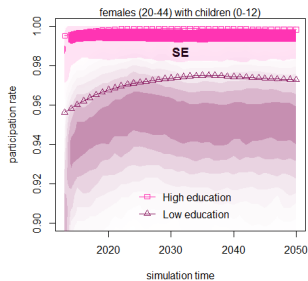
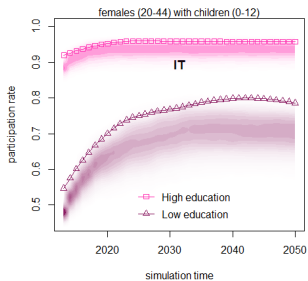
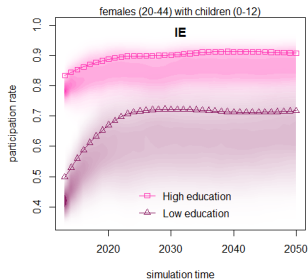
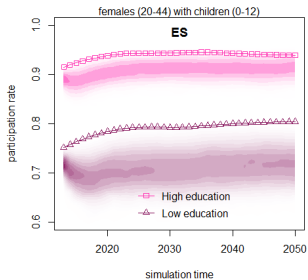


Females, 20-44

## Results: Baseline drivers /3

- The low female participation rates in the countries under analysis can be explained mainly by an **adverse behaviour of older women** (even after controlling for differences in individual characteristics).
  - Moreover, in most countries the **behaviour of younger women** is not detrimental to participation, their lower **educational attainments** are only partly responsible for the participation gap, and **demography** does not help either in explaining it.
- 
- The last source of the participation gap for women in childbearing years – in the model – is the **role of family-friendly policies**, and in particular the presence of **public, affordable childcare, paid parental leave, and part-time opportunities**.

## Results: Enhanced family policies



## Conclusions

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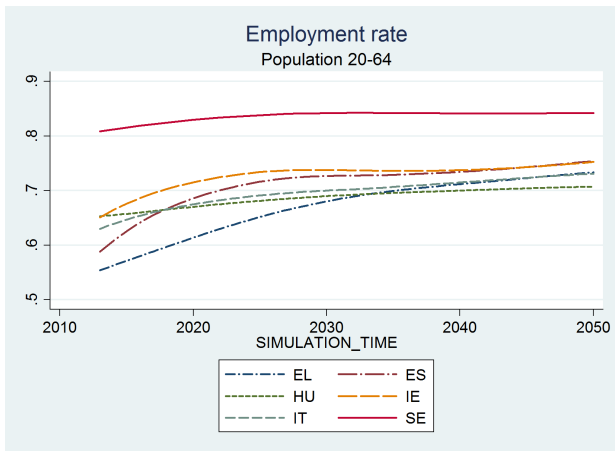
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- By converse, the labour market behaviour of **younger women** in most countries is not too different from their counterparts in Sweden.
- The reason of their persistently low participation rates in these countries has to be searched in the lack of adequate **family policies** and in the limited opportunities for **family-work conciliation** for younger women.

Thank you for your attention.

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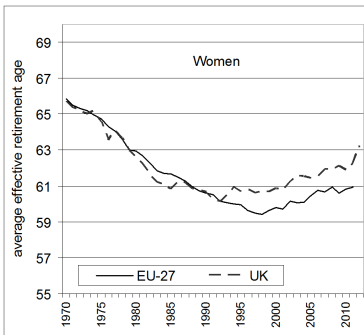
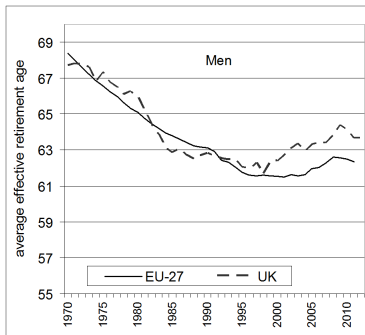


## Baseline: employment rates



▶ back

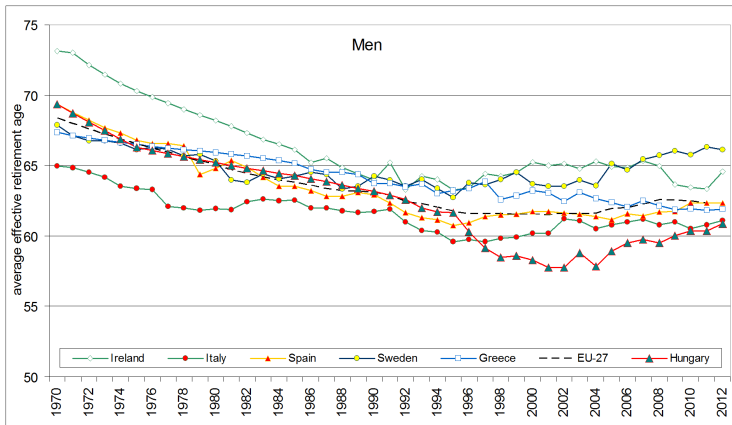
## Average effective retirement age



▶ back

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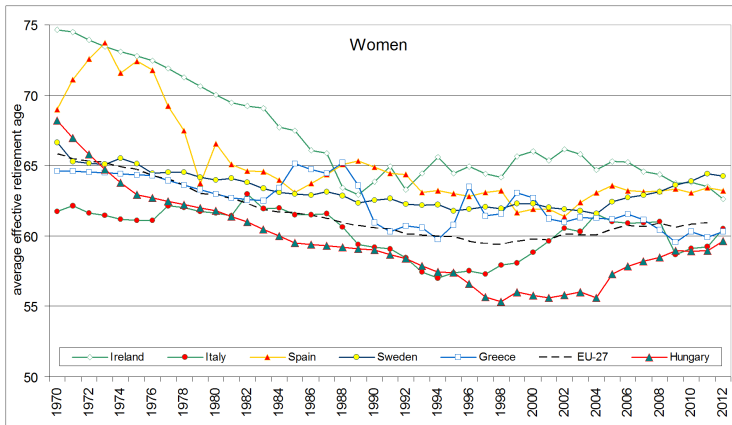
case studies, males



▶ back

# Average effective retirement age

case studies, females



▶ back